

**Combined course
on growth assessment and
IYCF counselling:**

Trainer's Guide



**World Health
Organization**

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CONTENTS – Trainer's Guide

Session	Heading.....	Duration	Page
	Introduction to the course		1
	Course objectives		2
	Course competencies.....		3
	The course and the materials.....		9
	Resource materials		12
	Teaching the course.....		14
	Follow-up after training		21
Session 1	An introduction to infant and young child feeding and the WHO child growth standards	30 minutes	23
Session 2	Why breastfeeding is important	30 minutes	37
Session 3	How breastfeeding works	30 minutes	51
Session 4	Assessing a breastfeed	60 minutes	65
Session 5	Introducing child growth assessment.....	100 minutes	85
Session 6	Measuring weight, length and height	80 minutes	105
Session 7	Listening and learning	60 minutes	111
Session 8	Listening and learning exercises	Homework.....	129
Session 9	<i>Practical Session 1</i>	120 minutes	135
	<i>Listening and learning. Measuring children</i>		
Session 10	Measuring is not so easy!.....	30 minutes	143
Session 11	Positioning a baby at the breast	75 minutes	147
	<i>Practical session: Positioning a baby using dolls</i>		
Session 12	Building confidence and giving support	45 minutes	157
Session 13	Building confidence and giving support exercises - Part 1	Homework	171
Session 14	Plotting points for growth indicators.....	60 minutes	179
Session 15	Interpreting plotted points for growth indicators	120 minutes	199
Session 16	<i>Practical Session 2</i>	120 minutes	215
	<i>Building confidence and giving support. Assessing a breastfeed and positioning a baby at the breast</i>		
Session 17	Interpreting trends on growth charts.....	120 minutes	223
Session 18	Taking a feeding history.....	20 minutes	239
Session 19	Common breastfeeding difficulties	60 minutes	247
Session 20	Expressing breast milk and cup feeding	40 minutes	271
Session 21	Breast conditions	45 minutes	281
Session 22	Importance of complementary feeding	45 minutes	303
Session 23	Building confidence and giving support exercises - Part 2	Homework	317
Session 24	Foods to fill the energy gap	30 minutes	325

Session 25	Foods to fill the iron and vitamin A gaps	50 minutes	337
Session 26	Quantity, variety and frequency of feeding	45 minutes	353
Session 27	Growth assessment results and feeding counselling when the child is growing well	50 minutes	367
Session 28	Investigating causes of undernutrition	60 minutes	383
Session 29	Counsel mother whose child has a problem of undernutrition	40 minutes	393
Session 30	Investigate causes and counsel mother whose child has a problem of overweight	60 minutes	399
Session 31	Checking understanding and arranging follow-up	30 minutes	411
Session 32	Gathering information and counselling on feeding and growth <i>Role plays</i>	60 minutes	419
Session 33	Hygienic preparation of feeds and food demonstration	60 minutes	431
Session 34	Feeding techniques	30 minutes	453
Session 35	<i>Practical Session 3</i>	180 minutes	463
	<i>Measuring growth and counselling on growth and feeding</i>		
Session 36	Overview of HIV and infant feeding	60 minutes	469
Session 37	Feeding during illness and low-birth-weight babies	30 minutes	495
Session 38	Follow-up after training	45 minutes	505
	Glossary of terms		511

Total time for sessions 1 – 38 = about 36 hours

CHECKLIST OF TRAINING SKILLS

Practise using these skills when you conduct sessions, and comment on these points when you give feedback to other trainers. For more information see pages 14 to 21 of this guide.

Preparation

- Follow the session plan accurately and completely - use your Trainer's Guide.
- Prepare thoroughly - read the text and practise.
- Prepare your helpers or co-facilitators (e.g. for role-plays) before the session - practise if possible.
- Have the required supplies, equipment and teaching aids ready - check and arrange them before the session.
- If needed, place a table at the front of the room to set up visual aids and teaching materials.
- Arrange the room so that all participants can see clearly what is happening - if possible arrange seats in a U-shape with no more than two rows of seats.
- Do not introduce too much extra material - give local or personal examples when appropriate.

Audiovisuals and Teaching Aids

- Make sure audiovisual equipment is available and working.
- Make sure audiovisuals and teaching aids can be seen by all participants.
- Write clearly on the board or flip chart - arrange words carefully so there is enough room.
- Let participants handle teaching aids that you use for demonstrations.
- Cover, turn off, or remove teaching aids that are not in use any more.

Presentations

- Take centre stage - don't hide behind a podium or desk.
- Follow the *Trainer's Guide* - but talk in your own way.
- Face the audience when speaking - not the board or screen.
- Make eye contact with people in all sections of the audience.
- Speak slowly, clearly and loudly enough for everyone to understand and hear.
- Vary the tone and level of your voice.
- Use natural gestures and facial expressions.
- Avoid blocking the participants' view - watch for craning necks.

Interaction

- Involve all participants. Ask questions to quiet ones. Control talkative ones.
- Move around the room - approach people to get their attention or response.
- Use participants' names.
- Allow time for participants to answer questions from the *Trainer's Guide* - give hints when needed.
- Repeat responses from participants when it is likely that not everyone heard.
- Respond encouragingly and positively to all answers - correct errors gently.
- Reinforce participants by thanking them for comments and praising good ideas.
- Respond adequately to questions - offer to seek answers if not known.
- Handle incorrect or off-the-subject comments tactfully.

Role-Plays

- Set up role-plays carefully. Obtain necessary props (e.g. dolls). Brief those who will play the roles, and allow them time to prepare.
- Clearly introduce the role-play by explaining its purpose, the situation, and the roles to be enacted.
- Keep the role-play brief and to the point.
- After the role-play, guide a discussion. Ask questions of both the players and observers.
- Summarize what happened and what was learnt.

Demonstrations

- Follow the instructions in the *Trainer's Guide*.
- State clearly the objective of the demonstration.
- Demonstrate the entire, correct procedure (no short cuts).
- Describe the steps aloud while doing them.
- Project your voice so all can hear. Stand where everyone can see.
- Encourage questions from participants.
- Ask participants questions to check their understanding.

Written Exercises

- Give clear instructions and a time limit before starting the exercises.
- While participants work, look available, interested and willing to help.
- Give individual help quietly, without disturbing others in the group.
- Sit down next to the participant whom you are helping.
- Check answers carefully - listen as participants give reasons for their answers.
- Encourage and reinforce participants' efforts - give positive feedback.
- Help participants to understand any errors - give clear explanations.
- Remember to use your counselling skills when giving feedback.

Practical Sessions and Group Work

- Before dividing into groups, explain clearly the purpose of the activity, what participants will do, and the time limit.
- If needed, demonstrate a skill before asking participants to do it on their own.
- Select suitable cases for the session's objectives.
- Observe participants carefully as they work with real mothers or counselling stories.
- Use the PRACTICAL DISCUSSION CHECKLIST.
- Try to get participants to identify their own strengths and weaknesses. Ask questions like - What did you do well? What difficulties did you have? What would you do differently in the future?
- Provide feedback on things which participants did well and on things that they need to improve on - be gentle and tactful when correcting errors.
- Keep participants busy by promptly assigning another mother or case scenario.

Time management

- Keep to time - not too fast or too slow. Don't take too long with the early part of a session.
- Don't lose time between sessions (e.g. going to practical session and group work). Before participants begin to move, explain clearly what they will do.

Combined course on growth assessment and IYCF counselling

Introduction

Why this course is needed

The sixty-third World Health Assembly Resolution WHA63.23 urges Member States to implement the WHO Child Growth Standards by their full integration into child health programmes. This course combines the skills required to assess child growth accurately and to effectively counsel and support mothers in the appropriate feeding of their infants and young children.

The WHO and UNICEF developed the Global Strategy for Infant and Young Child Feeding in 2002 to revitalize world attention to the impact that feeding practices have on the nutritional status, growth, development, health, and survival of infants and young children. This strategy is based on the conclusions and recommendations of expert consultations, which resulted in the global public health recommendation to protect, promote and support exclusive breastfeeding for six months, and to provide safe and appropriate complementary foods with continued breastfeeding for up to two years of age or beyond.

The WHO Child Growth Standards, published in 2006, were developed using a sample of children from six countries: Brazil, Ghana, India, Norway, Oman, and the United States of America. The WHO Multicentre Growth Reference Study (MGRS)¹ was designed to provide data describing how children should grow, by including in the study's selection criteria certain recommended health behaviours (for example, breastfeeding, providing standard paediatric care, and not smoking). A key characteristic of the new standards is that they explicitly identify breastfeeding as the biological norm and establish the breastfed child as the normative model for growth and development² and are a most appropriate complement to the WHO/UNICEF Global Strategy for Infant and Young Child Feeding.

Many children are not fed in the recommended way. Many mothers, who initiate breastfeeding satisfactorily, often start complementary feeds or stop breastfeeding within a few weeks of delivery. In addition, many children, even those who have grown well for the first six months of life, do not receive adequate complementary feeds. This may result in malnutrition, which is an increasing problem in many countries. More than one-third of under-five children are undernourished – whether stunted, wasted, or deficient in vitamin A, iron or other micronutrients – and malnutrition contributes to about one third of the 7.8 million deaths each year among children under five in developing countries.³

On the other hand, inappropriate feeding is probably contributing to increased overweight/obesity in childhood. The application of the WHO Child Growth Standards and the counselling on infant and young child feeding presented in this course aim to address as much the practices that lead to undernutrition as those that pre-dispose to the accumulation of excessive weight.

Information on how to feed young children comes from family beliefs, community practices and information from health workers. Advertising and commercial promotion by food manufacturers is sometimes the source of information for many people, both families and health workers. It has often been difficult for health workers to discuss with families how best to feed their young children due to the confusing, and often conflicting, information available. Inadequate knowledge about how to breastfeed, the appropriate complementary foods to

¹ de Onis M, Garza C, Victora CG, Bhan MK, Norum KR, editors. WHO Multicentre Growth Reference Study (MGRS): Rationale, Planning and Implementation. *Food Nutr Bull* 2004; 25 (Suppl 1):S1–89.

² WHO Child Growth Standards. Mercedes de Onis, Cutberto Garza, Adelheid W. Onyango, Reynaldo Martorell, guest editors. *Acta Paediatrica*, 2006; Suppl 450: 1-101.

³ WHO: Child Epidemiology. Available from http://www.who.int/maternal_child_adolescent/epidemiology/child/en/index.html

give, and good feeding practices are often a greater determinant of malnutrition than the availability of food.

There is therefore an urgent need to train those involved in infant feeding counselling in the skills needed to support and protect breastfeeding and good complementary feeding practices. The growth assessment skills acquired in the present course will equip them to work with mothers towards achieving the complementary aims of appropriate infant and young child feeding (IYCF) and healthy child growth.

The present course is developed by combining the core elements of two existing courses:

- WHO/UNICEF: Infant and Young child Feeding Counselling: An Integrated Course (5 days)
- WHO: Training Course on Child Growth Assessment (3.5 days)

This 5-day *Combined course on growth assessment and IYCF counselling* does not set out to replace these courses. Sections that address special needs, e.g. IYCF in the context of HIV, are excluded from the core course but will be presented as a supplementary section for use in populations where such needs pose challenges to appropriate IYCF.

‘Counselling’ is an extremely important component of this course, as it is in the parent courses. The concept of ‘counselling’ may be new and can be difficult to translate. Some languages use the same word as ‘advising’. However, counselling means more than simple advising. Often, when health workers advise people, they tell them what they think should be done. However, the aim of counselling is to listen and help the person decide what is best from various options or suggestions, and then build their confidence to carry out the decision. This course aims to give health workers basic counselling skills so that they can help mothers and caregivers more effectively.

Course objectives

After completing this course, participants will be able to assess breastfeeding and complementary feeding, measure children, plot measurements on growth charts, and interpret growth indicators and counsel and support mothers to carry out WHO/UNICEF recommended feeding practices for their infants and young children.

Each session of this course has a set of learning objectives to guide both trainers and participants track their acquisition of necessary skills and competencies.

Target Audience

This course is aimed at the following groups of people:

- Lay counsellors
- Community health workers
- Primary Health Care nurses and doctors – especially if supervising and/or a referral level for lay counsellors, community health workers
- Clinicians at first referral level
- Paediatricians, family practice physicians, nurses, clinical officers, health assistants, and nutritionists who measure and assess the growth of children or supervise these activities

Course participants are not expected to have any prior knowledge of infant feeding.

The Trainers

Ideally, trainers for this course should be qualified as such in the integrated course on infant and young child feeding counselling (5 days), OR the two WHO counselling courses on infant feeding – Breastfeeding Counselling: A Training Course (5 days) and Complementary Feeding Counselling: A Training Course (3 days). They should also have completed the WHO training course on child growth assessment as facilitators (4 days).

It is **essential** that trainers for this combined course possess the technical skills required to measure, plot and interpret growth curves and be skilled in counselling and supporting mothers to practice appropriate feeding to assure healthy child growth.

The trainers should have hands-on experience in caring for infants and mothers/caregivers. After completing this course it is unlikely that the participants will have learnt all the practical skills covered. Therefore, a follow-up session is proposed to take place between one and three months after the course. Ideally trainers should be available after the course to mentor participants and conduct the post-training follow-up and evaluation. This is best assured if they live and work within accessible distance from the facilities served by the participants.

The trainers should have access to the Training Guides from each of the individual courses listed in the first paragraph above. These Guides will provide them with additional background information to help them answer participants' questions and clarify issues.

Course competencies

This course is based on a set of competencies which every participant is expected to learn during the training and subsequent practice and follow-up at their place of work. To become competent at something you need a certain amount of knowledge and be proficient in certain skills. The following table lists the competencies (column 1), the knowledge required for each competency (column 2) and the skills required for each competency (column 3).

The 'knowledge' part of the competencies will be taught during this course, and is contained in the Participant's Manual for later reference and review by participants. Most people find that they obtain the 'knowledge' part of a competency more quickly than the 'skills' part.

The 'skills' part of the competencies will also be taught during this course. However, there may not be time for each participant to become proficient in every skill. This will depend on their previous experience. During the course every participant should practise as many of the skills as possible, so that they know what to do when they return to their place of work. The skills will be practised further in the supervised follow-up session.

The competencies are arranged in a certain order. The competencies at the beginning of the table are those which are most commonly used, and on which later competencies depend. For example, the competency 'use listening and learning skills to counsel a mother' is used in many of the other competencies.

Competency	Knowledge	Skills
1. Use Listening and Learning skills to counsel a mother	<ul style="list-style-type: none"> • List the 6 Listening and Learning skills • Give an example of each skill 	<ul style="list-style-type: none"> • Use the Listening and Learning skills appropriately when counselling a mother on child growth and feeding her infant or young child
2. Use Confidence and Support skills to counsel a mother	<ul style="list-style-type: none"> • List the 6 Confidence and Support skills • Give an example of each skill 	<ul style="list-style-type: none"> • Use the Confidence and Support skills appropriately when counselling a mother on child growth and feeding her infant or young child
3. Assess a breastfeed	<ul style="list-style-type: none"> • Explain the contents and arrangement of the Breastfeed Observation Job Aid 	<ul style="list-style-type: none"> • Assess a breastfeed using the Breastfeed Observation Job Aid • Recognize a mother who needs help using the Breastfeed Observation Job Aid
4. Help a mother to position a baby at the breast	<ul style="list-style-type: none"> • Explain the 4 key points of positioning • Describe how a mother should support her breast for feeding • Explain the main positions – sitting, lying, underarm and across 	<ul style="list-style-type: none"> • Recognize good and poor positioning according to the 4 key points • Help a mother to position her baby using the 4 key points, in different positions
5. Help a mother to attach her baby to the breast	<ul style="list-style-type: none"> • Describe the relevant anatomy and physiology of the breast and suckling action of the baby • Explain the 4 key points of attachment 	<ul style="list-style-type: none"> • Recognize signs of good and poor attachment and effective suckling according to the Breastfeed Observation Job Aid • Help a mother to get her baby to attach to the breast once he is well positioned
6. Explain to a mother about the optimal pattern of breastfeeding	<ul style="list-style-type: none"> • Describe the physiology of breast milk production and flow • Describe unrestricted (or demand) feeding, and implications for frequency and duration of breastfeeds and using both breasts alternatively 	<ul style="list-style-type: none"> • Explain to a mother about the optimal pattern of breastfeeding and demand feeding
7. Help a mother to express her breast milk by hand	<ul style="list-style-type: none"> • List the situations when expressing breast milk is useful • Describe the relevant anatomy of the breast and physiology of lactation • Explain how to stimulate the oxytocin reflex • Describe how to select and prepare a container for expressed breast milk • Describe how to store breast milk 	<ul style="list-style-type: none"> • Explain to a mother how to stimulate her oxytocin reflex • Rub a mother's back to stimulate her oxytocin reflex • Help a mother to learn how to prepare a container for expressed breast milk • Explain to a mother the steps for expressing breast milk by hand • Observe a mother expressing breast milk by hand and help her if necessary

Competency	Knowledge	Skills
8. Help a mother to cup-feed her baby	<ul style="list-style-type: none"> • List the advantages of cup-feeding 	<ul style="list-style-type: none"> • Demonstrate to a mother how to prepare a cup hygienically for feeding • Practise with a mother how to cup-feed her baby safely
9. Measure weight, length and height	<ul style="list-style-type: none"> • Describe how to measure weight length and height • Determine when to measure length and when to measure height 	<ul style="list-style-type: none"> • Measure weight of a young child held by a mother and an older child alone • Measure length correctly • Measure height correctly
10. Plot single points on various growth charts	<ul style="list-style-type: none"> • Explain how to place a point on a graph combining information from two axes • Describe where to find the age, weight, and length/height on various growth indicator charts 	<ul style="list-style-type: none"> • Plot weight and length/height points on weight-for-age and length/height-age charts • Plot weight points on weight-for-length/height charts
11. Interpret single points on various indicator charts	<ul style="list-style-type: none"> • Identify growth problems based on points plotted on a single indicator chart • Define a growth problem using a combination of indicator charts 	<ul style="list-style-type: none"> • Identify children who are stunted, underweight, wasted and overweight based on points plotted on several indicator charts
12. Interpret growth trends using a combination of indicators	<ul style="list-style-type: none"> • Interpret trends on growth charts 	<ul style="list-style-type: none"> • Identify a child who are growing normally, has a growth problem or is at risk of a growth problem
13. Take a feeding history for an infant 0-6 months	<ul style="list-style-type: none"> • Describe the contents and arrangement of the Feeding History Job Aid, 0-6 Months 	<ul style="list-style-type: none"> • Take a feeding history using the job aid and appropriate counselling skills according to the age of the child
14. Teach a mother the 10 Key Messages for complementary feeding	<ul style="list-style-type: none"> • List and explain the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6) • Explain when to use the food consistency pictures, and what each picture shows • List and explain the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7-8) • List and explain the Key Message about how to feed an infant or young child (Key Message 9) • List and explain the Key Message about how to feed an infant or young child during illness (Key Message 10) 	<ul style="list-style-type: none"> • Explain to a mother the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6) • Use the food consistency pictures appropriately during counselling • Explain to a mother the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7-8) • Explain to a mother the Key Message about how to feed an infant or young child (Key Message 9) • Explain to a mother the Key Message about how to feed an infant or young child during illness (Key Message 10)

Competency	Knowledge	Skills
15. Counsel a pregnant woman about breastfeeding	<ul style="list-style-type: none"> • List the Ten Steps to Successful Breastfeeding • Describe how the International Code of Marketing of Breast-milk Substitutes helps to protect breastfeeding • Discuss why exclusive breastfeeding is important for the first six months • List the special properties of colostrum and reasons why it is important 	<ul style="list-style-type: none"> • Use counselling skills appropriately with a pregnant woman to discuss the advantages of exclusive breastfeeding • Explain to a pregnant woman how to initiate and establish breastfeeding after delivery, and the optimal breastfeeding pattern • Apply competencies 1, 2 and 6
16. Help a mother to initiate breastfeeding	<ul style="list-style-type: none"> • Discuss the importance of early contact after delivery and of the baby receiving colostrum • Describe how health care practices affect initiation of exclusive breastfeeding 	<ul style="list-style-type: none"> • Help a mother to initiate skin-to-skin contact immediately after delivery and to introduce her baby to the breast • Apply competencies 1, 2, 4 and 5
17. Support exclusive breast feeding for the first six months of life	<ul style="list-style-type: none"> • Describe why exclusive breastfeeding is important • Describe the support that a mother needs to sustain exclusive breastfeeding 	<ul style="list-style-type: none"> • Apply competencies 1 to 8 and 13 appropriately
18. Help a mother to sustain breastfeeding up to 2 years of age or beyond	<ul style="list-style-type: none"> • Describe the importance of breast milk in the 2nd year of life 	<ul style="list-style-type: none"> • Apply competencies 1, 2, 12 and 14, including explaining the value of breastfeeding up to 2 years and beyond
19. Help a mother with 'not enough milk'	<ul style="list-style-type: none"> • Describe the common reasons why a baby may have a low breast milk intake • Describe the common reasons for apparent insufficiency of milk • List the reliable signs that a baby is not getting enough milk 	<ul style="list-style-type: none"> • Apply competencies 1, 3, 12 and 13 to decide the cause • Apply competencies 2, 4, 5, 6, 7 and 8 to overcome the difficulty, including explaining the cause of the difficulty to the mother
20. Help a mother with a baby who cries frequently	<ul style="list-style-type: none"> • List the causes of frequent crying • Describe the management of a crying baby 	<ul style="list-style-type: none"> • Apply competencies 1, 3, 12 and 13 to decide the cause • Apply competencies 2, 4, 5 and 6 to overcome the difficulty, including explaining the cause of the difficulty to the mother • Demonstrate to a mother the positions to hold and carry a colicky baby
21. Help a mother whose baby is refusing to breastfeed	<ul style="list-style-type: none"> • List the causes of breast refusal • Describe the management of breast refusal 	<ul style="list-style-type: none"> • Apply competencies 1, 3, 12 and 13 to decide the cause • Apply competencies 2, 4 and 5 to overcome the difficulty, including explaining the cause of the difficulty to the mother • Help a mother to use skin-to-skin contact to help her baby accept the breast again

Competency	Knowledge	Skills
		<ul style="list-style-type: none"> • Apply competencies 7 and 8 to maintain breast milk production and to feed the baby meanwhile
22. Help a mother who has flat or inverted nipples	<ul style="list-style-type: none"> • Explain the difference between flat and inverted nipples and about protractility • Explain how to manage flat and inverted nipples 	<ul style="list-style-type: none"> • Recognize flat and inverted nipples • Apply competencies 2, 4, 5, 7 and 8 to overcome the difficulty • Show a mother how to use the syringe method for the treatment of inverted nipples
23. Help a mother with engorged breasts	<ul style="list-style-type: none"> • Explain the differences between full and engorged breasts • Explain the reasons why breasts may become engorged • Explain how to manage breast engorgement 	<ul style="list-style-type: none"> • Recognize the difference between full and engorged breasts • Apply competencies 2, 4, 5, 6 and 7 to manage the difficulty
24. Help a mother with sore or cracked nipples	<ul style="list-style-type: none"> • List the causes of sore or cracked nipples • Describe the relevant anatomy and physiology of the breast • Explain how to treat candida infection of the breast 	<ul style="list-style-type: none"> • Recognize sore and cracked nipples • Recognize candida infection of the breast • Apply competencies 2, 3, 4, 5, 7 and 8 to manage these conditions
25. Help a mother with mastitis	<ul style="list-style-type: none"> • Describe the difference between engorgement and mastitis • List the causes of a blocked milk duct • Explain how to treat a blocked milk duct • List the causes of mastitis • Explain how to manage mastitis, including indications for antibiotic treatment and referral • List the antibiotics to use for infective mastitis 	<ul style="list-style-type: none"> • Recognize mastitis and refer if necessary • Recognize a blocked milk duct • Manage blocked duct appropriately • Manage mastitis appropriately using competencies 1, 2, 3, 4, 5, 6, 7, 8 and rest, analgesics and antibiotics if indicated. Refer to the appropriate level of care
26. Help a mother to breastfeed a low-birth-weight baby or sick baby	<ul style="list-style-type: none"> • Explain why breast milk is important for a low-birth-weight baby or sick baby • Describe the different ways to feed breast milk to a low-birth-weight baby 	<ul style="list-style-type: none"> • Help a mother to feed her LBW baby appropriately • Apply competencies, especially 7, 8 and 12, to manage these infants appropriately • Explain to a mother the importance of breastfeeding during illness and recovery
27. Help mothers whose babies are over six months of age	<ul style="list-style-type: none"> • List the gaps which occur after six months when a child can no longer get enough nutrients from breast milk alone 	<ul style="list-style-type: none"> • Apply competencies 1, 2, 12 and 14 • Use the FOOD INTAKE JOB AID, 6-23 MONTHS to learn how a

Competency	Knowledge	Skills
to give complementary feeds	<ul style="list-style-type: none"> • List the foods that can fill the gaps • Describe how to prepare feeds hygienically 	<p>mother is feeding her infant or young child</p> <ul style="list-style-type: none"> • Identify the gaps in the diet using the FOOD INTAKE JOB AID, 6-23 MONTHS and the FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS
28. Counsel a mother whose child has undernutrition	<ul style="list-style-type: none"> • Describe causes of stunting, wasting, and underweight • Involve the mother in identifying possible causes of her child's undernutrition • Find age-appropriate advice for the problem identified • Set goals for improving growth of an undernourished child 	<ul style="list-style-type: none"> • Identify the key sections of the job-aid INVESTIGATING CAUSES OF UNDERNUTRITION • Use the job-aid appropriately (find the correct pages for the child's age, complete the investigation before counselling, counsel using age-appropriate recommendations) • Check mother's understanding using checking questions • Involve mother in setting goals for improved growth
29. Counsel a mother whose child is overweight	<ul style="list-style-type: none"> • Describe causes of overweight/obesity • Involve the mother in identifying possible causes of her child's overweight • Set goals for improving growth of an overweight child 	<ul style="list-style-type: none"> • Identify the key sections of the job-aid INVESTIGATING CAUSES OF OVERWEIGHT • Use the job-aid appropriately (find the correct pages for the child's age, complete the investigation before counselling, counsel using age-appropriate recommendations) • Check mother's understanding using checking questions • Involve mother in setting goals for improved growth

The Course and the Materials

Structure of the course

The course is divided into 38 sessions, which take approximately 36 hours without meals or the opening and closing ceremonies. The course can be conducted consecutively in a working week, or can be spread in other ways. The sessions use a variety of teaching methods, including lectures, demonstrations, and practical work and exercises in smaller groups. Because of time constraints, written exercises are given as homework and it is expected that the trainer reviews the homework with the participants assigned to him/her before providing the answer sheets for each exercise.

Order of sessions

The sessions are in a suggested sequence (examples of Timetables are provided in the *Director's Guide*) but the order may need to be adapted to suit local facilities – for example, if mothers and infants are not available for practical sessions at the suggested times. The course begins with assessment of growth and breastfeeding. Following these are the sessions on complementary feeding and counselling on growth and feeding.

Some sessions can be moved, but it is necessary for some aspects of the sequence to be maintained. The main requirement is that you conduct the sessions that prepare participants for a particular practical session before the practical.

Course materials

Director's Guide

The *Director's Guide* contains all the information that the Course Director needs to plan and prepare for a course, and to select trainers and participants, starting several months before the actual training. It contains lists of the materials and equipment needed, examples of timetables, and copies of the forms that need to be photocopied before a course. It also describes the Director's role during the course itself.

The Trainer's Guide

The *Trainer's Guide* contains what you, the trainer, need in order to lead participants through the course. The Guide contains the information that you require, detailed instructions on how to conduct each session, the exercises that participants will do, together with answers, and the summary sheets, forms, checklists and stories used during the practical sessions of the course. This is your most essential tool as a trainer on the course. It is recommended that you use it at all times and add notes to it as you work. These notes will help you in future courses.

Slides

Many sessions use slides. These are provided on a CD for projection onto a screen. Alternatively you can use overhead transparencies, and picture books containing the photographs. Your Director will inform you which you will use. It is important that you are familiar with the equipment beforehand. All the slides are shown in your Trainer's Guide so that you can make sure you understand the information, pictures or graphs for your sessions.

Participant's Manual

A *Participant's Manual* is provided for each participant. This contains summaries of information, copies of Worksheets and Checklists for the practical sessions and exercises participants will do during the course (without answers). This Manual can be used for reference after the course, so it is not essential for participants to take detailed notes.

Answer sheets

These are provided separately, and they give answers to all the exercises. Give them to the participants after they have worked through the each exercise.

Forms and checklists

Loose copies of the forms, checklists and job-aids needed for practical sessions and counselling exercises are provided. These are:

- . BREASTFEED OBSERVATION JOB AID
- . FEEDING HISTORY JOB AID, 0-6 MONTHS
- . LISTENING AND LEARNING SKILLS CHECKLIST
- . COUNSELLING SKILLS CHECKLIST ('listening and learning' & 'confidence and support')
- . PRACTICAL DISCUSSION CHECKLIST (for trainers only)
- . FOOD INTAKE JOB AID, 6-23 MONTHS
- . JOB-AID: INVESTIGATING CAUSES OF UNDERNUTRITION
- . JOB-AID: INVESTIGATING CAUSES OF OVERWEIGHT
- . GROWTH CHART BOOKLET (GIRLS AND BOYS)
- . AGE CALCULATOR

Updates

Any updates on the topics covered in this course will be available at the NHD website; this site should be consulted when preparing a course.

Training aids

You will need a flipchart, and blackboard and chalk, or white board and suitable markers, for most sessions, and a means of fixing flipchart pages to the wall or notice board – such as masking tape. You will also need approximately 1 life-size baby doll and 1 model breast for each small working group of 3-4 participants.

If dolls and model breasts are not available here are some instructions for making them very simply and out of readily available material.

HOW TO MAKE A MODEL DOLL

- Find any large fruit or vegetable, a towel or other strong thick cloth, and some rubber bands or string.
- Put the fruit or vegetable in the middle of the cloth, and tie the cloth around it to form the baby's 'neck' and 'head'.
- Bunch the free part of the cloth together to form the baby's legs and arms, and tie them into shape.
- If the cloth is rather thin, you may like to stuff some other cloth inside to give the doll more of a 'body'.

HOW TO MAKE A MODEL BREAST

- Use a pair of near skin-coloured socks, or stockings, or an old sweater or T-shirt.
- Make the cloth into a round bag shape, and stuff it with other cloth or foam rubber to make it breast shaped.
- Stitch a 'purse string' around a circle in the middle of the breast to make a nipple.
- Stuff the nipple with foam or cotton.
- Colour the areola with a felt pen. You can also push the nipple in, to make an 'inverted' nipple.
- If you wish to show the inside structure of the breast, with the larger ducts, make the breast with two layers, for example with 2 socks.
- Sew the nipple in the outer layer, and draw the large ducts and ducts on the inside layer, beneath the nipple.
- You can remove the outer layer with the nipple to reveal the inside structure.

Resource Materials

RESOURCE MATERIALS

As a trainer, you may wish to obtain the following reference materials to answer questions and provide additional information:

These can be downloaded from WHO web sites: www.who.int/maternal_child_adolescent/en/ or www.who.int/nut/publications or www.who.int/childgrowth

Also available from Marketing and Distribution of Information, WHO, Avenue Appia, 1211 Geneva 27, Switzerland, Fax: 41-22-791-4857; bookorders@who.int or your local WHO Publication Stockists.

- Annex to Breastfeeding Counselling: A training Course on Breastfeeding and Maternal Medication: Recommendations for drugs in the WHO Model List of Essential Drugs WHO/CDR/95.11
- Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants. World Health Organization, Geneva, 2010.
- Breastfeeding Counselling: A training course. World Health Organization, Geneva, 1998 (Updated on 2012).
- Community-Based Strategies for Breastfeeding Promotion and Support in Developing Countries WHO 2003
- Complementary Feeding – family foods for breastfed children. WHO/NHD/00.1
- Complementary Feeding Counselling: a training course WHO 2004.
- Complementary Feeding of Young Children in Developing Countries: a review of current scientific knowledge. WHO/NUT/98.1
- De Onis M et al. The WHO Multicentre Growth Reference Study (MGRS): Rationale, planning and implementation. Food and Nutrition Bulletin 2004; 25 (Supplement 1): S3-S84
- Evidence for the Ten Steps to Successful Breastfeeding WHO/CHD/98.9
- Guidelines on optimal feeding of low birth-weight infants in low- and middle-income countries. WHO, Geneva, 2011.
- Guiding Principles for Complementary Feeding of the Breastfed Child. 2003, PAHO/WHO, Division of Health Promotion and Protection/Food and Nutrition Program, Washington, DC, USA.
- Guiding principles for feeding the non-breastfed child 6-24 months. Geneva, 2005
- Hepatitis B and breastfeeding update. WHO 1996
- Infant and young child feeding: Model chapter for textbook for medical students and allied health professionals. WHO, Geneva, 2009.
- Infant and young child feeding: A tool for assessing national practices, policies and programmes, Geneva 2003
- International Code of Marketing of Breast-milk Substitutes. Geneva, 1981.
- Mastitis: causes and management WHO/FCH/CAH/00.13
- Protecting, Promoting and supporting breast-feeding: the special role of maternity services. A joint WHO/UNICEF Statement, Geneva, 1989
- Relactation – a review of experience and recommendations for practice WHO/CHS/CAH/98.14
- The International Code of Marketing of Breast-milk Substitutes: Frequently Asked Questions. WHO, Geneva, 2006.
- WHO Child Growth Standards. Acta Paediatrica Supplement 2006; 450: 5-101
- WHO Training course on child growth assessment. Geneva, World Health Organization, 2008.
- WHO. The optimal duration of exclusive breastfeeding: a systematic review. WHO/NHD/01.08
- WHO. HIV and infant feeding 2010: an updated framework for priority action. Geneva, World Health Organization, 2012.
- WHO/UNICEF. Acceptable medical reasons for use of breast-milk substitutes. WHO, Geneva, 2009.
- WHO/UNICEF. Global Strategy for Infant and Young Child Feeding Geneva, 2003.
- WHO, UNICEF, USAID, AED, UCDAVIS, IFPRI. Indicators for assessing infant and young child feeding practices. Definitions. Measurement, Country Profiles. Geneva, 2008-2010.
- WHO, UNAIDS, UNFPA, UNICEF. Guidelines on HIV and infant feeding 2010: Principles and

recommendations for infant feeding in the context of HIV and a summary of evidence. World Health Organization, Geneva, 2010.

Available from WHO, Department of Food Safety (FOS) fos@who.int

- Basic principles for the preparation of safe food for infants and young children WHO/FNU/FOS/96.6 www.who.int/fsf/Documents/brochure/basic.pdf
- Adams M, & Motarjemi, Y. Basic Food Safety for Health Workers. WHO/SDE/PHE/FOS/99.1
- Five keys to safer food (poster). WHO/SDE/PHE/FOS/01.1 <http://www.who.int/foodsafety/publications/consumer/5keys/en/index.html>
- Five keys to safer food manual <http://www.who.int/foodsafety/consumer/5keysmanual/en/index.html>

Available from WHO, HIS (HIV/AIDS/STI)

- Counselling for HIV/AIDS: a key to caring WHO/GPA/TCO/HCS/95.15
- HIV in Pregnancy: a Review WHO/CHS/RHR/99.15; UNAIDS 99.35
- Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants, Recommendations for a public health approach (2010 version).
- Antiretroviral therapy for HIV infection in adults and adolescents. Recommendations for a public health approach: 2010 revision

Available from UNAIDS Information Centre, 20 Avenue Appia, 1211 Geneva 27, Switzerland unaid@unaid.org

- Prevention of HIV transmission from mother to child: Strategic options. UNAIDS/99.44E
- Counselling and Voluntary HIV testing for pregnant women in high HIV prevalence countries: elements and issues. UNAIDS/99.40E

Available from WHO Regional Office for Europe, Copenhagen, Denmark

- Fleischer Michaelsen K, Weaver L, Branca F, Robertson A, Feeding and nutrition of infants and young children – guidelines for the WHO European Region. WHO Regional Publication, European Series, No 87, 2000

Available from UNICEF, Nutrition Section, 3 United Nations Plaza, New York NY 10017, USA: wdemos@unicef.org

- Engle P. The Care Initiative: assessment, analysis and action to improve care for nutrition. New York: UNICEF Nutrition Section, 1997.
- Armstrong, HC. Techniques of Feeding Infants: the case for cup feeding. Research in Action, No 8, June 1998, UNICEF, NY

Available from Teaching Aids At Low Cost, PO Box 49, St Albans, Herts AL1 5TX, UK, Fax: +44-1727-846852 www.talcuk.org

- Savage-King, F & Burgess, A, Nutrition for Developing Countries, ELBS, Oxford University Press, 1995
- Savage-King, F, Helping mothers to breastfeed (Revised Edition, African Medical and Research Foundation, 1992, or an adapted version), AMREF, Kenya

Teaching the Course

This section explains the teaching methodology used in the course. You should read it before you start conducting sessions.

Motivating participants

Encourage interaction

During the first day, interact at least once with every participant, and encourage them to interact with you. This will help them to overcome their shyness, and they will be more likely to interact with you for the remainder of the course.

Make an effort to learn participants' names early in the course, and use their names whenever it is appropriate. Use names when you ask participants to speak, or to answer questions, or when you refer to their comments, or thank them.

Be readily available at all times. Remain in the room, and look approachable. For example, do not read magazines or talk constantly with other trainers. Talk to participants rather than trainers during tea breaks, and be available after a session has ended.

Get to know the participants who will be in your group, and encourage them to come and talk to you at any time, to ask questions, or to discuss any difficulties, or even to tell you that they are interested and enjoying themselves.

Reinforce participants' efforts

Take care not to seem threatening. These techniques may help:

- . be careful not to use facial expressions or comments that could make participants feel ridiculed
- . sit or bend down to be on the same level as a participant to whom you are talking, particularly when you are going over individual written exercises
- . do not be in a hurry, whether you are asking or answering questions
- . show interest in what participants say. For example, say: "That is an interesting question/suggestion."

Praise, or thank participants, who make an effort. For example when they:

- . try hard
- . ask for an explanation of a confusing point
- . do a good job on an exercise
- . participate in group discussion
- . help other participants (without distracting them by talking about something irrelevant).

You may notice that many of the counselling skills taught during the course are also important for communicating with participants. In particular, you will find it helpful to use appropriate non-verbal communication, to ask open questions, to praise them and help them to feel confident in their work with caregivers of young children. It is important that you, as a trainer, demonstrate these counselling skills throughout the course – not only during the relevant sessions, but also in your approach to the participants, mothers, caregivers, staff in the facilities etc. This will demonstrate to the participants that counselling skills are useful in many situations and, with practice, become a way of life.

Be aware of language difficulties

Try to identify participants who have difficulty understanding or speaking the language in which the course is conducted. Speak slowly and clearly so that you can be more easily understood. Encourage participants in their efforts to communicate.

If necessary, speak with a participant in her own language (or ask someone else to do so for you) to clarify a difficult point.

Discuss with the Course Director any language problems that seriously hinder the ability of a participant to understand the material. It may be possible to arrange help for the participant, or for her to do some of the exercises in a different way.

Using Your Trainer's Guide

Before you lead any session:

Look at your Guide and read the 'Session Outline', to find out what kind of session it will be, and what your responsibilities are. Read the 'Objectives' to find out what the participants should be able to do at the end of the session.

Read the 'Preparation' box at the beginning of the text, so that you know what you have to do in advance to prepare for the session, and what training aids (and other kind of help) you need.

Read the text for the session, so that you are clear what you will have to do. The text includes detailed point-by-point instructions about how to conduct the session.

Consider splitting the session between two or more trainers, particularly if the session is long. Trainers can also work together with one trainer writing on the flip chart or assisting with a demonstration while the other trainer is conducting the session.

When you lead a session:

Keep your *Trainer's Guide* with you and use it all the time. You do not need to try to memorize what you have to do. It is extremely difficult to do so. Use the Guide as your session notes, and follow it carefully.

The Course Director may explain at the beginning of the course that using the *Trainer's Guide* is the correct method for this kind of teaching, in the same way that participants need to use their Manual. You may wish to copy the necessary pages of the Guide, to use as your notes during the session. This will not be so bulky as carrying the whole Guide.

Remember that even the authors of the materials find it necessary to follow the Guide when they teach the course. If they do not, they find it difficult to keep to the planned sequence of teaching, and they miss out important steps.

If the participants seem tired or their attention is wandering, pause for a short break. Encourage everyone to stretch and take some deep breaths. Perhaps a short activity, song, or game, may revive them.

Preparing to give a presentation

Study the material

Before you give one of the lecture presentations, read the notes through carefully, and study the slides that go with it.

You do not have to give the lecture exactly as it is written. It is preferable not to read it out, though this is acceptable if you feel that there is no other way you can do it. However, it is important that you are thoroughly familiar with the contents of the lecture, and with the order of ideas in the presentation. This is necessary even if you are an experienced trainer, and knowledgeable about infant feeding.

Go through the text, mark it and add your own notes to remind you about points to emphasize, or points of special local importance. Try to think of ways to present the information naturally, in your own way.

Read the 'Further information' sections at the end of the sessions. They give extra information about topics that are covered only briefly in the main text. You should not present them as part of the main presentation, but they may help you to answer questions that arise in the course of discussion.

Prepare your slides and flipcharts

Make sure that you have all the slides for the session. If you are projecting the slides, ensure that your projection equipment is working. If you are using overhead transparencies, arrange them in the correct order. If flipcharts need to be written beforehand, do this in plenty of time. During the session when you are asking for responses from participants, another trainer can write items on the flipchart, thus allowing you to keep eye contact with the participants.

Shortly before the session, make sure that the audience will be able to see the images – that the room is dark enough, that the screen is well placed, and that the chairs are arranged appropriately. You do not have to keep the arrangements from a previous session – it can be an advantage to move an audience around, and present material in a new way. It may help to keep their attention.

Giving a lecture

Talk in a natural and lively way

- . Present the information as in a conversation, instead of reading it.
- . Speak clearly and try to vary the pitch and pace of your voice.
- . Move around the room, and use natural hand gestures.

Explain the slides carefully

Remember that slides do not do the teaching for you. They are aids to help you to teach and to help participants to learn. Do not expect participants to learn from them without your help.

Explain to the audience exactly what each picture shows, and tell them clearly the main points that they should learn from it. As you explain the information in the text, point out on the slide where it shows what you are talking about. Do not assume that they automatically see what you want them to look at.

Remember to face the audience as you explain – do not keep looking at the screen yourself. Do not turn your back on the audience for more than a short time. Keep looking at them, and maintain eye contact, so that they feel that you are talking to them personally.

Be careful not to block participants' view of the screen. Either stand to the side, or sit down, and check that they can see clearly. Look out for participants bending to see the screen or demonstration because you are in the way. Stop and adjust your position before you continue.

When you are familiar with the material, and you have taught it a few times, you will be able to explain it in your own way. You will be able to make it appropriate for the participants, and answer their questions in a way that is most helpful for them.

It is sometimes helpful, when presenting photographs, to ask participants to come to the screen to point things out to the others. This technique is recommended for session 4 'Assessing a Breastfeed' and session 21 'Breast conditions'.

Involve the participants

You will have to give much of the information in lecture form. This is necessary to cover enough material in the limited time available.

It is also helpful during lectures and other sessions to ask questions, to check that participants understand, and to keep them thinking. This interactive technique helps to keep participants interested and involved, and is usually a more effective way of learning. Ask open questions, (which you have learnt about in the sessions on counselling skills) so that participants have to give an answer that is more than a 'yes' or 'no'.

A number of questions are indicated in the text. The questions are asked in a way that participants should be able to decide the answer either by looking at the figure that is displayed, or from their own experience, or from what has been covered previously in the course, without requiring new information that they may not have.

Sometimes you may want to give participants a hint to help them to answer. Sometimes asking the question again, in another way, can help. However, do not help them or give them the answer too quickly. It is important to wait, and to give them a genuine chance to think of the answer themselves.

Ask participants to keep their Manuals closed while answering discussion questions so that they think about possible answers rather than read the information from their Manual.

Do not get involved in discussions which are distracting, and which waste a lot of time. Encourage participants to make a few suggestions; discuss their suggestions; and then continue with the section. You do not have to wait until they have given all the answers listed in the text. Notes to guide you are included with many of the questions.

Acknowledge all participants' responses, to encourage them to try again. Comment briefly on their answer, or say "Thank you", or "Yes". If participants give an incorrect answer, do not say "No – that is wrong!" or some may hesitate to make other suggestions. Accept all answers, and say something non-committal, such as "That is an interesting idea" or "I haven't heard that one before". Ask them to say more to clarify the idea, or say, "What does anyone else think?" or ask for other suggestions. Make participants feel that it is good to make a suggestion, even if it is not the 'correct' answer. Then clarify the information so that participants have the correct information.

When someone answers correctly, 'hold onto' their answer; expand it if necessary, and make sure that everyone else has understood.

Do not let several participants talk at once. If this occurs, stop the talkers, and give them an order to speak in. For example, say "Let's hear Mary's comment first, then Anastasia's, then Siti's". People will usually not interrupt if they know that they will have a turn to talk.

Do not let the same one or two people answer all the questions. If a talkative participant tries to answer several questions, ask her to wait for a minute, or move away and focus attention on others. Try to encourage quieter participants to talk. Ask by name someone who has not yet spoken to try to answer a question, or walk towards someone to bring attention toward her, and make her feel that she is being asked to talk.

Thank participants whose answers are short and to the point.

Preparing to give a demonstration

Some sessions include a number of short demonstrations of counselling techniques, and other skills. You should practise these beforehand in order for them to be effective and to demonstrate the relevant points to the participants.

Study the instructions and collect the equipment

Sometime before you give the demonstration, read through the instructions carefully, so that you are familiar with them and you do not forget any important steps. This is necessary even if you have already seen someone else give the demonstration. Make sure that you have the equipment that you need.

Prepare your assistant

You may need someone to help you to give a demonstration, for example, someone to pretend to be a mother. It is usually a good idea to ask a participant to help you. This can be a good learning experience for her. It increases her involvement, and helps her to learn about teaching methods. Ask for help the day before a demonstration, so that helpers have time to prepare themselves and discuss what you want them to do. If the participant will be taking part in one of the role-plays with a written scenario, give her the words she will read the day before so that she can practise them.

If you feel that participants are not ready to demonstrate the counselling skills, do the demonstrations yourself with another trainer. This helps participants to understand what playing the part is about, and they can see that making mistakes does not matter, so they may feel more confident to try themselves next time.

Practise the demonstration

Practise giving the demonstration, by yourself, with your assistant, or with another trainer, so that you know how long it takes, what can go wrong, and if there is anything else that you need, such as an extra table or chairs. This will make the demonstration much more convincing, and it is a good idea even if you have done it before.

Giving the demonstration

Make sure that all the equipment is ready and together, and prepare the place where you will give the demonstration. Arrange tables and chairs as you will need them. Make sure that you can use a board or flipchart to write things on, or an overhead projector if you need to show a transparency as part of the demonstration, without having to rearrange everything.

Demonstrate slowly, step-by-step, and make sure that the audience is able to see what you do. If necessary, ask them to move closer to you so that they can all see and hear clearly; or you can move closer to them, going to each part of the audience in turn.

As you give the demonstration, take every opportunity to let participants handle and examine the equipment that you use, and themselves practise what you demonstrate. They will learn more if they try things out, than just watching you.

At the end of a lecture or demonstration

Leave time for participants to ask questions, and do your best to answer them. You do not need to know the answer to every question. Another trainer or a participant may be able to offer information or you can refer them to a local source of further information.

Ask participants to find the summary notes for the session in their Manuals. Ask them to read the notes later on the same day.

Working in groups

Large groups of about eight participants with two trainers are used for some sessions which involve written exercises.

Work in groups of 3-4 with one trainer is mainly for the practice of skills, such as the practical sessions. The smaller groups give everybody a chance to practise their skills.

Read the specific instructions for the group sessions that you will lead, and plan how you will conduct them.

Facilitating individual written exercises

A number of exercises are individual written exercises. This is an important way for individual participants to learn and to find out for themselves what they are and are not clear about. It helps you to discover who easily understands what has been taught, and who needs more help. The participants who are most in need of help may not ask for it, and you may not discover who they are until they do these exercises. In addition, you may find that someone who is very quiet in fact understands much more than you expect. Giving feedback also helps you to discover which topics are easy and which are difficult for the group.

Make sure participants have found the correct page in their Manual. Explain that they should read the questions and write the answers in their Manuals. They should use pencil so they can change their answer if needed.

Try to arrange for participants to sit a little away from each other, so they do not see or hear other people's answers and so that there is room for trainers to sit between them to give individual feedback. The two trainers circulate, and give individual feedback and personal attention to the participants as they do the exercises. Talk to each participant individually, and as confidentially as possible. Try not to let other participants overhear what you are saying. Compare their answers with the suggested answers in your Guide. Praise them if they have a good answer. If an answer is incorrect, do not make them feel ridiculed. Ask them if they have any other ideas, and give them a chance to correct the answer. If they cannot do so, help them to decide the correct answer, and explain how they went wrong. Try not to give the answer too easily.

If a question causes difficulty for several participants, discuss it afterwards with the group together. At the end of the time, if there are unfinished questions in the exercise, suggest that they finish them in their own time and ask a trainer later to review the answers.

Practical sessions

For the Practical Sessions each trainer takes a group of 3-4 participants to a ward or clinic to practise with mothers, caregivers and infants the skills they have learnt in the previous sessions. Use the PRACTICAL DISCUSSION CHECKLIST to help you to discuss each mother and baby with the participants. Remember to use your counselling skills when you give feedback to the participants. Encourage other participants to use their counselling skills when giving feedback to recognize and praise what the participant who is practising did well in addition to making suggestions about what they could do better. They should not just criticize, but they should not give only praise either.

Detailed instructions are given with the notes for each practical session.

Checklist of training skills

At the front of the Guide is a summary CHECKLIST OF TRAINING SKILLS. The Course Director may decide to demonstrate these skills at the time of preparing the trainers before a course, or you may be asked to study them for yourself. Refer to the list from time to time to remind you how to make your session effective.

WHAT THE SIGNS USED IN THE GUIDE INDICATE

- an instruction to you, the trainer
 - what you, the trainer, say to the participants.

Further Information – these sections give extra information on topics in the text. You should not present them with the main presentation but they may help you to answer questions that arise in the course of the discussion.

Follow-up after training

It is unlikely that participants will learn all the competencies listed on pages 4-8 of this Guide during the course. They should have a sound theoretical knowledge at the end of the course, and have practised the counselling skills in many different situations. However, practical skills (e.g. helping a mother to position and attach her baby; using the FOOD INTAKE JOB AID;) need time to practise in many different situations before participants will become really confident.

Follow-up after this course in the participants' work-place is essential, not only to evaluate the training but also to build participants' confidence, listen to situations that they have found difficult to manage, and to assess their practical and counselling skills after the training.

The Course Director will give you details of the schedule for the follow-up visit in the Training-of-Trainers course. You will also be provided with the necessary forms and paper-work. The follow-up is designed to take one working day at the participants' work place. Ideally several participants from one facility, or area, can be assessed on the same day. The maximum number of participants to assess during one day is four.

The follow-up will be discussed with the participants in Session 38 of the course. The participants will also be asked to prepare some exercises and a log of skills ready for this follow-up.

The follow-up will start with an Introduction and Welcome to the participants. It is important to emphasize to participants that this is not an exam, but is a way for us to assess the training and to help with situations that they have found difficult to manage since the course. Participants will not be given an individual mark during the assessment.

The counselling and technical skills of participants will then be assessed in a practical situation. It will not be possible to assess all competencies for all participants. This exercise will take most of the morning, particularly if there are 2-4 participants being assessed.

The afternoon is spent in a classroom setting. You will look at the log that the participants have kept of skills they have practised in their work setting. This can be done as a group with all the participants together. You can use this opportunity to facilitate a group discussion of skills that participants have found hard to learn and situations which they have found difficult to manage. If there are any conditions in their facility that affect the implementation of growth assessment infant feeding counselling then these should be discussed. You will be asked to make a record of these.

Finally you will go through the individual written exercises that the participants have completed. This will give you further opportunities to reinforce both knowledge and application of counselling skills.

When all the trainers have completed their follow-up visits, a meeting will be held at the district level to discuss the findings and any actions needed. The purpose of this meeting is to describe the progress of growth assessment and infant feeding training in the district, any important or recurring problems and any actions needed.

Session 1

An Introduction to Infant and Young Child Feeding and the WHO child growth standards

Objectives

After completing this session participants will be able to:

- describe The Global Strategy for Infant and Young Child Feeding
- list the operational targets of The Global Strategy
- state the current recommendations for feeding children from 0-24 months of age
- describe the significance of the WHO child growth standards

Session outline

**30
minutes**

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	2 minutes
II.	Present Slides 1/1-1/6	13 minutes
III.	Present Slides 1/7-1/10	13 minutes
IV.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 1/1-1/10 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Make sure that you have one copy of The Global Strategy for Infant and Young Child Feeding for each participant.
- Read the Further Information sections so that you are familiar with the ideas that they contain.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

- Show **Slide 1/1 - Session 1 Objectives** and read out the objectives:

1/1

Introduction to IYCF and WHO child growth standards

After completing this session participants will be able to:

- describe The Global Strategy for Infant and Young Child Feeding
- list the operational targets of The Global Strategy
- state the current recommendations for feeding children from 0-24 months of age
- describe the significance of the WHO child growth standards

II. Present Slides 1/2 - 1/6**13 minutes**

- Make these points:
- This course brings together the essential elements of the Global Strategy for Infant and Young Child Feeding and the WHO child growth standards and is an important tool for their implementation.
 - Let's first discuss the Global Strategy
- Ask: Has anyone heard of The Global Strategy for Infant and Young Child Feeding and what is contained in it?*
- Wait for a few replies and then continue.*

Show **Slide 1/2 - The Global Strategy** and make the points that follow:

The Global Strategy for Infant and Young Child Feeding

1/2

- Developed by WHO and UNICEF to revitalize world attention on the impact that feeding practices have on infants and young children
- Malnutrition has been responsible, directly or indirectly, for about one third of the 8.1 million deaths annually among children <5 years
- Over two-thirds of these deaths occur in the first year of life

- The Global Strategy for Infant and Young Child Feeding was developed by WHO and UNICEF jointly, to revitalize world attention to the impact that feeding practices have on the nutritional status, growth, development and health, and thus the very survival of infants and young children.
- Malnutrition has been responsible, directly or indirectly, for about one third of the 8.1 million deaths annually among children under five.
- Well over two-thirds of these deaths, which are often associated with inappropriate feeding practices, occur during the first year of life.

Show Slide 1/3 - Policy initiatives and make the points that follow:

1/3

Policy initiatives

- International Code of Marketing of Breast-milk Substitutes (1981)
- Innocenti Declaration (1990)
- Baby-friendly Hospital Initiative (1991)

- Global Strategy for Infant and Young Child Feeding (2002)

- The Global Strategy was launched in 2002. It was built on previous initiatives such as the International Code of Marketing of Breast-milk Substitutes in 1981, the Innocenti Declaration in 1990 and the Baby-friendly Hospital Initiative in 1991. We will be discussing some of these important initiatives later in the course.
- The Global Strategy is designed for use by governments and other concerned parties, such as health professional bodies, non-governmental organizations, commercial enterprises and international organizations.
- The Strategy lists the WHO/UNICEF recommendations for appropriate feeding of infants and young children, explains the obligations and responsibilities of governments and concerned parties, and describes the actions they could take to protect, promote and support mothers to follow recommended feeding practices.
- Ask participants to turn to page 2 of their Manuals and find the box **GLOBAL STRATEGY FOR INFANT AND YOUNG CHILD FEEDING: SUMMARY OF OPERATIONAL TARGETS**. Ask one or two of the participants to read out the targets:

GLOBAL STRATEGY FOR INFANT AND YOUNG CHILD FEEDING
SUMMARY OF OPERATIONAL TARGETS

All governments are urged to:

A. Follow up previous targets from Innocenti Declaration:

1. Appoint a national breastfeeding coordinator with appropriate authority, and establish a multisectoral national breastfeeding committee
2. Ensure that every facility providing maternity services fully practises all the 'Ten steps to successful breastfeeding' set out in the WHO/UNICEF statement on breastfeeding and maternity services
3. Implement the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions
4. Enact imaginative legislation protecting the breastfeeding rights of working women and establish means for its enforcement

B. Introduce these five NEW targets:

5. Develop, implement, monitor and evaluate a comprehensive policy on infant and young child feeding
6. Ensure that health and other relevant sectors protect, promote and support exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond, while providing women access to the support they require
7. Promote timely, adequate, safe and appropriate complementary feeding with continued breastfeeding
8. Provide guidance on feeding infants and young children in exceptionally difficult circumstances
9. Consider what new legislation or other suitable measures may be required to implement the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions

If a national strategy and/or Code exist, mention it here.

- Now let us look at some of these targets in more detail.

Show **Slide 1/4 - Exclusive breastfeeding** and make the points that follow:

1/4

Exclusive breastfeeding

- Breastfeeding provides ideal food for the healthy growth and development of infants
- Infants should be exclusively breastfed for the first six months of life

- Breastfeeding provides ideal food for the healthy growth and development of infants, and it is all that a child needs for the first six months of life.
- As a global public health recommendation, infants should be exclusively breastfed for the first six months of life.
- We will be talking a lot about exclusive breastfeeding during this course.

Ask: What does the term exclusive breastfeeding mean?

Wait for a few replies and then ask participants to turn to page 3 of their Manuals and find the box DEFINITION OF EXCLUSIVE BREASTFEEDING.

- Ask one participant to read out the definition.

DEFINITION OF EXCLUSIVE BREASTFEEDING
Exclusive breastfeeding means giving a baby only breast milk, and no other liquids or solids, not even water. Drops or syrups consisting of vitamins, mineral supplements or medicines (including ORS) are permitted.

- Virtually all mothers can breastfeed exclusively provided they have accurate information and support within their families and communities.
- They should have access to skilled practical help from people trained in breastfeeding counselling who can help to build their confidence, improve feeding technique and prevent or resolve breastfeeding difficulties.
- During this course you will start to develop these skills, or build on skills you are already using in your daily work.

Show Slide 1/5 - **Complementary feeds** and make the points that follow:

1/5

Complementary feeds

- After six months all babies require complementary foods while breastfeeding continues for up to two years of age or beyond
- Complementary feeds should be:
 - timely
 - adequate
 - safe
 - properly fed

- After six months of age, all babies require other foods to complement breast milk - we call these foods complementary foods.
- When complementary feeds are introduced, breastfeeding should still continue for up to two years of age or beyond.
- By the time breastfeeding stops children should be receiving a nutritionally adequate, diversified diet with the rest of the family. Care should be taken not to under- or over-feed children.
- Infants are particularly vulnerable during the transition period when complementary feeding begins. Ensuring that their nutritional needs are met requires that complementary foods be:

timely – meaning that they are introduced when the need for energy and nutrients exceeds what can be provided through exclusive and frequent breastfeeding

adequate – meaning that they provide sufficient energy, protein and micronutrients to meet a growing child's nutritional needs

safe – meaning that they are hygienically stored and prepared and fed with clean hands using clean utensils and not bottles and teats

properly fed – meaning that they are given in response to a child's signals of hunger and that meal frequency and feeding methods are suitable for the child's age.

- Show **Slide 1/6 - Feeding in exceptionally difficult circumstances** and make the points that follow:

1/6

Feeding in exceptionally difficult circumstances

- Emergency situations
- Malnourished children
- Low-birth-weight babies
- Infants of HIV-infected mothers
- Orphans

- The Global Strategy also talks about feeding in exceptionally difficult circumstances.
- It includes emergency situations, malnourished children, low-birth-weight babies, infants of HIV-infected mothers and orphans.
- In this course we will only briefly discuss feeding low-birth-weight babies and HIV and infant feeding.

III. Present slides 1/7 - 1/10**13 minutes**

- Show **Slide 1/7 - Development of the WHO growth standards** and make the points that follow:

1/7

Development of the WHO growth standards

- Based on a sample of children from six countries
 - Brazil, Ghana, India, Norway, Oman, USA
- WHO Multicentre Growth Reference Study (MGRS)
- How children **should** grow - selection criteria based on recommended behaviours (e.g., breastfeeding, providing standard paediatric care, and not smoking).
- Term babies followed from birth to 2 years of age, with frequent observations in the first weeks of life.
- Another group of children, age 18 to 71 months, measured once
- data from the two samples combined to create the growth standards for birth to 5 years of age.

- Make these points:
- Now we will look at the WHO child growth standards.
 - The World Health Organization (WHO) developed growth standards based on a sample of children from six countries: Brazil, Ghana, India, Norway, Oman, and the United States of America.
 - The WHO Multicentre Growth Reference Study (MGRS)⁴ was designed to provide data describing how children should grow, by including in the study's selection criteria certain recommended health behaviours (for example, breastfeeding, providing standard paediatric care, and not smoking).
 - The study followed term babies from birth to 2 years of age, with frequent observations in the first weeks of life.
 - Another group of children, age 18 to 71 months, were measured once, and data from the two samples were combined to create the growth standards for birth to 5 years of age.

- Show **Slide 1/8 - The WHO Multicentre Growth Reference Study (MGRS)** and make the points that follow:

⁴ de Onis M, Garza C, Victora CG, Bhan MK, Norum KR, editors. WHO Multicentre Growth Reference Study (MGRS): Rationale, Planning and Implementation. Food Nutr Bull 2004; 25 (Suppl 1): S1-89

The WHO Multicentre Growth Reference Study (MGRS) 1/8

- The WHO growth standards differ from many existing single country references which merely describe the size of children assumed to be healthy
- By including children from many countries with recommended feeding and care, resulted in prescriptive **standards** for normal growth
- Show what growth can be achieved with recommended feeding and health care
- Can be used anywhere in the world

- The WHO growth standards differ from many existing single country references which merely describe the size of children assumed to be healthy
- By including children from many countries who were receiving recommended feeding and care, the MGRS resulted in prescriptive standards for normal growth, as opposed to simply descriptive references.
- The standards show what growth can be achieved with recommended feeding and health care (e.g. immunizations, care during illness).
- The standards can be used anywhere in the world since the study also showed that children everywhere grow in similar patterns when their nutrition, health, and care needs are met.

- Show Slide 1/9 - **Benefits of the new growth standards** and make the points that follow:

1/9

Benefits of the new growth standards

- Establish the breastfed infant as the model for normal growth and development
- They should lead to strengthening of public support for breastfeeding
- Will help better identify stunted and overweight/obese children
- New standards (such as BMI) are useful for measuring the increasing worldwide epidemic of obesity
- Charts that show patterns of expected growth rate over time enable health care providers to identify children at risk of undernutrition or overweight

- Benefits of the new growth standards include the following:
- The new standards establish the breastfed infant as the model for normal growth and development. As a result, health policies and public support for breastfeeding will be strengthened.
- The new standards will help better identify stunted and overweight/obese children.
- New standards such as BMI (body mass index) are useful for measuring the increasing worldwide epidemic of obesity.
- Charts that show standard patterns of the expected growth rate over time enable health care providers to identify children at risk of becoming undernourished or overweight early, rather than waiting until a problem level is reached.

- Show **Slide 1/10 - Gross motor milestones** and make the points that follow:

1/10

Gross motor milestones

- Sitting without support
- Standing with assistance
- Hands-and-knees crawling
- Walking with assistance
- Standing alone
- Walking alone

- In addition to standards for physical growth, the WHO Child Growth Standards include six gross motor development milestones: sitting without support, standing with assistance, hands-and-knees crawling, walking with assistance, standing alone, and walking alone
- All healthy children are expected to achieve these milestones during specified age ranges between 4 and 18 months.
- The expected age ranges for achieving these milestones (or "windows of achievement") are included in the WHO child Growth Record provided with this course. This course, however, focuses on physical growth assessment and does not provide training on assessing motor development.

IV. Summarize the session

2 minutes

- Ask participants if they have any questions, and try to answer them.
- Make these points:
 - During this course we will be learning more about how to achieve the targets of The Global Strategy, and how to offer mothers and caregivers the skilled practical help they need to feed their children optimally.
 - We will be discussing, and practising, how to help mothers to breastfeed exclusively, how to prepare and feed complementary foods while sustaining breastfeeding.
 - We will learn how to measure children from birth to 5 years of age, how to assess the growth of children in relation to the WHO growth standards and how to counsel mothers about feeding and growth.
 - Explain that a summary of this session can be found on pages 1-4 of the *Participant's Manual*.

Further Information

Session 2

Why Breastfeeding is Important

Objectives

After completing this session, participants will be able to:

- state the advantages of exclusive breastfeeding
- list the disadvantages of artificial feeding
- describe the main differences between breast milk and artificial milks

Session outline

30 minutes

Participants are all together for a lecture presentation by one trainer.

- | | | |
|------|-------------------------|------------|
| I. | Introduce the session | 3 minutes |
| II. | Present Slides 2/1-2/11 | 25 minutes |
| III. | Summarize the session | 2 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 2/1-2/11 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Read the Further Information sections so that you are familiar with the ideas that they contain.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session

3 minutes

- Make these points:
 - The Global Strategy for Infant and Young Child Feeding recommends that infants are exclusively breastfed for the first six months of life.
 - You need to understand why breastfeeding is important so you can help to support mothers who may have doubts about the value of breast milk.

Show **Slide 2/1 - Session 2 Objectives** and read out the objectives:

2/1

Why breastfeeding is important

After completing this session participants will be able to:


- state the advantages of exclusive breastfeeding
- list the disadvantages of artificial feeding
- describe the main differences between breast milk and artificial milk

II. Present Slides 2/2 to 2/11**25 minutes**

- Show **Slide 2/2 - The advantages of breastfeeding** and make the points that follow:

2/2

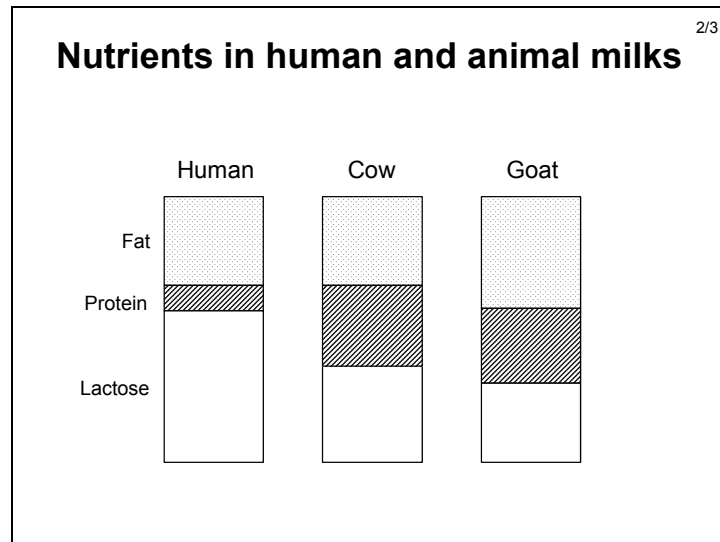
Advantages of breastfeeding

<p>Breast milk</p> <ul style="list-style-type: none"> • Perfect nutrients • Easily digested; efficiently used • Protects against infection 		<p>Breastfeeding</p> <ul style="list-style-type: none"> • Helps bonding and development • Helps delay a new pregnancy • Protects mothers' health
--	---	--

• Costs less than artificial feeding

- This diagram summarizes the main advantages of breastfeeding.
- It is useful to think of the advantages of both breast milk (listed on the left) and the process of breastfeeding (listed on the right).
- The advantages of a baby having breast milk are that:
 - . It contains exactly the nutrients that a baby needs
 - . It is easily digested and efficiently used by the baby's body
 - . It protects a baby against infection.
- The other advantages of breastfeeding are that:
 - . It costs less than artificial feeding
 - . It helps a mother and baby to bond – that is, to develop a close, loving relationship
 - . It helps a baby's development
 - . It can help to delay a new pregnancy
 - . It protects a mother's health:
 - . It helps the uterus to return to its previous size. This helps to reduce bleeding, and may help to prevent anaemia
 - . Breastfeeding also reduces the risk of ovarian cancer, and breast cancer, in the mother.
- In the next few slides, we will look at some of these advantages in more detail.

- Show **Slide 2/3 - Nutrients in human and animal milks** and make the points that follow:



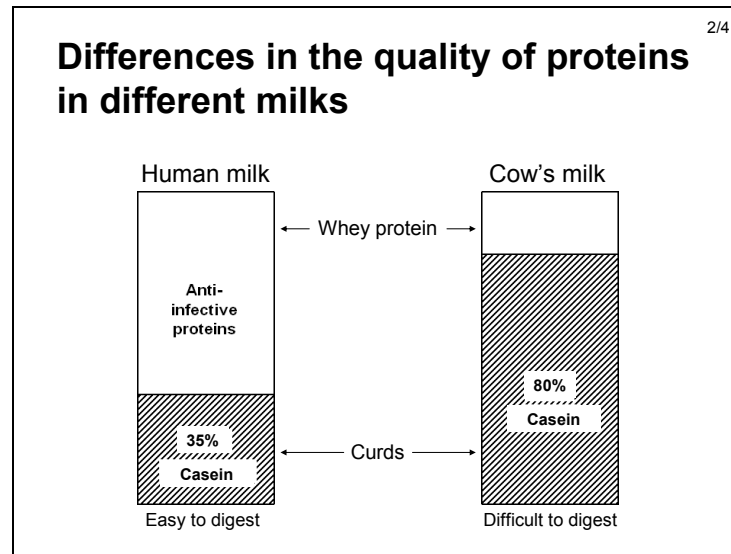
- First, we will look at the nutrients in breast milk, to see why they are perfect for a baby.
- Formula milks are made from a variety of products, including animal milks, soybean, and vegetable oils. Although they have been adjusted so that they are more like human milk, they are still far from perfect for babies.
- In order to understand the composition of formula milk we need to understand the differences between animal and human milk and how animal milks need to be modified to produce formula milk.
- This chart compares the nutrients in breast milk with the nutrients in fresh cow's and goat's milk.
- All the milks contain fat which provides energy, protein for growth and a milk sugar called lactose which also provides energy.

Ask: *What is the difference between the amount of protein in human milk and the amount in animal milks?*

Wait for a few replies and then continue.

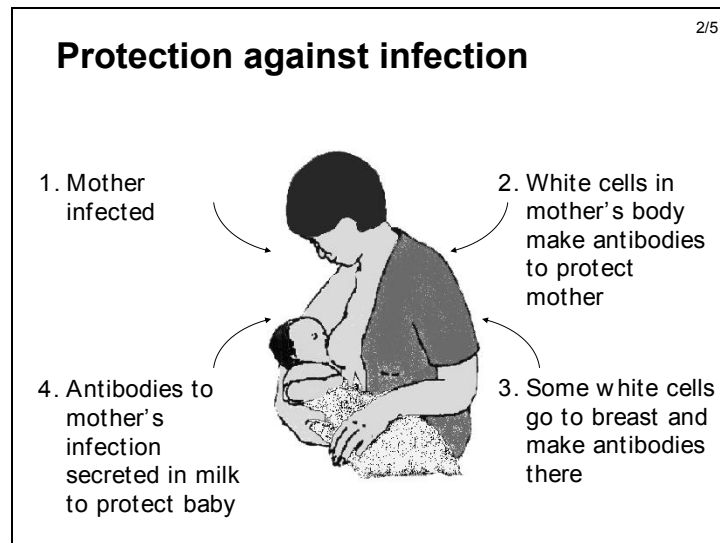
- The animal milk contains more protein than human milk.
- It is difficult for a baby's immature kidneys to excrete the extra waste from the protein in animal milks.
- Human milk also contains essential fatty acids that are needed for a baby's growing brain and eyes, and for healthy blood vessels. These fatty acids are not present in animal milks, but may have been added to formula milk.

- Show **Slide 2/4 - Quality of proteins in different milks** and make the points that follow:



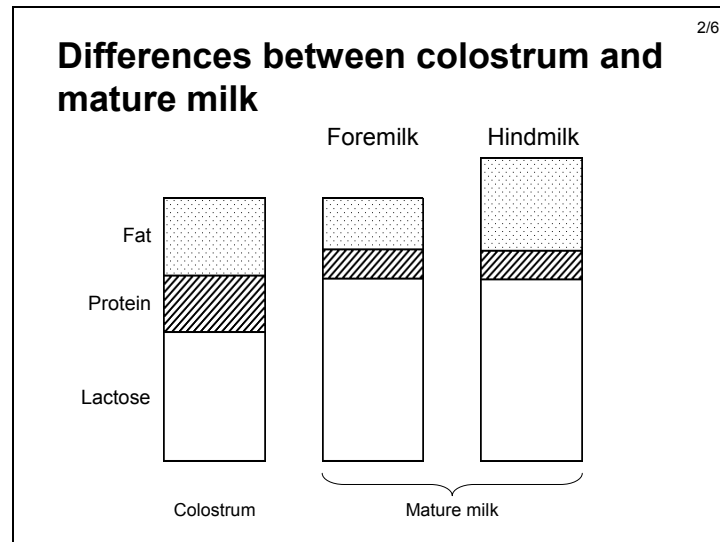
- The protein in different milks varies in quality, as well as in quantity. Whilst the quantity of protein in cow's milk can be modified to make formula, the quality of proteins cannot be changed.
- This chart shows that much of the protein in cow's milk is casein.
Ask: What happens if human babies eat too much casein?
Wait for a few replies and then continue.
- Casein forms thick, indigestible curds in a baby's stomach.
- You can see in the diagram that human milk contains more whey proteins.
- The whey proteins contain anti-infective proteins which help to protect a baby against infection.
- Artificially fed babies may develop intolerance to protein from animal milk. They may develop diarrhoea, abdominal pain, rashes and other symptoms when they have feeds that contain the different kinds of protein.

Show Slide 2/5 - Protection against infection and make the points that follow:



- Breast milk contains white blood cells, and a number of anti-infective factors, which help to protect a baby against many infections.
- Breast milk also contains antibodies against infections that the mother has had in the past.
- This diagram shows that when a mother develops an infection (1), white cells in her body become active, and make antibodies against the infection to protect her (2).
- Some of these white cells go to her breasts and make antibodies (3) which are secreted in her breast milk to protect her baby (4).
- So a baby should not be separated from his mother when she has an infection, because her breast milk protects him against the infection.

- Show **Slide 2/6 - Differences between colostrum and mature milk** and make the points that follow:



- The composition of breast milk is not always the same. It varies according to the age of the baby, and from the beginning to the end of a feed. This chart shows some of the main variations.

Ask: *What differences do you notice between the different types of breast milk?*

Wait for a few replies and then continue.

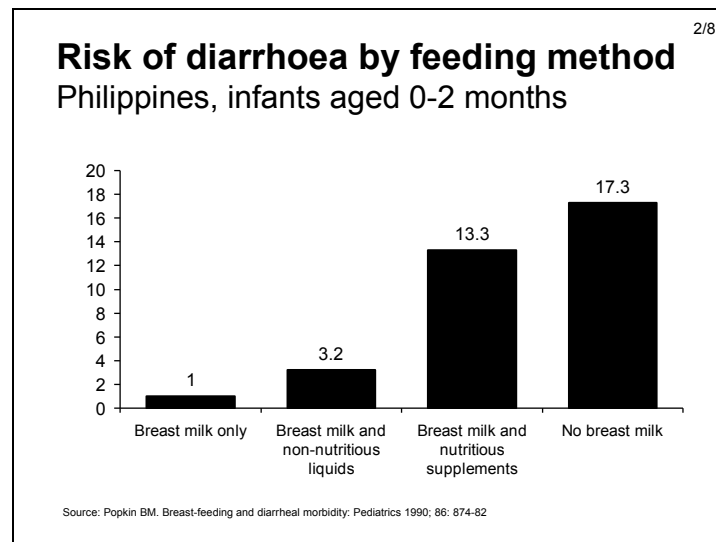
- Colostrum is the special breast milk that women produce in the first few days after delivery. It is thick, and yellowish or clear in colour. It contains more protein than later milk (Point to the area on the graph).
- After a few days, colostrum changes into mature milk. There is a larger amount of mature milk, and the breasts feel full, hard and heavy. Some people call this the milk 'coming in'.
- Foremilk is the thinner milk that is produced early in a feed. It is produced in large amounts and provides plenty of protein, lactose, water and other nutrients. Babies do not need other drinks of water before they are six months old, even in a hot climate.
- Hindmilk is the whiter milk that is produced later in a feed. It contains more fat than foremilk which is why it looks whiter (Point to the area on the graph). This fat provides much of the energy of a breastfeed which is why it is important not to take the baby off a breast too quickly.
- Mothers sometimes worry that their milk is 'too thin'. Milk is never 'too thin'. It is important for a baby to have both foremilk and hindmilk to get a complete 'meal', which includes all the water that he needs.

Show **Slide 2/7 - Colostrum** and make the points that follow:

Colostrum	
Property	Importance
<ul style="list-style-type: none"> • Antibody rich • Many white cells • Purgative • Growth factors • Rich in Vitamin A 	<ul style="list-style-type: none"> - protects against allergy & infection - protects against infection - clears meconium - helps to prevent jaundice - helps intestine to mature - prevents allergy, intolerance - reduces severity of infection

- This chart shows the special properties of colostrum, and why it is important.
- Colostrum contains more antibodies and other anti-infective proteins than mature milk. This is part of the reason why colostrum contains more protein than mature milk.
- It contains more white blood cells than mature milk.
- Colostrum helps to prevent the bacterial infections that are a danger to newborn babies and provides the first immunization against many of the diseases that a baby meets after delivery.
- Colostrum has a mild purgative effect, which helps to clear the baby's gut of meconium (the first dark stools). This clears bilirubin from the gut, and helps to prevent jaundice from becoming severe.
- Colostrum contains many growth factors which help a baby's immature intestine to develop after birth. This helps to prevent the baby from developing allergies and intolerance to other foods.
- Colostrum is rich in vitamin A which helps to reduce the severity of any infections the baby might have.
- So it is very important for babies to have colostrum for their first few feeds. Colostrum is ready in the breasts when a baby is born.
- Babies should not be given any drinks or foods before they start breastfeeding. Artificial feeds given before a baby has colostrum are likely to cause allergy and infection.

Show **Slide 2/8 - Risk of diarrhoea** and make the points that follow:



- This chart shows how breastfeeding protects a baby against diarrhoea.
- The chart shows the main findings of a study from the Philippines. It compares how often babies fed in different ways get diarrhoea.
- The bar on the left is for babies who were exclusively breastfeeding. The bar is small, because very few exclusively breastfed babies get diarrhoea.
- The bar on the right is for artificially fed babies, who received no breast milk. This column is 17 times taller, because these babies were 17 times more likely to get diarrhoea than babies fed only on breast milk.
- Some of the babies were given breast milk and other feeds or fluids. These babies were more likely to have diarrhoea than exclusively breastfed babies, but less likely than babies who received no breast milk at all (Point to the 2 bars in the middle of the chart).
- Artificially fed babies get diarrhoea more often partly because artificial feeds lack anti-infective factors, and partly because artificial feeds are often contaminated with harmful bacteria.
- Breastfeeding also protects against respiratory illness. Mortality from pneumonia is increased in babies who are not exclusively breastfed.
- Other studies have shown that breastfeeding also protects babies against other infections, for example ear infections, meningitis and urinary tract infections.

- Show **Slide 2/9 - Psychological benefits of breastfeeding** and make the points that follow:

2/9

Psychological benefits of breastfeeding

Emotional bonding

- close, loving relationship between mother and baby
- mother more emotionally satisfied
- baby cries less
- baby may be more emotionally secure

Development

- children perform better on intelligence tests

- Breastfeeding has important psychological benefits for both mothers and babies.
- Close contact from immediately after delivery helps the mother and baby to bond and helps the mother to feel emotionally satisfied. Babies tend to cry less if they are breastfed and may be more emotionally secure.
- Some studies suggest that breastfeeding may help a child to develop intellectually. Low-birth-weight babies fed breast milk in the first weeks of life perform better on intelligence tests in later childhood than children who are artificially fed.
- If mothers are not breastfeeding, for a medical reason, it is important to help them to bond with their babies in other ways apart from breastfeeding.

- Show **Slide 2/10 - Disadvantages of artificial feeding** and make the points that follow:

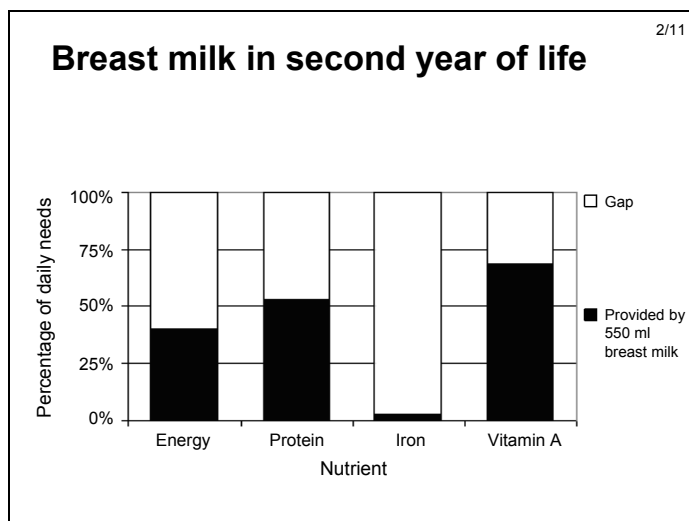
2/10

Disadvantages of artificial feeding

- Interferes with bonding
- More diarrhoea and persistent diarrhoea
- More frequent respiratory infections
- Malnutrition; Vitamin A deficiency
- More allergy and milk intolerance
- Increased risk of some chronic diseases
- Obesity
- Lower scores on intelligence tests
- Mother may become pregnant sooner
- Increased risk of anaemia, ovarian cancer, and breast cancer in mother

- This slide summarizes the disadvantages of artificial feeding.
- Artificial feeding may interfere with bonding. The mother and baby may not develop such a close, loving relationship.
- An artificially fed baby is more likely to become ill with diarrhoea, respiratory and other infections. The diarrhoea may become persistent.
- He may get too little milk and become malnourished because he receives too few feeds or because they are too dilute. He is more likely to suffer from vitamin A deficiency.
- He is more likely to develop allergic conditions such as eczema and possibly asthma.
- He may become intolerant of animal milk, so that the milk causes diarrhoea, rashes and other symptoms.
- The risk of some chronic diseases in the child, such as diabetes, is increased.
- A baby may get too much artificial milk, and become obese.
- He may not develop so well mentally, and may score lower on intelligence tests.
- A mother who does not breastfeed may become pregnant sooner. She is more likely to become anaemic after childbirth, and later to develop cancer of the ovary and the breast.
- So artificial feeding is harmful for children and their mothers.

Show Slide 2/11 - Breast milk in the second year and make the points that follow:



- For the first six months of life, exclusive breastfeeding can provide all the nutrients and water that a baby needs.
- From the age of six months, breast milk is no longer sufficient by itself. In session 1 we learnt that all babies need complementary foods from six months, in addition to breast milk.
- However, breast milk continues to be an important source of energy and high quality nutrients beyond six months of age. We will discuss this in more detail in the sessions on complementary feeding.
- This chart shows how much of a child's daily energy and nutrient needs can be supplied by breast milk during the second year of life.

Ask: How much of the protein that a child needs in the second year can breast milk provide? How much of the energy that a child needs in the second year can breast milk provide?

Wait for a few replies and then continue.

- It can provide about one-third of the energy and half of the protein a child needs

Ask: How much of the vitamin A that a child needs can breast milk provide?

Wait for a few replies and then continue.

- Breast milk can provide about 75% of the vitamin A that a child needs, provided the mother is not deficient in vitamin A herself.

III. Summarize the session**2 minutes**

- Ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on pages 5-12 of the Participant's Manual.

Further Information**Sugar:**

The sugar *lactose* is the main carbohydrate in milk. None of the milks contain the carbohydrate *starch*. Starch is a very important nutrient for older children and adults - it is the main nutrient in staple foods, and in many complementary foods. But young babies cannot digest starch easily, so it is not appropriate to give them starchy foods in the first few months of life. Breast milk contains more lactose than other milks.

Protein:

There is some casein in human milk, but less than in cow's milk, and it forms soft curds that are easier to digest.

The whey proteins in animal and human milks are different. Human milk contains *alpha*-lactalbumin and cow's milk contains *beta*-lactoglobulin.

In addition, the proteins in animal milks and formula contain a different balance of amino acids from breast milk, which may not be ideal for a baby. Animal milk and formula may lack the amino acid *cystine*, and formula may lack *taurine* which newborns need especially for brain growth. Taurine is now sometimes added to formula milks.

The anti-infective proteins in human milk include lactoferrin (which binds iron, and prevents the growth of bacteria which need iron) and lysozyme (which kills bacteria) as well as antibodies (immunoglobulin, mostly IgA).

Other important anti-infective factors include the *bifidus factor* (which promotes the growth of *Lactobacillus bifidus*. *L. bacillus* inhibits the growth of harmful bacteria, and gives breastfed babies' stools their yoghurt smell). Breast milk also contains anti-viral and anti-parasitical factors.

Babies who develop intolerance to animal proteins may develop diarrhoea which becomes persistent. Babies who are fed animal milks or formula are also more likely than breastfed babies to develop *allergies*, which may cause eczema. A baby may develop intolerance or allergy after only a few artificial feeds given in the first few days of life.

Vitamins:

The amounts of vitamins are different in breast milk and animal milks. Cow's milk has plenty of the B vitamins, but it does not contain as much vitamin A and vitamin C as human milk. Breast milk contains plenty of vitamin A, if the mother has enough in her diet. Breast milk can supply much of the vitamin A that a child needs even in the second year of life.

Vitamin A supplements for mothers: Do not give a mother high dose capsules of vitamin A (over 10,000 units daily) more than 4-6 weeks after she has given birth. After 6 weeks, there is a slight possibility that she could be pregnant. If high doses of vitamin A are given in early pregnancy, they can damage the foetus.

B vitamins in different milks: For some B vitamins, the amount in human milk is the same or more than in cow's milk, but for most of them the amount in cow's milk is 2-3 times higher than in breast milk. These high levels are more than a baby needs. Goat's milk lacks the B vitamin folic acid, and this can cause anaemia.

Vitamin C: Health workers often recommend giving babies fruit juice from a very early age, to provide vitamin C. This may be necessary for artificially fed babies, but it is not necessary for breastfed babies.

Iron:

Different milks contain similar very small amounts of iron. However, only about 10% of the iron in cow's milk is absorbed, but about 50% of the iron from breast milk is absorbed. Babies fed on cow's milk may not get enough iron, and they often become anaemic.

Some brands of formula have iron added. This added iron is not well absorbed, so a large amount has to be added to ensure that a baby gets enough iron to protect against anaemia.

Added iron may make it easier for some kinds of bacteria to grow, which may increase the chances of some kinds of infection, for example, meningitis and septicaemia.

Foremilk and hindmilk:

There is no sudden change from 'fore' to 'hind' milk. The fat content increases gradually from the beginning to the end of a feed.

Protection against infection:

The main immunoglobulin in breast milk is IgA - often called 'secretory' immunoglobulin A. It is secreted within the breast into the milk, in response to the mother's infections.

This is different from other immunoglobulins (such as IgG) which are carried in the blood.

Intolerance and allergies to milk proteins:

Colostrum and breast milk contain many hormones and growth factors. The function of all of them is not certain. However, epidermal growth factor, which is present in both, has been shown to stimulate growth and maturation of the intestinal villi. Undigested cow's milk proteins can pass through the immature infant gut into the blood, and may cause intolerance and allergy to milk protein. Epidermal growth factor helps to prevent the absorption of large molecules by stimulating rapid development of the gut. This 'seals' the baby's intestine, so that it is more difficult for proteins to be absorbed without being digested.

Antibodies probably help to prevent allergies by coating the intestinal mucosa, and preventing the absorption of larger molecules.

Vitamin A from breast milk in the second year of life:

There are different estimates of how much of a child's vitamin A requirements can be provided by breastfeeding in the second year, ranging from 38% to 75%. The amount depends on the mother's vitamin A status, and the volume of breast milk consumed. However, what we do know is that breastfeeding in the second year provides useful protection to the child against vitamin A deficiency.

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Notes

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Session 3

How Breastfeeding Works

Objectives

After completing this section participants will be able to:

- name the main parts of the breast and describe their function
- describe the hormonal control of breast milk production and ejection
- describe the difference between good and poor attachment of a baby at the breast
- describe the difference between effective and ineffective suckling

Session outline

**30
minutes**

Participants are all together for a lecture presentation by one trainer.

- | | | |
|------|-------------------------|------------|
| I. | Introduce the session | 2 minutes |
| II. | Present Slides 3/1-3/11 | 25 minutes |
| III. | Summarize the session | 3 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 3/1-3/11 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Read the Further Information sections so that you are familiar with the ideas that they contain.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

- Show **Slide 3/1 - Session 3 Objectives** and read out the objectives:

3/1

How breastfeeding works

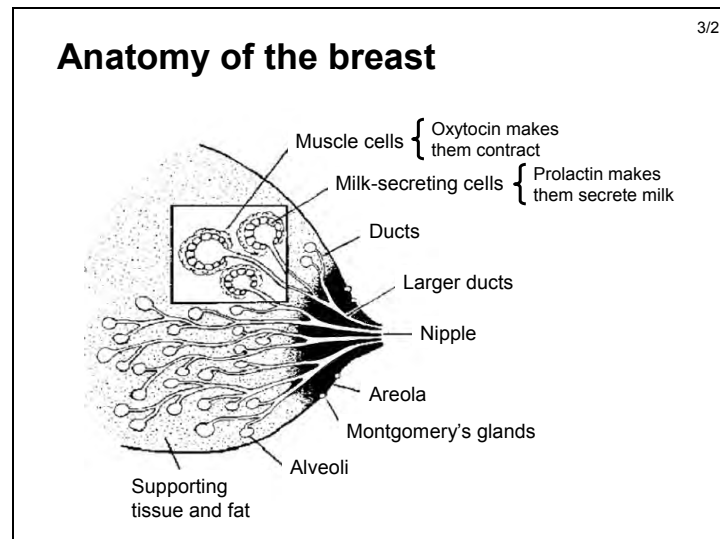
After completing this session participants will be able to:

- name the main parts of the breast and describe their function
- describe the hormonal control of breast milk production and ejection
- describe the difference between good and poor attachment of a baby at the breast
- describe the difference between effective and ineffective suckling

- Make these points:
- In order to help mothers, you need to understand how breastfeeding works.
 - You cannot learn a specific way of counselling for every situation, or every difficulty. But if you understand how breastfeeding works, you can work out what is happening, and help each mother to decide what is best for her.

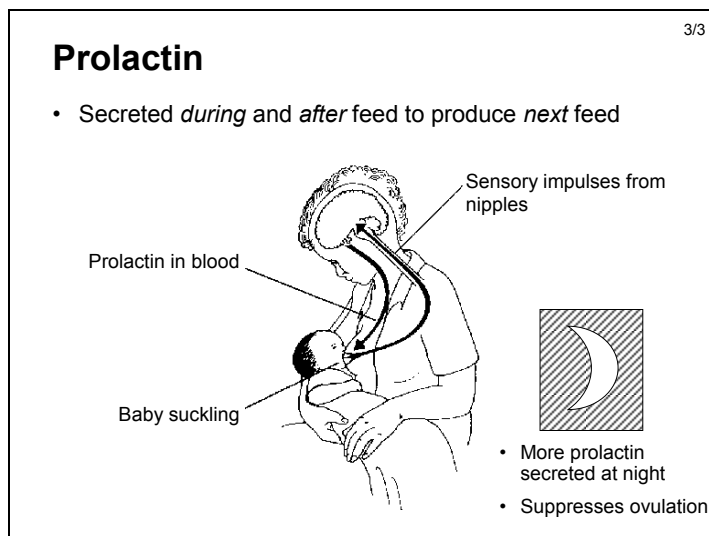
II. Present Slides 3/2 - 3/11**25 minutes**

- Show **Slide 3/2 - Anatomy of the breast** and make the points that follow:



- This diagram shows the anatomy of the breast.
 - First, look at the nipple, and the dark skin called the areola which surrounds it. In the areola are small glands called Montgomery's glands which secrete an oily fluid to keep the skin healthy (Point to the relevant parts of the diagram on the slide as you explain them).
 - Inside the breast are the alveoli, which are very small sacs made of milk-secreting cells. There are millions of alveoli – the diagram shows only a few. The box shows three of the alveoli enlarged. A hormone called prolactin makes these cells produce milk.
 - Around the alveoli are muscle cells, which contract and squeeze out the milk. A hormone called oxytocin makes the muscle cells contract.
 - Small tubes, or ducts, carry milk from the alveoli to the outside. Milk is stored in the alveoli and small ducts between feeds.
 - The larger ducts beneath the areola dilate during feeding and hold the breast milk temporarily during the feed.
 - The secretory alveoli and ducts are surrounded by supporting tissue, and fat.
- Ask:** *Some mothers think their breasts are too small to produce enough milk. What is the difference between large breasts and small breasts?*
- Wait for a few replies and then continue.**
- It is the fat and other tissue which gives the breast its shape, and which makes most of the difference between large and small breasts.
 - Small breasts and large breasts both contain about the same amount of gland tissue, so they can both make plenty of milk.

- Show **Slide 3/3 - Prolactin** and make the points that follow:



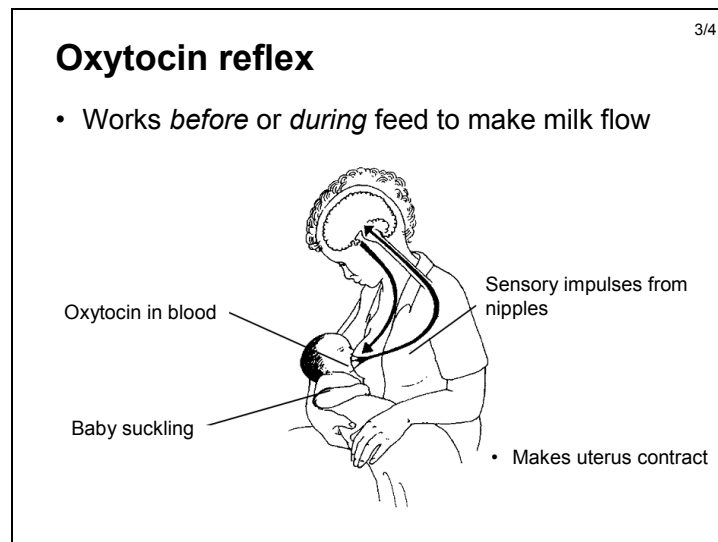
- This diagram explains about the hormone prolactin.
- When a baby suckles at the breast, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes prolactin.
- Prolactin goes in the blood to the breast, and makes the milk-secreting cells produce milk.
- Most of the prolactin is in the blood about 30 minutes after the feed – so it makes the breast produce milk for the next feed. For this feed, the baby takes the milk which is already in the breast.

Ask: *What does this suggest about how to increase a mother's milk supply?*

Wait for a few replies and then continue.

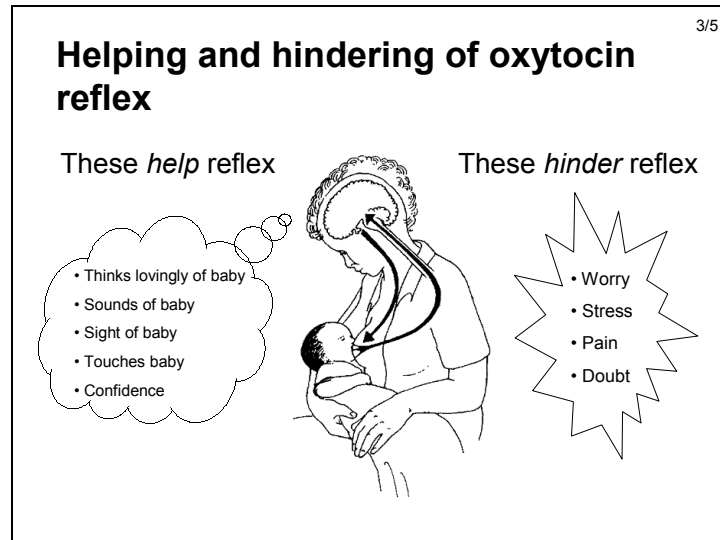
- It tells us that if her baby suckles more, her breasts will make more milk. So, suckling makes more milk.
- If a mother has two babies, and they both suckle, her breasts make milk for two. If a baby stops suckling, the breasts soon stop making milk.
- Sometimes people suggest that to make a mother produce more milk, we should give her more to eat, more to drink, more rest, or medicines. It is important for a mother to eat and drink enough, but these things do not help her to produce milk if her baby does not suckle.
- Some special things to remember about prolactin are:
 - More prolactin is produced at night; so breastfeeding at night is especially helpful for keeping up the milk supply.
 - Hormones related to prolactin suppress ovulation so breastfeeding can help to delay a new pregnancy. Breastfeeding at night is important for this.

Show **Slide 3/4 - Oxytocin reflex** and make the points that follow:



- This diagram explains about the hormone oxytocin.
- When a baby suckles, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes the hormone oxytocin.
- Oxytocin goes in the blood to the breast, and makes the muscle cells around the alveoli contract.
- This makes the milk which has collected in the alveoli flow along the ducts to the larger ducts beneath the areola. Here the milk is stored temporarily during the feed. This is the oxytocin reflex, the milk ejection reflex or the let-down reflex.
- Oxytocin is produced more quickly than prolactin. It makes the milk in the breast flow for this feed. Oxytocin can start working before a baby suckles, when a mother learns to expect a feed.
- If the oxytocin reflex does not work well, the baby may have difficulty in getting the milk. It may seem as if the breasts have stopped producing milk. However, the breasts are producing milk, but it is not flowing out.
- Another important point about oxytocin is that it makes a mother's uterus contract after delivery. This helps to reduce bleeding, but it sometimes causes uterine pain and a rush of blood during a feed for the first few days. The pains can be quite strong.

- Show **Slide 3/5 - Helping and hindering the oxytocin reflex** and make the points that follow:



- This diagram shows how the oxytocin reflex is easily affected by a mother's thoughts and feelings.
- Good feelings, for example feeling pleased with her baby, or thinking lovingly of him, and feeling confident that her milk is the best for him, can help the oxytocin reflex to work and her milk to flow. Sensations such as touching or seeing her baby, or hearing him cry, can also help the reflex.
- But bad feelings, such as pain, or worry, or doubt that she has enough milk, can hinder the reflex and stop her milk from flowing. Fortunately, this effect is usually temporary.

Ask: *Why is it important to understand the oxytocin reflex in the way we care for mothers after delivery?*

Wait for a few replies and then continue.

- A mother needs to have her baby near her all the time, so that she can see, touch and respond to him. If a mother is separated from her baby between feeds, her oxytocin reflex may not work so easily.
- You need to remember a mother's feelings whenever you talk to her. Try to make her feel good and build her confidence. Try not to say anything which may make her doubt her breast milk supply.
- Mothers are often aware of their oxytocin reflex. There are several signs of an active reflex that they, or you, may notice.

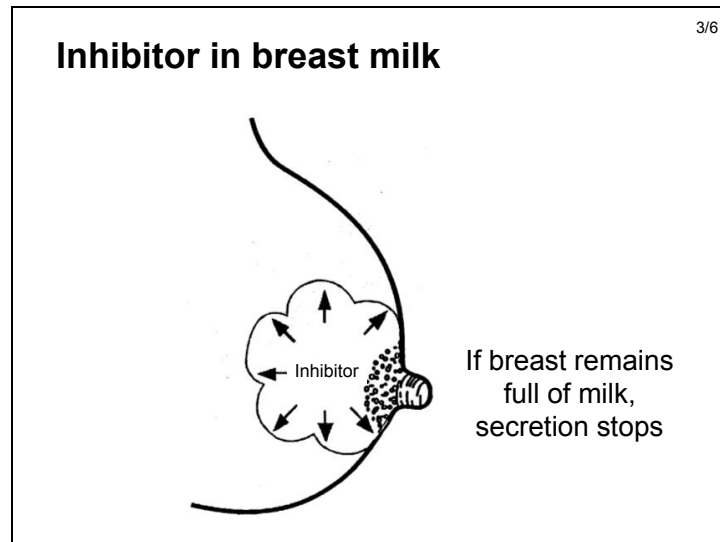
- Ask participants to turn to page 16 of their Manuals, and find the box SIGNS AND SENSATIONS OF AN ACTIVE OXYTOCIN REFLEX.
- Ask participants to take it in turns to read out the signs.

SIGNS AND SENSATIONS OF AN ACTIVE OXYTOCIN REFLEX

A mother may notice:

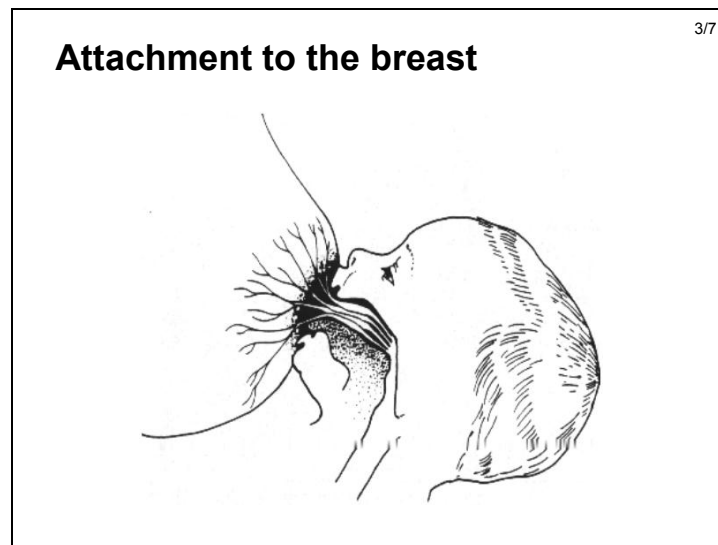
- A squeezing or tingling sensation in her breasts just before she feeds her baby, or during a feed.
- Milk flowing from her breasts when she thinks of her baby, or hears him crying.
- Milk dripping from her other breast, when her baby is suckling.
- Milk flowing from her breasts in fine streams, if her baby comes off the breast during a feed.
- Pain from uterine contractions, sometimes with a rush of blood, during feeds in the first week.
- Slow deep sucks and swallowing by the baby, which show that breast milk is flowing into his mouth.

☐ Show Slide 3/6 - Inhibitor in breast milk and make the points that follow:



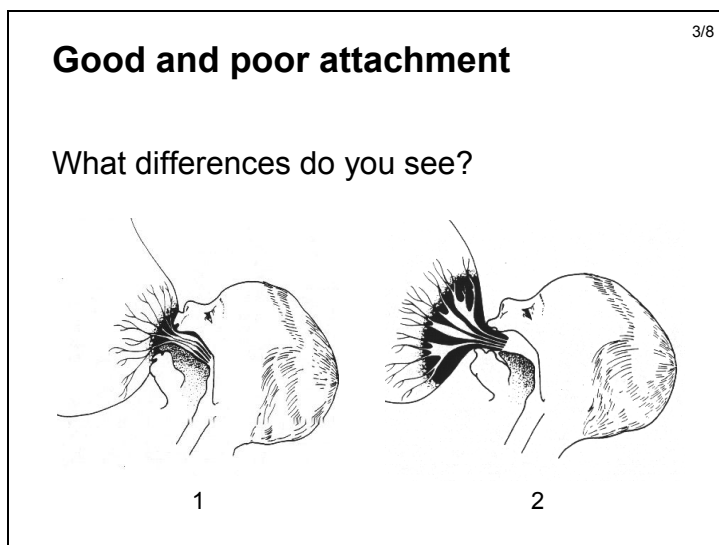
- Breast milk production is also controlled within the breast itself.
- You may wonder why sometimes one breast stops making milk, while the other breast continues to make milk - although oxytocin and prolactin go equally to both breasts. This diagram shows why.
- There is a substance in breast milk which can reduce or inhibit milk production.
- If a lot of milk is left in a breast, the inhibitor stops the cells from secreting any more. This helps to protect the breast from the harmful effects of being too full. It is obviously necessary if a baby dies or stops breastfeeding for some other reason.
- If breast milk is removed, by suckling or expression, the inhibitor is also removed. Then the breast makes more milk.
- This helps you to understand why:
 - . If a baby stops suckling from one breast, that breast stops making milk.
 - . If a baby suckles more from one breast, that breast makes more milk and becomes larger than the other.
- It also helps you to understand why:
 - . For a breast to continue making milk, the milk must be removed.
 - . If a baby cannot suckle from one or both breasts, the breast milk must be removed by expression to enable production to continue. This is an important point which we will discuss more later in the course when we talk about expressing breast milk.

Show **Slide 3/7 - Attachment to the breast** and make the points that follow:



- This diagram shows how a baby takes the breast into his mouth to suckle.
 - Ask:** *What do you see?*
 - Ask one participant** to come to the screen to show how the baby takes the breast into his mouth.
- Notice these points:
 - . He has taken much of the areola and the underlying tissues into his mouth.
 - . The larger ducts are included in these underlying tissues.
 - . He has stretched the breast tissue out to form a long 'teat'.
 - . The nipple forms only about one-third of the 'teat'.
 - . The baby is suckling from the breast, not the nipple.
- Notice the position of the baby's tongue:
 - . His tongue is forward, over his lower gums, and beneath the larger ducts.
 - . His tongue is cupped round the 'teat' of breast tissue. You cannot see that in this drawing, though you may see it when you observe a baby.
 - . The tongue presses milk out of the larger ducts into the baby's mouth.
- If a baby takes the breast into his mouth in this way, we say that he is well attached to the breast. He can remove breast milk easily and we say that he is suckling effectively.
- When a baby suckles effectively, his mouth and tongue do not rub the skin of the breast and nipple.

Show Slide 3/8 - Good and poor attachment and make the points that follow:



- Here you see two pictures. Picture 1 is the same baby as in Slide 3/7. He is well attached to the breast. Picture 2 shows a baby suckling in a different way.

Ask: *In what way is picture 2 different from picture 1?*

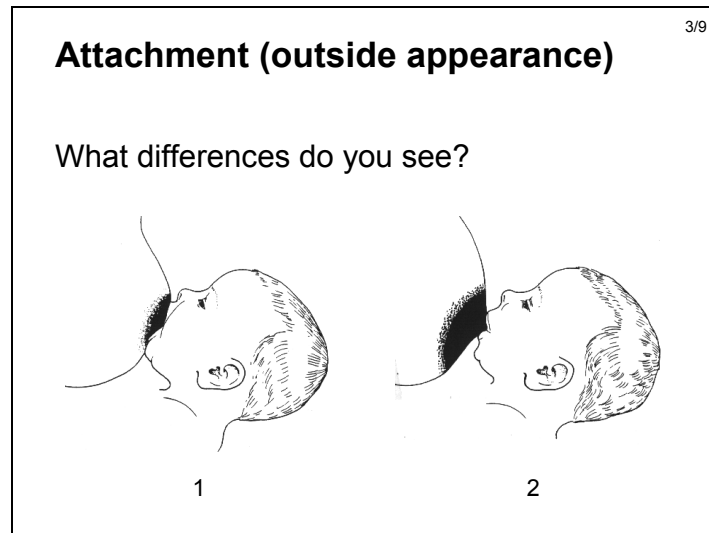
Wait for a few replies and then continue.

Make sure that the points below are clear.

If participants notice signs that are described with Slide 3/9, accept their observations, but do not repeat or emphasize them yet.

- The most important differences to see in picture 2 are:
 - . Only the nipple is in the baby's mouth, not the underlying breast tissue.
 - . The larger ducts are outside the baby's mouth, where his tongue cannot reach them.
 - . The baby's tongue is back inside his mouth, and not pressing on the larger ducts.
- The baby in picture 2 is poorly attached. He is 'nipple sucking'.

- Show **Slide 3/9 - Attachment - outside appearance** and make the points that follow:



- This picture shows the same two babies from the outside.

Ask: *What differences do you see between pictures 1 and 2?*

Wait for a few replies and then continue.

- In picture 1 you can see more of the areola above his top lip and less below his bottom lip. This shows that he is reaching with his tongue under the larger ducts to press out the milk. In picture 2 you can see the same amount of areola above his top lip and below his bottom lip, which shows that he is not reaching the larger ducts.
- In picture 1 his mouth is wide open. In picture 2 his mouth is not wide open and points forward.
- In picture 1 his lower lip is turned outwards. In picture 2 his lower lip is not turned outwards.
- In picture 1 the baby's chin touches the breast. In picture 2 his chin does not touch the breast.
- These are some of the signs that you can see from the outside which tell you that a baby is well attached to the breast.
- Seeing a lot of areola is not a reliable sign of poor attachment. Some mothers have a very large areola, and you can see a lot even if the baby is well attached. It is more reliable to compare how much areola you see above the baby's top lip and below his bottom lip.
- There are other differences which you can see when you look at a real baby, which you will learn about in Session 4.

Ask: *What do you think might be the results of poor attachment?*

Wait for a few responses before showing the next slide.

Show Slide 3/10 - Results of poor attachment and make the points that follow:

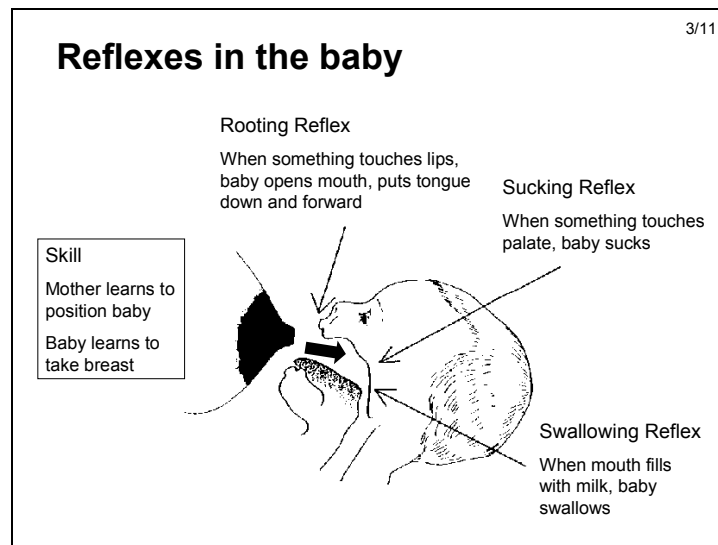
3/10

Results of poor attachment

- Painful nipples
- Damaged nipples
- Engorgement
- Baby unsatisfied and cries a lot
- Baby feeds frequently and for a long time
- Decreased milk production
- Baby fails to gain weight

- If a baby is poorly attached, and he 'nipple sucks', it is painful for his mother. Poor attachment is the most important cause of sore nipples.
- As the baby sucks hard to try to get milk he pulls the nipple in and out. This makes the nipple skin rub against his mouth. If a baby continues to suck in this way, he can damage the nipple skin and cause cracks (also known as fissures).
- As the baby does not remove breast milk effectively the breasts may become engorged.
- Because he does not get enough breast milk, he may be unsatisfied and cry a lot. He may want to feed often or for a very long time at each feed.
- Eventually if breast milk is not removed the breasts may make less milk.
- A baby may fail to gain weight and the mother may feel she is a breastfeeding failure.
- To prevent this happening all mothers need skilled help to position and attach their babies.
- Also babies should not be given feeding bottles. If a baby feeds from a bottle before breastfeeding is established, he may have difficulty suckling effectively. Even babies who start bottle feeds after a few weeks may also begin to suckle ineffectively.

☐ Show **Slide 3/11 - Reflexes in the baby** and make the points that follow:



- Earlier slides showed reflexes in a mother, but it is also useful to know about the reflexes in a baby.
- There are three main reflexes – the rooting reflex, the sucking reflex, and the swallowing reflex.
- When something touches a baby's lips or cheek, he opens his mouth and may turn his head to find it. He puts his tongue down and forward. This is the 'rooting' reflex. It should normally be the breast that he is 'rooting' for.
- When something touches a baby's palate, he starts to suck it. This is the sucking reflex.
- When his mouth fills with milk, he swallows. This is the swallowing reflex.
- All these reflexes happen automatically without the baby having to learn to do them.
- Notice in the drawing that the baby is not coming straight towards the breast. He is coming up to it from below the nipple. This helps him to attach well because:
 - . The nipple is aiming towards the baby's palate, so it can stimulate his sucking reflex.
 - . The baby's lower lip is aiming well below the nipple so he can get his tongue under the larger ducts.

III. Summarize the session**3 minutes**

- Ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on pages 13-20 of the Participant's Manual.

Further Information**Attachment:**

The amount of areola that you see outside a baby's mouth may help you to compare the attachment of the same baby before and after you correct it. However, the first time that you see a baby, it is not a reliable sign. A mother may have a very small areola, which all goes inside the baby's mouth easily; or a very large areola, so that you can always see a lot outside.

Causes of poor attachment:

1. Use of a feeding bottle: The action of sucking from a bottle is different from suckling from the breast. Babies who have had some bottle feeds may try to suck on the breast as if it is a bottle, and this makes them 'nipple suck'. When this happens, it is sometimes called 'suckling confusion' or 'nipple confusion'. So giving a baby feeds from a bottle can interfere with breastfeeding. Skilled help is needed to overcome this problem.
2. Inexperienced mother: If a mother has not had a baby before, or if she bottle fed or had difficulties breastfeeding previous babies, she may have difficulty getting her baby well attached to her breast. However, even mothers who have previously breastfed successfully sometimes have difficulties.
3. Functional difficulty: Some situations can make it more difficult for a baby to attach well to the breast. For example: if a baby is very small or weak; if a mother's nipples and the underlying tissue are poorly protractile; if her breasts are engorged; if there has been a delay in starting to breastfeed. Mothers and babies can breastfeed in all these situations, but they may need extra skilled help to succeed.
4. Lack of skilled support: A very important cause of poor attachment is lack of skilled help and support. Some women are isolated and lack support from the community. They may lack help from experienced women such as their own mothers; or from traditional birth attendants, who often are very skilled at helping with breastfeeding. Women in 'bottle feeding' cultures may be unfamiliar with how a breastfeeding mother holds and feeds her baby. They may never have seen a baby breastfeeding. Health workers who look after mothers and babies, for example doctors and midwives, may not have been trained to help mothers to breastfeed.

Sucking/suckling:

The term 'suckling' is usually used when referring to a baby feeding from the breast. The term 'sucking' is used when referring to a baby feeding from a bottle. However, note that the reflex referred on page 63 is known as 'sucking reflex' as it refers to anything that touches the baby's palate.

Session 4

Assessing a Breastfeed

Objectives

After completing this session participants will be able to:

- explain the 4 key points of attachment
- assess a breastfeed by observing a mother and baby
- identify a mother who may need help
- recognize signs of good and poor attachment and positioning
- explain the contents and arrangement of the BREASTFEED OBSERVATION JOB AID

Session outline

60 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	5 minutes
II.	Explain the BREASTFEED OBSERVATION JOB AID	20 minutes
III.	Show and discuss Slides 4/1-4/7	20 minutes
IV.	Practise using the BREASTFEED OBSERVATION JOB AID (Exercise 4.a, Slides 4/8- 4/9)	10 minutes
V.	Summarize the session	5 minutes

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 4/1-4/9 are in the correct order. Study the slides and the text that goes with them so that you are familiar with what each slide shows and the particular points to teach from it.
- For demonstration of the General Section of the BREASTFEED OBSERVATION JOB AID:
 - . Ask two participants to help you with the demonstration.
 - . Explain what you want them to do, and help them to practise.
 - . Make sure that they have dolls for the demonstration.
 - . If you feel that participants cannot do this on the first day of the course, ask other trainers to help instead.
- For demonstration of how to hold a breast – (General Section of BREASTFEED OBSERVATION JOB AID):
 - . Make sure that you have a model breast available. (See page 11 for instructions on ‘How to make a model breast’).
- At the beginning of the session ask participants to arrange their seats so that they are sitting in a half circle near to the screen, without tables or other obstruction in front of them. They need to be able to go to the screen to point out appearances on the slides.
- Put a seat for yourself to sit with the participants, so that you do not stand up in front to lecture.

I. Introduce the session**5 minutes**

- Show **Slide 4/1 - Session 4 Objectives** and read out the objectives:

4/1

Assessing a breastfeed

After completing this session participants will be able to:

- explain the 4 key points of attachment
- assess a breastfeed by observing mother and baby
- identify a mother who may need help
- recognize signs of good and poor attachment and positioning
- Explain the contents and arrangement of the BREASTFEED OBSERVATION JOB AID

- Make these points:
- Assessing a breastfeed helps you to decide if a mother needs help or not, and how to help her.
 - You can learn a lot about how well or badly breastfeeding is going by observing, before you ask questions.
 - There are some things you can observe when a baby is not breastfeeding. Other things you can only observe if a baby is breastfeeding.

II. Explain the BREASTFEED OBSERVATION JOB AID**20 minutes**

- Ask participants to turn to page 22 of their Manuals and find the BREASTFEED OBSERVATION JOB AID.
- Make these points:
 - This form will help you to remember what to look for when you assess a breastfeed.
 - The form is arranged in 5 sections: General, Breasts, Baby's Position, Baby's Attachment, Suckling.
 - The signs on the left all show that breastfeeding is going well. The signs on the right indicate a possible difficulty.
 - Beside each sign is a box to mark with a tick if you have seen the sign in the mother that you are observing.
 - As you observe a breastfeed mark a tick in the box for each sign that you observe. If you do not observe a sign you should make no mark.
 - When you have completed the form, if all the ticks are on the left hand side of the form, breastfeeding is probably going well. If there are some ticks on the right hand side, then breastfeeding may not be going well. This mother may have a difficulty and she may need your help.
 - We looked at the 4 key points of attachment in the last session. We will talk about positioning in a later session.
- Ask one participant to read aloud the points in the first section of the form (General), reading the point from the left hand column and then the corresponding point from the right hand column.
- Then ask another participant to read the next section (Breasts).
- Do not read the other sections at this stage – they will be read later.

BREASTFEED OBSERVATION JOB AID

Mother's name _____

Date _____

Baby's name _____

Baby's age _____

Signs that breastfeeding is going well:

Signs of possible difficulty:

GENERAL

Mother:

- Mother looks healthy
- Mother relaxed and comfortable
- Signs of bonding between mother and baby

Mother:

- Mother looks ill or depressed
- Mother looks tense and uncomfortable
- No mother/baby eye contact

Baby:

- Baby looks healthy
- Baby calm and relaxed
- Baby reaches or roots for breast if hungry

Baby:

- Baby looks sleepy or ill
- Baby is restless or crying
- Baby does not reach or root

BREASTS

- Breasts look healthy
- No pain or discomfort
- Breast well supported with fingers away from nipple
- Nipple stands out, protractile

- Breasts look red, swollen, or sore
- Breast or nipple painful
- Breast held with fingers on areola
- Nipple flat, not protractile

BABY'S POSITION

- Baby's head and body in line
- Baby held close to mother's body
- Baby's whole body supported
- Baby approaches breast, nose to nipple

- Baby's neck and head twisted to feed
- Baby not held close
- Baby supported by head and neck only
- Baby approaches breast, lower lip/chin to nipple

BABY'S ATTACHMENT

- More areola seen above baby's top lip
- Baby's mouth open wide
- Lower lip turned outwards
- Baby's chin touches breast

- More areola seen below bottom lip
- Baby's mouth not open wide
- Lips pointing forward or turned in
- Baby's chin not touching breast

SUCKLING

- Slow, deep sucks with pauses
- Cheeks round when suckling
- Baby releases breast when finished
- Mother notices signs of oxytocin reflex

- Rapid shallow sucks
- Cheeks pulled in when suckling
- Mother takes baby off the breast
- No signs of oxytocin reflex noticed

Explain the first two sections: General and Breasts

- Ask** participants to keep their Manuals open at the Breastfeed Observation Job Aid during the rest of the session.
- Ask two participants to play the roles of mothers and babies in the following demonstration.

Mother A (name) sits comfortably and relaxed, and acts being happy and pleased with her baby. She holds baby close, facing her breast, and she supports his whole body. She looks at her baby, and fondles or touches him lovingly. She supports her breast with her fingers against her chest wall below her breast, and her thumb above, away from the nipple.

Mother B (name) sits uncomfortably, and acts being sad and not interested in her baby. She holds baby loosely, and not close, with his neck twisted, and she does not support his whole body. She does not look at him or fondle him, but she shakes or prods him a few times to make him go on breastfeeding. She uses a scissor grip to hold her breast.

- Ask the other participants to start observing the ‘mothers and babies’. (Do not let this role-play last more than 2 minutes). As they are observing ask what they have observed from the first two sections of the BREASTFEED OBSERVATION JOB AID.
- Make the following points. Ensure that the participants are clear about which point on the BREASTFEED OBSERVATION JOB AID you are referring to:
 - Look at the mother to see if she looks well. Her expression may tell you something about how she feels – for example she may be in pain.
 - Observe whether the mother looks relaxed and comfortable. If a mother holds her baby securely and feels confident, it is easier for her baby to suckle effectively, and her milk will flow more easily. If a mother is nervous and lacks confidence, she may show this by shaking or prodding the baby to make him go on feeding. This can upset her baby and interfere with suckling and breast milk flow.
 - Observing how a mother interacts with her baby whilst feeding is important. Remember from the last session that if a mother feels good about breastfeeding, this will help her oxytocin reflex to work well, and this will help her milk to flow.
 - Look at the baby’s general health, nutrition and alertness. Look for conditions which may interfere with breastfeeding: e.g. a blocked nose or difficult breathing.
 - Notice whether the breasts look healthy. You may notice a cracked nipple, or may see that the breast is inflamed. We will talk about breast conditions in more detail later in the course.
 - If breastfeeding feels comfortable and pleasant for the mother, her baby is probably well attached. Ask a mother how breastfeeding feels.
 - Notice how the mother is holding her breast.

- ❑ Demonstrate these points with a model breast and doll, or on your own body:
 - How a mother holds her breast during feeding is important.
 - Does the mother lean forward and try to push the nipple into the baby's mouth; or does she bring her baby to the breast, supporting her whole breast with her hand?
 - Does she hold the breast close to the areola. This makes it more difficult for a baby to suckle. It may also block the milk ducts so that it is more difficult for the baby to get the breast milk.
 - Does the mother hold her breast back from her baby's nose with her finger? This is not necessary.
 - Does the mother use the 'scissor' hold – when she holds the nipple and areola between her index finger above and middle finger below. This can make it more difficult for a baby to take enough breast into his mouth.
 - Does the mother support her breast in an appropriate way:
 - with her fingers against the chest wall
 - with her first finger supporting the breast
 - with her thumb above, away from the nipple.

Explain Section: Baby's Position

- ❑ **Ask** one participant to read aloud the points in the third section of the BREASTFEED OBSERVATION JOB AID (Baby's Position), reading the point from the left hand column and then the corresponding point from the right hand column. Ask the participants what they observed during the previous role-play from the third section of the form. Then make these points:
 - Observe how the mother holds her baby. Notice if the baby's head and body are in line.
 - Notice if she holds the baby close to the breast and facing it, making it easier for him to suckle effectively. If she holds him loosely, or turned away so that his neck is twisted, it is more difficult for him to suckle effectively.
 - If the baby is young, observe whether the mother supports his whole body or only his head and shoulders.

Explain Section: Baby's Attachment

- ❑ **Ask** one participant to read aloud the points in the fourth section of the BREASTFEED OBSERVATION JOB AID (Baby's Attachment), reading the point from the left hand column and then the corresponding point from the right hand column. These points will not have been observed during the role-play with the doll. The 4 key points of attachment were covered in the last session.

Explain Section: Suckling

- Ask** one participant to read aloud the points in the fifth section of the BREASTFEED OBSERVATION JOB AID (Suckling), reading the point from the left hand column and then the corresponding point from the right hand column. These points will not have been observed during the role-play with the doll.

- Make the following points:
 - Look and listen for the baby taking slow deep sucks. This is an important sign that the baby is getting breast milk and is suckling effectively. If a baby takes slow, deep, sucks then he is probably well attached.
 - If the baby is taking quick shallow sucks all the time, this is a sign that the baby is not suckling effectively.
 - If the baby is making smacking sounds as he sucks this is a sign that he is not well attached.
 - Notice whether the baby releases the breast himself after the feed, and looks sleepy and satisfied.
 - If a mother takes the baby off the breast before he has finished, for example, if he pauses between sucks, he may not get enough hindmilk.

III. Show and discuss Slides 4/2 to 4/7**20 minutes**

- You will now see a series of slides of babies breastfeeding.
 - You will practise recognizing the signs of good and poor attachment that the slides show, and you will practise using the BREASTFEED OBSERVATION JOB AID. There are also some signs of good and poor positioning, but not in all the slides.
 - You will not be able to see all of the signs in the slides. For example, you cannot see signs with movement in slides.
 - Observe the signs that are clear, and do not worry about signs that you cannot see.
 - However, when you see real mothers and babies, you should look for all the signs.
 - As you look at each slide:
 - Decide which signs of good or poor attachment you see.
 - Decide if you think the baby's attachment is good or poor.
 - Notice if there are any signs of good or poor positioning shown.
- Ask a different participant to come forward for each of the Slides 4/2-4/7.
- As you show each slide:
Ask: What do you think of this baby's attachment (and positioning, if signs are visible)?
- Give the participant at the screen a few moments to study the picture, and to describe and point to the signs that she sees. Then ask other participants to describe the signs that they see.
- Then point out any signs that they have missed. Try not to repeat signs that they have already mentioned.
- The text below lists the signs that each slide illustrates particularly well, and which can help the observer to make a decision. Try to encourage participants to go through the 4 key points of attachment first and then to list points from the other sections of the BREASTFEED OBSERVATION JOB AID. This will help them to think more systematically as they assess a breastfeed.
- Participants may describe more signs than are given in the text. There are other signs in the slides, but most of them are not very helpful. Accept participants' observations, or gently correct them if they are incorrect.

Show Slide 4/2

- Signs that you can see clearly are:
 - There is more areola above the baby's top lip than below the bottom lip
 - His mouth is quite wide open
 - His lower lip is turned outwards
 - His chin is almost touching the breast.
- These signs show that the baby is well attached to the breast.
- In addition, the baby is close to the breast and facing it.
- The baby is breathing quite well without his mother holding her breast back with her finger.

Show **Slide 4/3**

- Signs that you can see clearly are:
 - His mouth points forwards
 - The baby's chin is not touching the breast.
- This baby is poorly attached.
- In addition, his cheeks are pulled in when suckling.
- The mother is holding her breast with the 'scissor hold'.

Show Slide 4/4

- Signs that you can see clearly are:
 - There is as much areola below the baby's bottom lip as above his top lip
 - His mouth is not wide open and his lips point forwards
 - His chin is not touching her breast.
- This baby is poorly attached to the breast.
- The baby's body is not close to his mother's.
- This mother's areola is very large, so it is unlikely that you would see a lot of it even if her baby was well attached. However, you should see more above the baby's top lip than below the bottom lip.

Show **Slide 4/5**

- Signs that you can see clearly are:
 - There is more areola above the baby's top lip than below the bottom lip
 - His mouth is quite wide open
 - His lower lip is turned in and not outwards
 - His chin is touching the breast.
- This baby is not well attached.
- His lower lip is turned in, so he is not well attached, even if the other signs are not bad.
- In addition, his head and body are straight and he is facing the breast.

Show Slide 4/6

- Signs that you can see clearly are:
 - There is as much or more areola below the baby's mouth as above it
 - His mouth is not wide open, his lips point forward
 - His chin is not touching the breast.
- This baby is poorly attached. He looks as though he is feeding from a bottle.
- In addition the baby is twisted and is not close to the breast.

Show **Slide 4/7**

- Signs that you can see are:
 - There is a little areola above the baby's top lip
 - His chin is touching the breast
 - As the baby is very close to the breast it makes it difficult to see many other signs
- This baby is well attached.
- Additional point: this is the same baby as in slide 4/6 after the health worker has helped the mother to position the baby better. In a better position a baby can attach more easily.

IV. Practise using the BREASTFEED OBSERVATION JOB AID**10 minutes****Exercise 4.a Using the BREASTFEED OBSERVATION JOB AID**

- Explain what to do:
 - With Slides 4/8 to 4/9, you will use your observations to practise filling in the BREASTFEED OBSERVATION JOB AID.
 - There are two copies of the form for this exercise in the Participant's Manual on pages 25 and 26. Fill in one form for each slide.
 - If you see a sign, make a ✓ in the box next to the sign. If you do not see a sign, leave the box empty.
 - Concentrate on the sections on baby's position and attachment. However, when you see mothers and babies in the practical sessions, you should fill in all sections of the form. Remember, you may not see all the signs with every baby.
- Ask all the trainers to help. They should circulate and make sure that participants understand what to do. They should give individual feedback on participants' observations of the slides.

 Show Slides 4/8 to 4/9

- Show each slide for about 4 minutes.
- In the Trainer's Guide, on pages 82 and 83, for each of the Slides 4/8 and 4/9, the BREASTFEED OBSERVATION JOB AID is copied. They have been marked with ✓s for the signs which participants should see in these slides. Boxes have only been ticked if the signs are clear. Remember it is difficult in slides to see all the signs. Use these answers to give individual feedback.

Show Slide 4/8



Show Slide 4/9



BREASTFEED OBSERVATION JOB AID – SLIDE 4/8

Mother's name _____

Date _____

Baby's name _____

Baby's age _____

Signs that breastfeeding is going well:

Signs of possible difficulty:

GENERAL

Mother:

- Mother looks healthy
- Mother relaxed and comfortable
- Signs of bonding between mother and baby

Mother:

- Mother looks ill or depressed
- Mother looks tense and uncomfortable
- No mother/baby eye contact

Baby:

- Baby looks healthy
- Baby calm and relaxed
- Baby reaches or roots for breast if hungry

Baby:

- Baby looks sleepy or ill
- Baby is restless or crying
- Baby does not reach or root

BREASTS

- Breasts look healthy
- No pain or discomfort
- Breast well supported with fingers away from nipple
- Nipple stands out, protractile

- Breasts look red, swollen, or sore
- Breast or nipple painful
- Breasts held with fingers on areola
- Nipple flat, not protractile

BABY'S POSITION

- Baby's head and body in line
- Baby held close to mother's body
- Baby's whole body supported
- Baby approaches breast, nose to nipple

- Baby's neck and head twisted to feed
- Baby not held close
- Baby supported by head and neck only
- Baby approaches breast, lower lip/chin to nipple

BABY'S ATTACHMENT

- More areola seen above baby's top lip
- Baby's mouth open wide
- Lower lip turned outwards
- Baby's chin touches breast

- More areola seen below bottom lip
- Baby's mouth not open wide
- Lips pointing forward or turned in
- Baby's chin not touching breast

SUCKLING

- Slow, deep sucks with pauses
- Cheeks round when suckling
- Baby releases breast when finished
- Mother notices signs of oxytocin reflex

- Rapid shallow sucks
- Cheeks pulled in when suckling
- Mother takes baby off the breast
- No signs of oxytocin reflex noticed

BREASTFEED OBSERVATION JOB AID – SLIDE 4/9

Mother's name _____ Date _____
 Baby's name _____ Baby's age _____

Signs that breastfeeding is going well:

Signs of possible difficulty:

GENERAL

Mother:

- Mother looks healthy
- Mother relaxed and comfortable
- Signs of bonding between mother and baby

Mother:

- Mother looks ill or depressed
- Mother looks tense and uncomfortable
- No mother/baby eye contact

Baby:

- Baby looks healthy
- Baby calm and relaxed
- Baby reaches or roots for breast if hungry

Baby:

- Baby looks sleepy or ill
- Baby is restless or crying
- Baby does not reach or root

BREASTS

- Breasts look healthy
- No pain or discomfort
- Breast well supported with fingers away from nipple
- Nipple stands out, protractile

- Breasts look red, swollen, or sore
- Breast or nipple painful
- Breasts held with fingers on areola
- Nipple flat, not protractile

BABY'S POSITION

- Baby's head and body in line
- Baby held close to mother's body
- Baby's whole body supported
- Baby approaches breast, nose to nipple

- Baby's neck and head twisted to feed
- Baby not held close
- Baby supported by head and neck only
- Baby approaches breast, lower lip/chin to nipple

BABY'S ATTACHMENT

- More areola seen above baby's top lip
- Baby's mouth open wide
- Lower lip turned outwards
- Baby's chin touches breast

- More areola seen below bottom lip
- Baby's mouth not open wide
- Lips pointing forward or turned in
- Baby's chin not touching breast

SUCKLING

- Slow, deep sucks with pauses
- Cheeks round when suckling
- Baby releases breast when finished
- Mother notices signs of oxytocin reflex

- Rapid shallow sucks
- Cheeks pulled in when suckling
- Mother takes baby off the breast
- No signs of oxytocin reflex noticed

Session 5

Introducing child growth assessment

Objectives

After completing this session participants will be able to:

- Start a Growth Record for a child and select pages to use at a given visit
- Determine a child's age on the visit day
- Identify the correct charts to use (age and sex) on a given visit and where these charts are in the growth record
- Identify the correct charts to use (age and sex) on a given visit and where these charts are in the growth record

Session outline

100 minutes

I.	Introduce the session	5 minutes
II.	Present Slides 1/2-1/7 & Grace Madu example	35 minutes
III.	Individual written exercise A & discussion	25 minutes
IV.	Individual work on continuing cases - Nalah and Toman (Exercise B)	25 minutes
V.	Group discussion and conclusion	10 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Ensure that Slides 5/1-5/7 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Each participant should have a boy's growth record, a girl's growth record and a child age calculator
- You need to be familiar with the contents of the child growth record and how to use the child age calculator

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**5 minutes**

- Show **Slide 5/1 - Session 5 Objectives** and read out the objectives:

5/1

Introducing child growth assessment

After completing this session participants will be able to:

- Start a Growth Record for a child and select pages to use at a given visit
- Determine a child's age today
- Identify the correct charts to use (age and sex) on a given visit and where these charts are in the growth record

II. Present Slides 5/2 - 5/7 & Grace Madu example**35 minutes**

- Make these points:
- We are going to see a series of slides that will help us become familiar with the child growth record and the child age calculator, and how to gather the basic information and take measurements needed to assess how well a child is growing.

- Show **Slide 5/2 - Child growth assessment I** and make the points that follow:

5/2

Child growth assessment I

- Basic growth assessment involves measuring a child's weight and length/ height
- Measurements are then compared to growth standards
- **Why?** To determine whether child is growing normally, has a growth problem or trend towards a problem
- **Steps:** measure, plot, interpret, take action to address or prevent growth problems
- Correct measuring, plotting and interpreting essential to identify problems correctly

- Basic growth assessment involves measuring a child's weight and length or height⁵ and comparing these measurements to growth standards.
- The purpose is to determine whether a child is growing "normally" or has a growth problem or trend towards a growth problem that should be addressed.
- The steps involve measuring weight, length, and height, plotting these measurements on growth charts; and interpreting growth indicators.
- Correct measurement, plotting, interpretation are essential for identifying growth problems

Show **Slide 5/3 - Child growth assessment II** and make the points that follow:

5/3

Child growth assessment II

- If there is a growth problem determine the causes
- Take action to address the causes of poor growth. Without appropriate action, programmes are ineffective in improving child health.
- In extreme poverty or emergencies, growth assessment aims to identify children who need urgent intervention, (therapeutic or supplementary feeding), to prevent death
- In health facility settings children with severe forms of undernutrition should be referred for specialized care
- Obese children need medical assessment and specialized management. Non-severe problems managed through counselling and age-appropriate advice on feeding and physical activity



- If a child has a growth problem or trend towards one the health care provider should talk with the mother or other caregiver⁶ to determine the causes.
- It is then critically important to take action to address the causes of poor growth. Growth assessments that are not supported by appropriate response programmes are not effective in improving child health.
- In circumstances such as extreme poverty or emergencies, growth assessment aims to identify children who need urgent intervention, such as therapeutic or supplementary feeding, to prevent death.
- In health facility settings children with severe forms of undernutrition should be referred for specialized care.
- Children with obesity should be referred for medical assessment and specialized management if these services are available. Non-severe problems can be managed through counselling, including age-appropriate advice on feeding and physical activity.

⁵ There are other growth measures (e.g. head circumference), but these are not covered in this course. Length of children less than 2 years old is measured lying down, while standing height is measured for children age 2 years or older. Throughout the manuals the phrase length/height is used to indicate that the age-appropriate measurement for linear growth should be used.

⁶ In this course the word "mother" is often used to refer to the child's primary caregiver. It is understood that the primary caregiver may be another person, such as the father, grandmother, or another relative or guardian.

Show Slide 5/4 - The Child Growth Record and make the points that follow:

The Child Growth Record 5/4

- Contains all of the charts needed to record and assess the growth of a child from birth up to 5 years of age
- A different *Growth Record* needed for boys and girls because boys and girls have different weights and lengths beginning at birth

- A Growth Record is a booklet that contains all of the charts needed to record and assess the growth of a child from birth up to 5 years of age.
- It also contains recommendations on child feeding and care, a useful reference for parents, other caregivers and health care providers.
- A different Growth Record is needed for boys and girls because boys and girls have different weights and lengths beginning at birth.
- A Growth Record should be started for each child and kept by the mother.

Show **Slide 5/5 - Growth Record contents** and make the points that follow:

5/5

Growth Record contents

- Personal data (pg 1)
- Visit notes (pp 6 -11)
- Special care (pg 12)
- Feeding recommendations (pp 13 -19)
- Food safety and hygiene (pg 20)
- Care for development (pp 21 -26)
- Growth charts (LH/A, WA, WL/H)
 - 0-6 mo (pp 29, 30, 31)
 - 6-24 mo (pp 33, 34, 35)
 - 2-5 y (pp 37, 38, 39)
- Gross motor milestones (page 41)

- Ask participants to study each section of the child Growth Record to identify the different sections listed in the slide. Review the contents of each section with the participants and respond to any questions they may have.
- Personal data (pg 1) - more detailed information in the next slide
 - Under Visit notes (pp6-11), record visit dates, age, reasons for clinic visits, measurements, information that will help explain any problems that may be observed during the assessment, and observations on the physical status of the child, for example a child looks:
 - Wasted* (too thin)
 - Lean (fleshed out, no noticeable fat)
 - Normal (rounded contours, no noticeable excess fat)
 - Heavy (sturdy, mostly muscular, not lean or thin)
 - Overweight* (noticeable fat)
 - Obese* (excess fat)
 - You will learn more technical definitions for these terms later in the course
 - The reference sections of the Growth record (special care, feeding recommendations, food safety and hygiene, and care for development) are handy references for parents and health care providers
 - We will not use the BMI charts in this course
 - Take note that in the 0-6 mo charts (pp 29, 30, 31), the first 3 months are plotted in weeks (and 13 weeks make 3 months exactly).

Show Slide 5/6 - Start a new Growth Record and make the points that follow:

Start a new Growth Record

5/6

- Select a boy's or girl's record as appropriate
- Ensure the date of birth is correct
- Record measurements at birth (weight, length, head circumference)
- Later growth assessment depends on the correctness of birth date and measurements
- Other information will be entered later (birth of the next child, feeding history, any adverse events)

- Ask participants to turn to page 1 of the Growth Record (Personal Data) and make the following points about starting a new child growth record:
- Verify the child's sex and select the correct growth record for a boy or girl
 - Ideally the growth record is started for each child at birth so as to enter correct information on date of birth, gestational age, birth weight, length and head circumference
 - Correct birth information is necessary for correct growth assessment later as it affects age calculation and the interpretation of growth trends
 - Date of birth of the next younger sibling is entered later if and when the mother gives birth to the next child
 - Similarly, information on feeding and any adverse events will be entered later as and when the relevant events happen
 - Where the exact date of birth is unknown, a local events calendar could be used to establish the child's likely date of birth.

Show **Slide 5/7 - The child age calculator** and make the points that follow:

5/7

The child age calculator

- Important to know the precise child's age today in order to assess certain growth indicators
- Study the child age calculator
 - Circular 12-month calendar
 - Rotating disk
 - Age in completed weeks for the first three months
 - Age in completed months for 3-11 months
- To calculate age:
 - Work out completed years
 - Bold arrow points to the child's birthday
 - Locate today's date on stationary calendar
 - Count on rotating disk completed weeks/months since last birthday

Ask participants to take out the age calculator and make the following points:

- It is important to know the precise age of the child in order to assess certain growth indicators.
- The WHO child age calculator is a rotating disk mounted on a calendar and is used to calculate a child's age in completed weeks or months in the first year of life. Instructions are given on the back of the calculator and on page 30 of your manual.
- Determine the child's date of birth. This date should already be recorded in the Growth Record on page 1 (Personal Data) or if the exact date of birth is unknown, use a local events calendar to establish the likely date of birth.
- Determine and note down the number of full years the child has completed, e.g. ask the mother how many birthdays have been celebrated if this is a local custom. (Note: Simply subtracting the year of birth from the current year will be accurate only if the child has already had a birthday this year.)
- If the child is one or more years old, you will turn the disk to calculate the number of additional months completed.
- If the child is less than one year old, you will use the disk to count the number of weeks (in the first 3 months) or months (from 3–11 months) completed since birth.
- Turn the disk until the bold arrow points to the child's birthday (month and day) on the stationary circular calendar.
- Locate today's date on the stationary calendar and count on the rotating disk how many months (or weeks if less than 3 months old) the child has completed since birth or the last birthday.

INSTRUCTIONS FOR USE OF THE CHILD AGE CALCULATOR

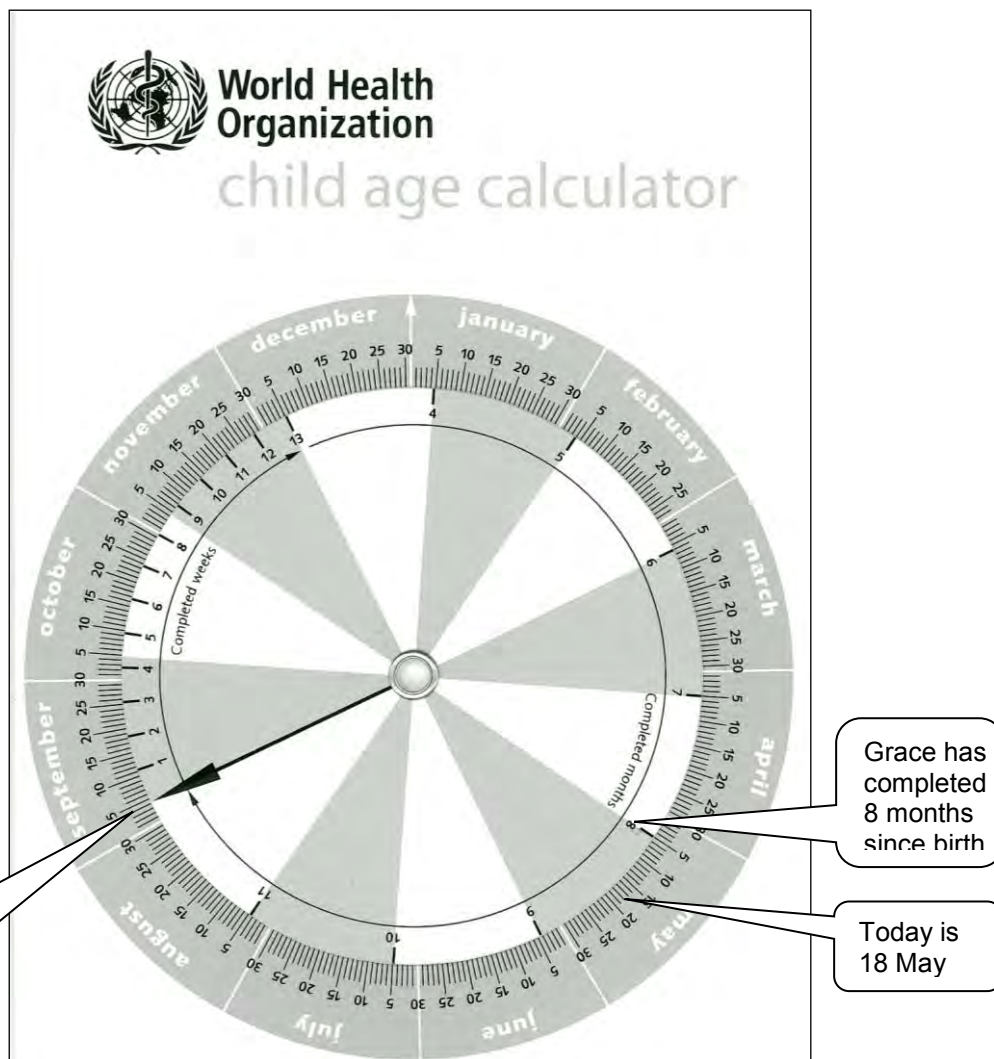
1. Determine the child's date of birth. This date should already be recorded in the Growth Record on page 1 (Personal Data).
2. Determine and note down the number of full years the child has completed, e.g. ask the mother how many birthdays have been celebrated if this is a local custom. (Note: Simply subtracting the year of birth from the current year will be accurate only if the child has already had a birthday this year.)
 - If the child is one or more years old, you will turn the disk to calculate the number of additional months completed.
 - If the child is less than one year old, you will use the disk to count the number of weeks (in the first 3 months) or months (from 3–11 months) completed since birth.
3. Turn the disk until the bold arrow points to the child's birthday (month and day) on the stationary circular calendar.
4. Locate today's date on the stationary calendar and count on the rotating disk how many months (or weeks if less than 3 months old) the child has completed since birth or the last birthday.
5. Record the child's age today in the Visit Notes of the Growth Record. Use abbreviations agreed upon for year, month, and week.
 - If the child is more than 1 year old, record completed years and months, for example, "1 yr 6 mo," "2 yr 3 mo." If no months have been completed beyond the child's birthday, record as "1 yr 0 mo," "2 yr 0 mo," etc.
 - If the child is between 3 months and 1 year old, record completed months, for example, "4 mo," "11 mo."
 - If the child is less than 3 months old, record completed weeks, for example, "9 wk."⁷ Notice that 13 weeks = 3 months.
 - If the child was born on 29 February, place the bold arrow on 28 February.

⁷ If a country uses different growth charts that count months rather than weeks from birth, it will not be necessary to record weeks.

- Ask participants to study the example of Grace Madu on page 31 of their manuals and discuss any issues before they proceed to do the individual written exercises on the next page:

EXAMPLE

Grace Madu is seen at a clinic on 18 May 2006. Her mother has brought her for immunization. Grace’s date of birth is already recorded on the Personal Data page of her Girl’s Growth Record as 4 September 2005. She has not yet completed one year since birth.



- Now please turn to page 32 of your manual and do the written exercise A.

III. Individual written exercise A & discussion 25 minutes

WRITTEN EXERCISE A: DETERMINING A CHILD'S AGE TODAY AND SELECTING GROWTH CHARTS TO USE IN THE GROWTH RECORD

In this exercise you will determine the age of several children using the WHO child age calculator. Then you will determine which growth charts in the Growth Record should be used during the child's growth assessment.

Answer the questions about each case described below:

1. On 30 June 2006, Mrs. Ismail brings her son Salaam to the health centre because he has ear pain. The Personal Data page in Salaam's Boy's Growth Record says that he was born on 12 September 2004.

What is Salaam's age today (30 June 2006), as it should be recorded in the Visit Notes (page 6) of the Boy's Growth Record?

After weighing and measuring Salaam and recording his weight and length in the Visit Notes, which three growth charts from the Growth Record should the health care provider use for Salaam's growth assessment?

Title of growth chart:

Page number:

- 1.
- 2.
- 3.

2. On 19 April 2006, a girl named Ruby is seen at the health centre for a well-child visit. Ruby's grandmother says that Ruby's Girl's Growth Record has been lost. She says that Ruby will celebrate her first birthday soon, on the first day of May. The health care provider begins a new Girl's Growth Record for Ruby by completing the Personal Data page.

What is Ruby's date of birth, as it should be recorded on the Personal Data page?

What is Ruby's age today (19 April 2006), as it should be recorded on the Visit Notes page?

After weighing and measuring Ruby and recording her weight and length in the Visit Notes, which three growth charts should the health care provider use?

Title of growth chart:

Page number:

- 1.
- 2.
- 3.

3. On 20 August 2006, a baby boy named Ivan is brought to the health centre for immunization. The boy's birth record says that he was born on 26 May 2006. The health care provider begins a Boy's Growth Record for Ivan by completing the Personal Data page. He then turns to the Visit Notes page to record Ivan's age today.

What is Ivan's age today (20 August 2006), as it should be recorded on the Visit Notes page?

After weighing and measuring Ivan and recording his weight and length in the Visit Notes, which three growth charts should the health care provider use?

Title of growth chart:

Page number:

- 1.
- 2.
- 3.

- Ask participants if they have any questions about the exercise and then explain to them what to do next.
 - We will use the two Growth Records to follow a little girl called Nalah and a boy called Toman.
 - In the next 20 minutes you will start a growth record for each of them with the information given on pages 34 and 35 of your manual.

IV. Exercise B - Continuing cases - Nalah and Toman 25 minutes

WRITTEN EXERCISE B: CONTINUING CASE STUDIES - NALAH AND TOMAN

In this exercise, you will begin a Growth Record for a girl named Nalah and one for a boy named Toman. You will continue to follow the growth of Nalah and Toman throughout this course. You have been given a Girl's Growth Record and a Boy's Growth Record to use in this and other exercises about Nalah and Toman.

Read the information about each child below and follow the instructions given.

Nalah

Nalah Parab was born on 7 February 2006. She was a single, term birth (38 weeks of pregnancy). According to her birth record, her weight was 2.9 kg and length was 49 cm. Her head circumference was not measured.

Nalah's parents are Hamid and Shira Parab. Their address is at 40 Rim Road. Nalah is the first and only child born to her mother. She is breastfed, but she has also been taking some water since she was 3 weeks old. There have been no unusual adverse events in her life so far.

The date of Nalah's visit to the health centre is 25 March 2006. Her mother has brought her for immunization.

Instructions:

1. Complete the Personal Data page of the Girl's Growth Record for Nalah. (You may make up a record number.)
2. In the Visit Notes section of the Girl's Growth Record, record Nalah's date of birth. On the first row, enter the date of Nalah's visit, her age today, and the reason for her visit.
3. List below the titles and page numbers of the three growth charts that the health care provider should use during Nalah's growth assessment.

Title of growth chart:

Page number:

- 1.
- 2.
- 3.

Toman

Toman Baruni comes to the health centre with his mother, Salwa Baruni, on 15 August 2006 for a well-child visit. Mrs Baruni thinks that it must be time for Toman to have another immunization, but she has lost his Growth Record, so she is not sure. She says that his last visit to the health centre was at 6 months, and he had received all of his immunizations at that point.

In order to start a new Boy's Growth Record, the health care provider asks Mrs Baruni about Toman's birth. Mrs Baruni says that Toman was born on 10 July 2005. He was a single, term birth and weighed 3.5 kg. She does not remember his length or head circumference.

Mrs Baruni was sick at Toman's birth, and Toman was given infant formula by the nurses for 3 days in the hospital. After leaving the hospital Mrs Baruni breastfed Toman, but she stopped after 3 months.

Toman is Mrs Baruni's second child. He lives with her at 100 Centre Street, Apartment 22. Mrs Baruni's first child was born of a different husband and lives with him. Toman has no younger siblings. Mrs Baruni is separated from Shaka Baruni, but Toman spends weekends with his father. Mrs Baruni does not think that the separation has been traumatic for Toman.

Instructions:

1. Complete the Personal Data page of the Boy's Growth Record for Toman. (You may make up a record number.)
2. Above the Visit Notes section of the Boy's Growth Record, record Toman's date of birth for easy reference. On the first row, enter the date of Toman's visit, his age today, and the reason for his visit.
3. List below the titles and page numbers of the three growth charts that the health care provider should use during Toman's growth assessment.

Title of growth chart:

Page number:

- 1.
- 2.
- 3.

**When you have finished this exercise,
review your answers with a facilitator.**

- Ask participants to do exercise C (page 36 of Participant's Manual) as a Homework

WRITTEN EXERCISE C: CONTINUING CASE STUDIES - NALAH AND TOMAN**HOMEWORK**

In Exercise B you began a Girl's Growth Record for Nalah and a Boy's Growth Record for Toman. In this exercise you will enter additional information from a series of visits by each child on the Visit Notes page, and determine age at each visit.

Nalah

On the Visit Notes page of Nalah's Girl's Growth Record, you have already recorded some information from her visit of 25 March 2006, when she was 6 weeks old. Open her Growth Record to the Visit Notes.

1. Nalah's weight at 6 weeks was 3.5 kg and her length was 51.3 cm. Record her weight and length at 6 weeks on the Visit Notes page.
2. Following is information from four subsequent visits by Nalah. Enter this information on the Visit Notes page. Determine Nalah's age at each visit and enter that as well.

Date of visit	Weight	Length	Reason for visit
20 April 2006	4.2 kg	54.8 cm	immunization
22 May 2006	4.3 kg	54.8 cm	diarrhoea
26 June 2006	4.8 kg	56.2 cm	immunization
15 August 2006	5.4 kg	58.1 cm	well-baby visit

Toman

On the Visit Notes page of Toman's Boy's Growth Record, you have already recorded some information from his visit of 15 August 2006, when he was 1 year and 1 month old. Open his Growth Record to the Visit Notes.

1. Toman's weight at 1 year and 1 month old was 11.9 kg and his length was 79.0 cm. Record his weight and length at this age on the Visit Notes page.
2. Following is information from three subsequent visits by Toman. Enter this information on the Visit Notes page. Determine Toman's age at each visit and enter that as well.

Date of visit	Weight	Length/Height	Reason for visit
15 December 2006	13.5 kg	84.5 cm	well-child visit
16 March 2007	15.0 kg	87.0 cm	ear pain
12 July 2007	16.8 kg	90.9 cm	well-child visit

**When you have finished this exercise,
review your answers with a facilitator.**

II. Discussion and conclusion**10 minutes**

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Answers to Written Exercise A

1. Salaam's age today: 1 yr 9 mo

The growth charts to be used for Salaam are:

Length-for-age, Boys, 6 months to 2 years, on page 33

Weight-for-age, Boys, 6 months to 2 years, on page 34

Weight-for-length, Boys, Birth to 2 years, on page 35

2. Ruby's date of birth: 1/5/2005

Ruby's age today: 11 mo

The growth charts to be used for Ruby are:

Length-for-age, Girls, 6 months to 2 years, on page 33

Weight-for-age, Girls, 6 months to 2 years, on page 34

Weight-for-length, Girls, Birth to 2 years, on page 35

3. Ivan's age today: 12 wk

The growth charts to be used for Ivan are:

Length-for-age, Boys, Birth to 6 months, on page 29

Weight-for-age, Boys, Birth to 6 months, on page 30

Weight-for-length, Boys, Birth to 6 months, on page 31

Written Exercise B – Continuing case studies of Nalah and Toman

In this exercise the participant should have made entries in a Girl's Growth Record for Nalah and a Boy's Growth Record for Toman. Compare the entries on the Personal Data and Visit Notes pages to those shown on the answer sheet. Be sure that the child's "age today" in the Visit Notes is correct; if not, determine why the participant made an error and correct any misunderstanding.

Be sure that the participant understands the structure of the Growth Record, specifically, where to find the growth charts to use for each age group.

Note that only minimal information about feeding is recorded on the Personal Data page. More details of the child's feeding history may be recorded in the Visit Notes. There is no need to write "still breastfeeding" for Nalah on the Personal Data page; leave the line after "age at termination of breastfeeding" blank until termination occurs. Also leave the line for "adverse events" blank unless some event has occurred; do not write "none" as something may happen later.

Answers to Written Exercise B

Nalah

1. Nalah's Personal Data page should look something like the following:

Personal Data

Child's name Nalah Parab **Girl** If a boy, must use a Boy's Growth Record

Identification/Record number _____

Parents' names Hamid and Shira Parab

Address 40 Rim Road

Birth information:

Date of birth 7-2-2006

Gestational age at birth 38 wk Single/multiple birth? Single

Measurements at birth:

Weight 2.9 kg Length 49 cm Head circumference _____

Birth rank 1st

Date of birth of next younger sibling (born to mother) _____

Feeding:

Age at introduction of any foods or fluids 3wk (water) *More details of feeding history may be recorded in Visit Notes*

Age at termination of breastfeeding _____

Adverse events (dates):

(such as death of parent, death of sibling age <5 years) _____

2. Nalah's Visit Notes (first row) should appear as follows:

Date of birth: <u>7-2-2006</u>		Visit Notes			
Date of visit	Age today (Completed years/months or weeks)	Measurements (Record below; then plot on charts)			Reason for visit, observations, recommendations
		Weight (kg)	Length/Height (cm)	BMI [†]	
<u>25-3-2006</u>	<u>6 wk</u>				<u>immunization</u>

3. The health care provider should use the following growth charts for Nalah at this visit:

- Length-for-age, Girls, Birth to 6 months, page 29
- Weight-for-age, Girls, Birth to 6 months, page 30
- Weight-for-length, Girls, Birth to 6 months, page 31

Toman

1. Toman's Personal Data page should look something like the following:

Personal Data

Child's name Toman Baruni **Boy** If a girl, must use a Girl's Growth Record

Identification/Record number _____

Parents' names Mother: Salwa Baruni

Address 100 Centre Street, Apt 22

Birth information:

Date of birth 10-7-2005

Gestational age at birth term Single/multiple birth? Single

Measurements at birth:

Weight 3.5 kg Length _____ Head circumference _____

Birth rank 2nd

Date of birth of next younger sibling (born to mother) _____

Feeding:

Age at introduction of any foods or fluids at birth (formula) More details of feeding history may be recorded in Visit Notes

Age at termination of breastfeeding 3 mo

Adverse events (dates):

(such as death of parent, death of sibling age <5 years) _____

2. Toman's Visit Notes (first row) should appear as follows:

Date of birth: <u>10-7-2005</u>	Visit Notes				
Date of visit	Age today (Completed years/months or weeks)	Measurements (Record below; then plot on charts)			Reason for visit, observations, recommendations
		Weight (kg)	Length/Height (cm)	BMI*	
<u>15-8-2006</u>	<u>1yr/1mo</u>				<p><i>Note: Earlier Growth Record lost. Immunizations up-to-date at Gmo.</i></p> <p><i>well child visit, measles immunization needed</i></p>

3. The health care provider should use the following growth charts for Toman at this visit:

- Length-for-age, Boys, 6 months to 2 years, page 33
- Weight-for-age, Boys, 6 months to 2 years, page 34
- Weight-for-length, Boys, Birth to 2 years, page 35

Answers to Written Exercise C

Nalah

Nalah's Visit Notes page should appear as follows (ignore the BMI values).

Date of birth: 7-2-2006		Visit Notes		
Date	Age today (Completed years/months or weeks)	Measurements (Record below; then plot on charts)		Reason for visit, observations, recommendations
		Weight (kg)	Length/Height (cm)	
25-3-2006	6 wk	3.5	51.3	immunization
20-4-2006	10 wk	4.2	54.8	immunization
22-5-2006	3 mo	4.3	54.8	diarrhoea
26-6-2006	4 mo	4.8	56.2	immunization
15-8-2006	6 mo	5.4	58.1	well-baby visit

Other information (e.g. drug or food allergies, chronic conditions):

Toman

Toman's Visit Notes page should appear as follows (ignore the BMI values).

Date of birth: 10-7-2005		Visit Notes		
Date	Age today (Completed years/months or weeks)	Measurements (Record below; then plot on charts)		Reason for visit, observations, recommendations
		Weight (kg)	Length/Height (cm)	
15-8-2006	1yr 1mo	11.9	79.0	Note: Earlier Growth Record Lost - Immunizations up-to-date at 6mo Well-child visit, measles immunization needed
15-12-2006	1yr 5mo	13.5	84.5	Well-child visit
16-3-2007	1yr 8mo	15.0	87.0	ear pain
12-7-2007	2yr 0mo	16.8	90.9	Well-child visit

Other information (e.g. drug or food allergies, chronic conditions):

Session 6

Measuring weight, length and height

Objectives

After completing this session participants will be able to:

- Use the available weighing and measuring equipment
- Weigh a child
- Measure length
- Measure height

Session outline

80 minutes

I.	Introduce the session	5 minutes
II.	Practical demonstrations of using equipment	30 minutes
III.	Participants' practice	25 minutes
IV.	Anthropometry video excerpts	15 minutes
V.	Summarize the session	5 minutes

Preparation

- Work in advance with the weight and length/height measuring equipment provided for the course and be sure to be able instruct the participants in how to use them.
- You will demonstrate how to use the taring scale and a height/length board. The following equipment is needed in the classroom for the demonstrations:
 - a taring scale (if available)
 - a length/height board set up to measure height
 - a length/height board set up to measure length
 - paper towels or soft cloth to cover the length/height board
 - a large doll is very helpful
- The job aid Weighing and Measuring a Child is a useful reference
- Set up video projection equipment to show a short section of the Anthropometry training video

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**5 minutes**

- The descriptions below of how to demonstrate and the key points to mention is very detailed. It is not expected that you will follow this description word for word. Instead, read it carefully a few times before the demonstration to remind you of the important steps and key points to make. Your co-facilitator can help to make sure that all the points are mentioned. Refer to the job aid *Weighing and Measuring a Child* for illustrations of the measurement procedures you will describe.
- Make these points:
 - After the practical demonstrations in this session you will be able to
 - Use the anthropometry equipment available for this training to weigh a child, to measure length, to measure height

II. Practical demonstrations**30 minutes**

**PRACTICAL DEMONSTRATION OF USE OF MEASURING EQUIPMENT
TARING SCALE**

- Ask a participant to be the mother for this demonstration. For this demonstration, prepare a “baby” that will weigh over 2 kg, such as 2-3 handbags or a bag holding several water bottles or books.
 - Place the scale on a flat, hard surface. The solar panel should be in good light.
 - Mention that the mother would undress the baby.
 - To turn on the scale, cover the solar panel for a second (literally one second). Wait until the number 0.0 appears.
 - Ask the mother to remove her shoes. Then ask her to step on the scale and stand still. Ask her to remain on the scale even after her weight appears, until you have finished weighing the baby.
 - After the mother’s weight is displayed, tare the scale by covering the solar panel for only a second and then waiting for the number 0.0 to appear along with a figure of a mother and baby.
 - Gently hand the “baby” to the mother. In a moment, the “baby’s” weight will appear.
 - Note: If the scale takes a long time to show 0.0 or a weight, it may not have enough light. Reposition the scale so that the solar panel is under the most direct light available.
 - Note: If a mother is very heavy (such as more than 100 kg) and the baby is light (such as less than 2.5 kg), the baby’s weight may not register on the scale. In such cases, have a lighter person hold the baby on the scale.

PRACTICAL DEMONSTRATION OF USE OF MEASURING EQUIPMENT

LENGTH BOARD

- If the length/height board requires assembling, begin by demonstrating how to assemble and disassemble the board. Then as you demonstrate use of the length board, mention the key points below. It is most helpful if you have a large doll for this demonstration.
 - Place the length board on a sturdy surface, such as a table or the floor. Cover the length board with a cloth or paper towel.
 - Stand on the side where you can see the measuring tape and move the footboard.
 - Explain to the mother that she will need to place the baby on the length board herself and then help to hold the baby's head in place while you take the measurement. Show her where to stand when placing the baby down. Also show her where to place the baby's head (against the fixed headboard).
 - When the mother is ready, ask her to lay the child on his back with his head against the headboard, compressing the hair.
 - Quickly position the head so that the child's eyes are looking straight up (imaginary vertical line from the ear canal to the lower border of the eye socket is perpendicular to the board). The person assisting should stand behind the headboard and hold the head in this position (see illustration in the job aid: Weighing and Measuring a Child).
 - Speed is important.
 - Check that the child lies straight along the board and does not change position.
 - Hold down the child's legs with one hand and move the footboard with the other. You will have best control if you hold the child's legs at the knees (with one finger between the knees) and gently press them down.
 - While holding the knees, move the footboard against the soles of the child's feet. The soles should be flat against the footboard, toes pointing upwards. If the child bends the toes or arches the foot, scratch the soles slightly and slide in the footboard quickly when the child straightens the toes.
 - Read the measurement and record the child's length in centimetres to the last completed 0.1 cm (this is the last line that you can see).
 - **Note:** If the child is extremely agitated and both legs cannot be held in position, measure with one leg in position.
 - **Note:** It is not possible to straighten the knees of newborns. Apply minimum pressure because newborns are fragile and could be injured easily.
 - Remember that if the child whose length you measured is 2 years or older, subtract 0.7 cm from the length and record the result as height in the Visit Notes.

PRACTICAL DEMONSTRATION OF USE OF MEASURING EQUIPMENT HEIGHT BOARD

- ❑ Demonstrate use of the height board and mention the key points below. It is also helpful if you have a large doll for this demonstration, or even a stick.
 - Place the height board with its back against the wall, so that it sits flat on the floor and cannot tip backward.
 - Place yourself to the right of the height board, kneeling down so that your head is at the level of the child's head.
 - Position the "child" (doll) on the baseboard with the back of the head, shoulder blades, buttocks, calves, and heels touching the vertical board.
 - Ask the person assisting to kneel down, hold the child's knees and feet in place, and to focus the child's attention and soothe the child as needed.
 - Position the child's head and hold the chin in place with your left hand. Push gently on the tummy to help the child stand to full height.
 - With your right hand bring down the headboard to rest on the top of the head. These positions are illustrated the job aid *Weighing and Measuring a Child*.
 - Read and record the measurement to the last completed 0.1 cm. This is the last line that you can actually see.

III. Participants' practice

25 minutes

- ❑ Explain to participants that they need to prepare the mother and child for weighing and measuring length or height
 - Begin by explaining to the mother the reasons for measuring the child, for example, to see how the child is growing, how the child is recovering from a previous illness, or how the child is responding to changes that have been made in his feeding or care.
 - The following are practical points to remember as you prepare mothers and their children for the different measurements:
 - If the child is less than 2 years old or is unable to stand, you will do tared weighing.
 - If the child is 2 years or older, you will weigh the child alone if the child will stand still.
 - Undress the child. Explain that child needs to remove outer clothing in order to obtain an accurate weight. A wet diaper, or shoes and jeans, can weigh more than 0.5 kg. Babies should be weighed naked; wrap them in a blanket to keep them warm until weighing. Older children should remove all but minimal clothing, such as their underclothes.
 - Note: If the child has braids or hair ornaments that will interfere with length/height measurements, remove them before weighing to avoid delay between the measurements. Especially with young children whose length will be measured, it is important to move quickly and surely from the scale to the length board to avoid upsetting the child.
 - Depending on a child's age and ability to stand, measure the child's length or height. A child's length is measured lying down (recumbent). Height is measured standing upright.

- If a child is less than 2 years old, measure recumbent length.
 - If the child is aged 2 years or older and able to stand, measure standing height.
 - In general, standing height is about 0.7 cm less than recumbent length. This difference was taken into account in developing the WHO growth standards used to make the charts in the Growth Record. Therefore, it is important to adjust the measurements if length is taken instead of height, and vice versa.
 - If a child less than 2 years old will not lie down for measurement of length, measure standing height and add 0.7 cm to convert it to length.
 - If a child aged 2 years or older cannot stand, measure recumbent length and subtract 0.7 cm to convert it to height.
- Now ask participants to study the job aid - Weighing and Measuring a Child which summarizes how to take the measurements.
- Then give them time to practice handling the equipment.

IV. Anthropometry video excerpt

15 minutes

- When everyone is ready, show selected section of the Anthropometry Training Video as directed below. Explain that this video was used to train staff in the WHO Multicentre Growth Reference Study (MGRS). Some of the sections will not apply to this training course, and you will skip those sections. As the equipment used in the course may be different from the equipment in the video, encourage participants to focus on weighing and measuring techniques rather than the equipment itself.
- Start the video at the beginning. First you will hear some general information about the WHO MGRS. Then you will view sections that show how to weigh a child using tared weighing, how to measure recumbent length, and how to measure standing height. Stop the video after viewing the screen titled "Summary of height," just before the section on head circumference. (Viewing time to this point is about 8 minutes.)
- Pause to answer any questions about the weighing and measuring process. (Point out that, although adult weights and heights were measured in the study, this course will not teach measurement of adults. Nor will it teach measurement of head circumference, mid-upper arm circumference, etc.) If you think it would help to answer a question or would be beneficial to participants, rewind and show the video (or a section of it) again.

V. Summary of session

5 minutes

- Make the following points:
- Tomorrow you will have the chance to measure real children.
 - You started child growth records for Nalah and Toman today. As homework, use the information given in Exercise C page 36 to calculate their ages at different visits and enter the details in Visit Notes pages of their respective growth records.
 - Important: this information will be used later to assess growth so if there are any errors in what you enter here, you will not be able to assess their growth correctly.

Session 7

Listening and Learning

Objectives

After completing this session participants will be able to:

- list the 6 listening and learning skills
- give an example of each skill
- demonstrate the appropriate use of the skills when counselling on infant and young child feeding

Session outline

60 minutes

Participants are all together for a demonstration led by one trainer.

- | | | |
|------|---|------------|
| I. | Introduce the session | 5 minutes |
| II. | Demonstrate listening and learning skills | 50 minutes |
| III. | Summarize the session | 5 minutes |

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Preparation

- Refer to the Introduction for guidance on how to give a demonstration.
- Study the notes for the session so that you are clear about what to do.
- You need two boards or flipcharts to make two summary lists.
- If it is difficult to get two flipchart boards, stick flipchart sheets to the wall. Make sure that participants can see them. Make sure you are clear about the lists that will go onto each flipchart.
- Make copies of all the DEMONSTRATIONS 7.B-7.O. (An alternative would be to use another copy of this guide).
- Ask different participants to help you to give the demonstrations. Explain what you want them to do. One way to involve several participants is to use a different participant for each skill. For DEMONSTRATIONS 7.B-7.G the participants read out the words of the mother. For DEMONSTRATIONS 7.H-7.O participants read out the words of the mother and the health worker.
- For DEMONSTRATION 7.A the participant has to sit and breastfeed a doll while you demonstrate different ways of talking to her. She can respond to your greetings, but need not say anything else. Discuss and agree with her before the demonstration what you can do to demonstrate 'appropriate touch' and 'inappropriate touch'.
- Give each of the participants a copy of the demonstrations that she has to read.
- If it is difficult for participants to help with the demonstrations for some reason, another trainer can play the part of the mother. However, try to involve participants as much as possible, because it helps them to learn.
- Make sure that Slide 7/1 is ready. Alternatively, as there is only one slide in this session, you might prefer to read aloud the objectives on Slide 7/1 without projecting them onto the screen.

I. Introduce the session**5 minutes**

- Show **Slide 7/1 - Session 7 Objectives** and read out the objectives:

5/1

Listening and learning

After completing this session participants will be able to:

- list the 6 listening and learning skills
- give an example of each skill
- demonstrate the appropriate use of the skills when counselling on infant and young child feeding

- Introduce the idea of counselling with these points:

- Counselling is a way of working with people in which you try to understand how they feel and help them to decide what they think is best to do in their situation.
- In this course we look at counselling mothers who are feeding infants and young children. They may be breastfeeding, giving complementary feeds, or, in some cases, giving replacement feeds.
- Although we talk about ‘mothers’ in this session, remember that these skills should be used when talking to other caregivers about infant feeding, for example fathers or grandmothers.
- Counselling mothers about feeding their infants is not the only situation in which counselling is useful.
- Counselling skills are useful when you talk to patients or clients in other situations. You may also find them helpful with your family and friends, or your colleagues at work. Practise some of the techniques with them – you may find the result surprising and helpful.
- A mother may not talk easily about her feelings, especially if she is shy, and with someone whom she does not know well. You will need the skill to listen and to make her feel that you are interested in her. This will encourage her to tell you more. She will be less likely to ‘turn off’ and say nothing.

II. Demonstrate listening and learning skills

50 minutes

- Tell participants that in this session you will explain and demonstrate six skills for listening and learning. Write the heading 'Listening and Learning Skills' on a board or flipchart with room for a list of six points below it (Flipchart 1). List the six skills underneath as you demonstrate them.

Skill 1. Use helpful non-verbal communication

- Write 'Use HELPFUL NON-VERBAL COMMUNICATION' on the list of listening and learning skills (Flipchart 1).
- Write 'HELFUL NON-VERBAL COMMUNICATION' on another board or flipchart with room for a list of five points below it (Flipchart 2).
- Explain the skill:
 - Ask:** *What do you think we mean by 'non-verbal communication'?*
 - Wait for a few replies and then continue.**
 - Non-verbal communication means showing your attitude through your posture, your expression, everything except through speaking.
- Demonstrate the skill. Tell participants that you will demonstrate five different kinds of non-verbal communication.
- Ask the participant whom you have prepared to help you. She sits with a doll, pretending to be a mother. She can respond to your greeting, but she does not have to say anything else. It is important that you say the same words, in the same tone of voice, with each demonstration. It is tempting to change your tone of voice to sound kinder in the demonstration which shows 'helpful non-verbal communication'. However, this will confuse the participants who may start to comment on verbal instead of non-verbal communication.
- Give the five pairs of demonstrations in DEMONSTRATION 7.A. With each pair, you approach the 'mother' in two ways – one way helps communication and the other way hinders communication. Demonstrate the way which helps sometimes first, and sometimes second, so that the participants who are observing cannot guess which is which just from the order of the demonstrations. Demonstrate 'appropriate touch' (socially acceptable) and 'inappropriate touch' (not socially acceptable) in the way that you agreed with the participant before the session.
- Ask other participants to:
- Identify the form of non-verbal communication that you demonstrate.
- Say which form helps communication and which hinders it.

DEMONSTRATION 7.A NON-VERBAL COMMUNICATION

With each demonstration say exactly the same few words, and try to say them in the same way, for example:

“Good morning, Susan. How is feeding going for you and your baby?”

1. Posture:

Hinders: Stand with your head higher than the other person's

Helps: Sit so that your head is level with hers.

Write – ‘Keep Your Head Level’ on the flipchart (Flipchart 2).

2. Eye contact:

Helps: Look at her and pay attention as she speaks

Hinders: Look away at something else, or down at your notes

Write – ‘Pay Attention’ on the flipchart.

(Note: eye contact may have different meanings in different cultures. Sometimes when a person looks away it means that he or she is ready to listen. If necessary, adapt this to your own situation)

3. Barriers:

Hinders: Sit behind a table, or write notes while you talk

Helps: Remove the table or the notes

Write – ‘Remove Barriers’ on the flipchart.

4. Taking time:

Helps: Make her feel that you have time. Sit down and greet her without hurrying; then just stay quietly smiling at her, watching her breastfeed, and waiting for her to answer

Hinders: Be in a hurry. Greet her quickly, show signs of impatience, look at your watch

Write – ‘Take Time’ on the flipchart.

5. Touch:

Helps: Touch the mother appropriately

Hinders: Touch her in an inappropriate way

Write – ‘Touch Appropriately’ on the flipchart.

(Note: If you cannot demonstrate an inappropriate touch, simply demonstrate not touching).

- Discuss appropriate touch in this community.

Ask: *What kinds of touch are appropriate and inappropriate in this situation in this community?*

Does touch make a mother feel that you care about her?

For a man, if it is not appropriate to touch the woman, is it appropriate to touch the baby?

Wait for a few replies and then continue.

- You now have the following list written on Flipchart 2. Post it up on the wall.

HELPFUL NON-VERBAL COMMUNICATION

- Keep your head level
- Pay attention
- Remove barriers
- Take time
- Touch appropriately

- Make the following point:

- Our non-verbal communication often demonstrates to a mother or caregiver our approval or disapproval of a situation. We should be careful to avoid allowing our own views on certain subjects, e.g. religion, to be expressed in a counselling situation where it might appear as though we are judging a mother.

- Introduce Skills 2-6 by making the following points:

- The next skills deal with what we say to mothers. In other words 'verbal communication'.
- Remember that the tone of our voice is important during verbal communication. We should always try to sound gentle and kind when talking to mothers.
- During counselling we are trying to find out how people feel. We need to be interested and to probe beneath the surface if we wish to learn their real worries and their concerns.

Skill 2. Ask open questions

- Write '**ASK OPEN QUESTIONS**' on the list of listening and learning skills (Flipchart 1).
- Explain the skill:
 - To start a discussion with a mother, or to take a history from her, you need to ask some questions.
 - It is important to ask questions in a way that encourages a mother to talk to you and to give you information. This saves you from asking too many questions, and enables you to learn more in the time available.
 - Open questions are usually the most helpful. To answer them, a mother must give you some information.
 - Open questions usually start with 'How? What? When? Where? Why? Who?'
 - For example, "How are you feeding your baby?"
 - Closed questions are usually less helpful. They tell a mother the answer that you expect, and she can answer them with a 'Yes' or 'No'.
 - Closed questions usually start with words like 'Are you?' or 'Did he?' or 'Has he?' or 'Does she?'
For example: "Did you breastfeed your last baby?"
 - If a mother says 'Yes' to this question, you still do not know if she breastfed exclusively, or if she also gave some artificial feeds.
 - If you continue to ask questions to which the mother can only answer 'yes' or 'no', you can become quite frustrated, and think that the mother is not willing to talk, or that she is not telling the truth.
- Demonstrate the skill. Ask a participant to read the words of the mother in **DEMONSTRATIONS 7.B AND 7.C** while you read the part of the health worker. After each demonstration, comment on what the health worker learnt.
- Introduce the role-plays by making these points:
 - We will now see this skill being demonstrated in two role-plays. The health worker is talking to a mother who has a young baby whom she is breastfeeding.

DEMONSTRATION 7.B CLOSED QUESTIONS TO WHICH SHE CAN ANSWER 'YES' OR 'NO'

Health worker:	“Good morning, (name). I am (name), the community midwife. Is (child’s name) well?”
Mother:	“Yes, thank you.”
Health worker:	“Are you breastfeeding him?”
Mother:	“Yes.”
Health worker:	“Are you having any difficulties?”
Mother:	“No.”
Health worker:	“Is he breastfeeding very often?”
Mother:	“Yes.”
Ask:	What did the health worker learn from this mother?
Comment:	The health worker got ‘yes’ and ‘no’ for answers and didn’t learn much. It can be difficult to know what to say next.

DEMONSTRATION 7.C OPEN QUESTIONS

Health worker:	“Good morning, (name). I am (name), the community midwife. How is (child’s name)?”
Mother:	“He is well, and he is very hungry.”
Health worker:	“Tell me, how are you feeding him?”
Mother:	“He is breastfeeding. I just have to give him one bottle feed in the evening.”
Health worker:	“What made you decide to do that?”
Mother:	“He wants to feed too much at that time, so I thought that my milk is not enough.”
Ask:	What did the health worker learn from this mother?
Comment:	The health worker asked open questions. The mother could not answer with a ‘yes’ or a ‘no’, and she had to give some information. The health worker learnt much more.

Explain how to use questions to start and to continue a conversation:

- A very general open question is useful to start a conversation. This gives the mother an opportunity to say what is important to her. For example, you might ask a mother of a nine-month-old baby: “How is your child feeding?”
- Sometimes a general question like this receives an answer such as, “Oh, very well thank you.”
- So then you need to ask questions to continue the conversation.

- For this, more specific questions are helpful. For example: “Can you tell me what your child ate for the main meal yesterday?”
 - Sometimes you might need to ask a closed question. For example: “Did your child have any fruit yesterday?”
 - After you have received an answer to this question try to follow-up with another open question.
- Demonstrate the skill. Ask a participant to read the part of the mother in **DEMONSTRATION 7.D**. You read the part of the health worker.
- Introduce the role play by making these points:
- We will now see a role-play demonstrating using questions to start and continue a conversation.
 - The health worker is talking to a mother who has a young baby whom she is breastfeeding.

DEMONSTRATION 7.D STARTING AND CONTINUING A CONVERSATION

Health worker: “Good morning, (name). How are you and (child’s name) getting on?”

Mother: “Oh, we are both doing well, thank you.”

Health worker: “How old is (child’s name) now?”

Mother: “He is two days old today.”

Health worker: “What are you feeding him on?”

Mother: “He is breastfeeding, and having drinks of water.”

Health worker: “What made you decide to give the water?”

Mother: “There is no milk in my breasts, and he doesn’t want to suck.”

Ask: What did the health worker learn from this mother?

Comment: **The health worker asks an open question, which does not help much. Then she asks two specific questions, and then follows up with an open question. Although the mother says at first that she and the baby are well, the health worker later learns that the mother needs help with breastfeeding.**

Skill 3. Use responses and gestures which show interest

- Write '**USE RESPONSES AND GESTURES WHICH SHOW INTEREST**' on the list of listening and learning skills (Flipchart 1).
- Explain the skill:
 - If you want a mother to continue talking, you must show that you are listening, and that you are interested in what she is saying.
 - Important ways to show that you are listening and interested are:
 - With gestures, for example, look at her, nod and smile
 - With simple responses, for example, you say 'Aha', 'Mmm', 'Oh dear!'.
- Demonstrate the skill. Ask a participant to read the words of the mother in **DEMONSTRATION 7.E**, while you play the part of the health worker. You give simple responses, and nod, and show by your facial expression that you are interested and want to hear more.
- Introduce the role-play by making these points:
 - We will now see a role-play demonstrating this skill.
 - The health worker is talking to a mother who has a one-year-old child.

DEMONSTRATION 7.E USING RESPONSES AND GESTURES WHICH SHOW INTEREST

Health worker: "Good morning, (name). How is (child's name) now that he has started solids?"

Mother: "Good morning. He's fine, I think."

Health worker: "Mmm." (nods, smiles.)

Mother: "Well, I was a bit worried the other day, because he vomited."

Health worker: "Oh dear!" (raises eyebrows, looks interested.)

Mother: "I wondered if it was something in the stew that I gave him."

Health worker: "Aha!" (nods sympathetically).

Ask: How did the health worker encourage the mother to talk?

Comment: **The health worker asked a question to start the conversation. Then she encouraged the mother to continue talking with responses and gestures.**

- Discuss locally appropriate responses:
 - In different countries, people use different responses.
 - Ask: What responses do people use locally?*
 - Wait for a few replies and then continue.*

Skill 4. Reflect back what the mother says

- Write '**REFLECT BACK WHAT THE MOTHER SAYS**' on the list of listening and learning skills (Flipchart 1).
- Explain the skill:
 - Health workers sometimes ask mothers a lot of factual questions. However, the answers to factual questions are often not helpful. The mother may say less and less in reply to each question.
 - For example, if a mother says: "My baby was crying too much last night", you might want to ask: "How many times did he wake up?" But the answer is not helpful.
 - It is more useful to repeat back or reflect what a mother says. This is another way to show you are listening and encourages the mother or caregiver to continue talking and to say what is important to her. It is best to say it in a slightly different way, so that it does not sound as though you are copying her.
 - For example, if a mother says: "I don't know what to feed my child, she refuses everything." You could reflect back by saying: "Your child is refusing all the food you offer her?"
- Demonstrate the skill. Ask a participant to read the words of the mother in **DEMONSTRATIONS 7.F** and **7.G** while you read the part of the health worker.
- Introduce the role-plays by making these points:
 - We will now watch two role-plays to demonstrate this skill.
 - The health worker is talking to a mother who has a six-week-old baby whom she is breastfeeding.

DEMONSTRATION 7.F CONTINUING TO ASK FOR FACTS

Health worker: "Good morning, (name). How are you and (child's name) today?"

Mother: "He wants to feed too much - he is taking my breast all the time!"

Health worker: "About how often would you say?"

Mother: "About every half an hour."

Health worker: "Does he want to suck at night too?"

Mother: "Yes."

Ask: What did the health worker learn from the mother?

Comment: **The health worker asks factual questions, and the mother gives less and less information.**

DEMONSTRATION 7.G REFLECTING BACK

Health worker:	“Good morning, (name). How are you and (child’s name) today?”
Mother:	“He wants to feed too much - he is taking my breast all the time!”
Health worker:	“(Child’s name) is feeding very often?”
Mother:	“Yes. This week he is so hungry. I think that my milk is drying up.”
Health worker:	“He seems more hungry this week?”
Mother:	“Yes, and my sister is telling me that I should give him some bottle feeds as well.”
Health worker:	“Your sister says that he needs something more?”
Mother:	“Yes. Which formula is best?”
Ask:	What did the health worker learn from the mother?
Comment:	The health worker reflects back what the mother says, so the mother gives more information.

Skill 5. Empathize - show that you understand how she feels

- Write ‘**EMPATHIZE – SHOW THAT YOU UNDERSTAND HOW SHE FEELS**’ on the list of listening and learning skills.
- Explain the skill:
 - Empathy is a difficult skill to learn. It is difficult for people to talk about feelings. It is easier to talk about facts.
 - When a mother says something which shows how she feels, it is helpful to respond in a way which shows that you heard what she said, and that you understand her feelings from her point of view.
 - For example, if a mother says: “My baby wants to feed very often and it makes me feel so tired!” you respond to what she feels, perhaps like this: “You are feeling very tired all the time then?”
 - Empathy is different from sympathy. When you sympathize you are sorry for a person, but you look at it from your point of view.
 - If you sympathize, you might say: “Oh, I know how you feel. My baby wanted to feed often too, and I felt exhausted.” This brings the attention back to you, and does not make the mother feel that you understand her.
 - You could reflect back what the mother says about the baby.
 - For example: “He wants to feed very often?” But this reflects back what the mother said about the baby’s behaviour, and it misses what she said about how she feels. She feels tired.

- So empathy is more than reflecting back what a mother says to you.
 - It is also helpful to empathize with a mother's good feelings. Empathy is not only to show that you understand her bad feelings.
- Demonstrate the skill. Ask the two participants whom you have prepared to give **DEMONSTRATIONS 7.H, 7.I, 7.J and 7.K.** to read the words of the mother and health worker.
- Introduce the role-plays by making these points:
- We will see a demonstration of this skill.
 - The health worker is talking to a mother of a ten-month-old child.
 - As you watch, look for empathy – is the health worker showing she understands the mother's point of view?

DEMONSTRATION 7.H SYMPATHY

Health worker: “Good morning, (name). How are you and (child's name) today?”
Mother: “(Child's name) is not feeding well, I am worried he is ill.”
Health worker: “I understand how you feel. When my child was ill, I was so worried. I know exactly how you feel.”
Mother: “What was wrong with your child?”
Ask: Do you think the health worker showed sympathy or empathy?
Comment: **Here the focus moved from the mother to the health worker. This was sympathy, not empathy. Let us hear this again with the focus on the mother and empathizing with her feelings.**

DEMONSTRATION 7.I EMPATHY

Health worker: “Good morning, (name). How are you and (child's name) today?”
Mother: “He is not feeding well, I am worried he is ill”
Health worker: “You are worried about him?”
Mother: “Yes, some of the other children in the village are ill and I am frightened he may have the same illness.”
Health worker: “It must be very frightening for you.”
Ask: Do you think the health worker showed sympathy or empathy?
Comment: **Here the health worker used the skill of empathy twice. She said “You are worried about him” and “It must be very frightening for you.” In this second version the mother and her feelings are the focus of the conversation.**

- Now let us see two more demonstrations. This time the mother is HIV-positive and pregnant and is coming to talk to the health worker about how she will feed her baby after birth. Again listen for empathy – is the health worker showing she understands the mother’s point of view?

DEMONSTRATION 7.J SYMPATHY

Health worker:	“Good morning, (name). You wanted to talk to me about something?” Smiles.
Mother:	“I had (name) weighed and measured last week and I was told that he is too small.”
Health Worker:	“Yes, I know how you feel. My nephew had a growth problem when he was 1 year old.”
Ask:	Do you think the health worker showed sympathy or empathy?
Comment:	Here the focus moved from the mother to the sister of the health worker. This was sympathy, not empathy. Let us hear this again with the focus on the mother and empathizing with her feelings.

DEMONSTRATION 7.K EMPATHY

Health worker:	“Good morning, (name). You wanted to talk to me about something?” Smiles.
Mother:	“I had (name) weighed and measured last week and I was told that he is too small.”
Health Worker:	“You’re really worried about his size.”
Mother:	“Yes I am. I don’t know what I should do?”
Ask:	Do you think the health worker showed sympathy or empathy?
Comment:	In the second version the health worker concentrated on the mother’s concerns and worries. The health worker responded by saying “You’re really worried about what’s going to happen.” This was empathy.

- Ask the two participants whom you have prepared to give **DEMONSTRATIONS 7.L, 7.M, 7.N** and **7.O**.
- Introduce the next role-play by making these points:
 - Now we will see another demonstration. Watch to see if the health worker is really listening to the mother.

The health worker is talking to a mother of a seven-month-old child who has recently started complementary feeds.

DEMONSTRATION 7.L ASKING FACTS

Health worker: “Good morning, (name). How are you and (child’s name) today?”

Mother: “He is refusing to breastfeed since he started eating porridge and other foods last week – he just pulls away from me and doesn’t want me!”

Health worker: “How old is (child’s name) now?”

Mother: “He is seven months old”.

Health worker: “And how much porridge does he eat during a day?”

Ask: What did the health worker learn about the mother’s feelings?

Comment: **The health worker asks about facts and ignored the mother’s feelings. The information the health worker learnt did not help the health worker to assist the mother with her worry that the baby won’t breastfeed since other foods were offered. The health worker did not show empathy. Let us hear this again.**

DEMONSTRATION 7.M EMPATHY

Health worker: “Good morning, (name). How are you and (child’s name) today?”

Mother: “He is refusing to breastfeed since he started eating porridge and other foods last week – he just pulls away from me and doesn’t want me!”

Health worker: “It’s very upsetting when your baby doesn’t want to breastfeed.”

Mother: “Yes, I feel so rejected.”

Ask: What did the health worker learn about the mother’s feelings this time?

Comment: **In this second version, the mother’s feelings are listened to at the beginning. Then the health worker is able to focus on what the mother sees as the problem.**

Skill 6. Avoid words which sound judging

Write ‘AVOID WORDS WHICH SOUND JUDGING’ on the list of listening and learning skills.

Explain the skill:

- ‘Judging words’ are words like: right, wrong, well, badly, good, enough, properly.
- If you use judging words when you talk to a mother about feeding, especially when you ask questions, you may make her feel that she is wrong, or that there is something wrong with the baby. A breastfeeding mother may feel there is something wrong with her breast milk.

- For example: Do not say: “Are you feeding your child **properly**?” Instead say: “How are you feeding your child?”
 - Do not say: “Do you give her **enough** milk?” Instead say: “How often do you give your child milk?”
- Introduce the role-play by making these points:
- We will see a demonstration of this skill. The health worker is talking to a mother of a five-month-old baby. As you watch, look for judging words.

DEMONSTRATION 7.N USING JUDGING WORDS

Health worker:	“Good morning. Is (name) breastfeeding normally?”
Mother:	“Well - I think so.”
Health worker:	“Do you think that you have enough breast milk for him?”
Mother:	“I don't know.....I hope so, but maybe not ...” (She looks worried.)
Health worker:	“Has he gained weight well this month?”
Mother:	“I don't know.....”
Health worker:	“May I see his growth chart?”
Ask:	What did the health worker learn about the mother's feelings?
Comment:	The health worker is not learning anything useful, but is making the mother very worried.

DEMONSTRATION 7.O AVOIDING JUDGING WORDS

Health worker:	“Good morning. How is breastfeeding going for you and (child's name)?”
Mother:	“It's going very well. I haven't needed to give him anything else.”
Health worker:	“How is his weight? Can I see his growth chart?”
Mother:	“Nurse said that he gained more than half a kilo this month. I was pleased.”
Health worker:	“He is obviously getting all the breast milk that he needs.”
Ask:	What did the health worker learn about the mother's feelings?
Comment:	This time the health worker learnt what she needed to know without making the mother worried. The health worker used open questions to avoid using judging words.

- Make these additional points:
 - Mothers may use judging words about their own situation. You may sometimes need to use them yourself, especially the positive ones, when you are building a mother's confidence. But practise avoiding them as much as possible, unless there is a really important reason to use one.
 - You may have noticed that judging questions are often closed questions. Using open questions often helps to avoid using a judging word.

III. Summarize the session

5 minutes

- Ask participants if they have any questions about listening and learning and try to answer them.
- You now have a list of the six skills on Flipchart 1. Post it on the wall. Read the list through, to remind participants of the six skills.
- Ask participants to find the list on page 47 of their Manuals. Ask them to try to memorize it. Explain that they will use the list for Practical Session 1.

LISTENING AND LEARNING SKILLS

- Use helpful non-verbal communication
- Ask open questions
- Use responses and gestures which show interest
- Reflect back what the mother says
- Empathize - show that you understand how she feels
- Avoid words which sound judging.

Session 8

Homework - Listening and Learning Exercises

Objectives

After completing this session participants will be able to:

- demonstrate appropriate use of the 6 listening and learning skills
- provide examples of each skill

Session outline

Participants work in groups or alone.

- | | | |
|------|---|-----------|
| I. | Introduce the exercises | 2 minutes |
| II. | Participants do the exercise (homework) | |
| III. | Review results | |

Preparation

- For Exercise 8.d, prepare translations of the judging words, and of the examples of judging and non-judging questions. Work with the other trainers to do this. Write your translations in the spaces in the box USING AND AVOIDING JUDGING WORDS.
- Make sure that Answer Sheets are available to give to participants after the revision of the exercise with them.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**2 minutes**

- Ask participants to turn to page 49 of their Manuals, and to find Exercises 8.a-8.d.
- Explain what they will do:
 - You will practise the six listening and learning skills that you learnt about in Session 7.
 - Exercises 8.a-8.c are individual written exercises.
 - For exercise 8.d you are encouraged to work in groups.
 - For each exercise, read the instructions How to do the exercise and the Example of what to do.
 - Then write your answers to the questions in the section which says To answer.
 - If possible use pencil, so that it is easier to correct the answers.
 - Your trainer will give feedback at a time agreed between him/her and you, and will give you Answer Sheets after you have completed your exercises.

II. Written exercises (Homework)**Exercise 8.a Asking open questions****How to do the exercise:**

Questions 1-4 are 'closed' and it is easy to answer 'yes' or 'no'.
Write a new 'open' question, which requires the mother to tell you more.

Example:**'Closed' Question**

Do you breastfeed your baby?

'Open' Question

How are you feeding your baby?

To answer:**'Closed' Questions**

1. Does your baby sleep with you?
2. Are you often away from your baby?
3. Does Sara eat porridge?
4. Is your child growing well?

Suggested answers for 'Open' Questions

- Where does your baby sleep?*
- How much time do you spend away from your baby?*
- What kinds of foods does Sara like to eat?*
- How is the growth of your child?*

Exercise 8.b Reflecting back what a mother says**How to do the exercise:**

Statements 1-3 are some things that mothers might tell you.

Underneath 1-3 are three responses. Mark the response that 'reflects back' what the statement says. For statement 4 make up your own response which 'reflects back' what the mother says.

Example:

My mother says that I don't have enough milk.

- a) Do you think you have enough?
- b) Why does she think that?
- ✓ c) She says that you have a low milk supply?

To answer:

1. Mika does not like to take thick porridge.
 - ✓ a) Mika does not seem to enjoy thick foods?
 - b) What foods have you tried?
 - c) It is good to give Mika thick foods as he is over six months old.
2. He doesn't seem to want to suckle from me.
 - a) Has he had any bottle feeds?
 - b) How long has he been refusing?
 - ✓ c) He seems to be refusing to suckle?
3. I tried feeding him from a bottle, but he spat it out.
 - a) Why did you try using a bottle?
 - ✓ b) He refused to suck from a bottle?
 - c) Have you tried to use a cup?
4. "My husband says our baby is old enough to stop breastfeeding now."

Your husband wants you to stop breastfeeding your baby?

Exercise 8.c Empathizing - to show that you understand how she feels

How to do the exercise:

Statements 1-4 are things that mothers might say.

Underneath statements 1-4 are three responses that you might make.

Underline the words in the mother's statement which show something about how she feels. Mark the response which is most empathetic.

For stories 5 and 6, underline the feeling words, then make up your own empathizing response.

Example:

My baby wants to feed so often at night that I feel exhausted.

- a. How many times does he feed altogether?
- b. Does he wake you every night?
- ✓ c. You are really tired with the night feeding.

To answer:

1. James has not been eating well for the past week. I am very worried about him.
 - ✓ a. You are anxious because James is not eating?
 - b. What did James eat yesterday?
 - c. Children often have times when they do not eat well.
2. My breast milk looks so thin - I am afraid it is not good.
 - a. That's the foremilk - it always looks rather watery.
 - ✓ b. You are worried about how your breast milk looks?
 - c. Well, how much does the baby weigh?
3. I feel there is no milk in my breasts, and my baby is a day old already.
 - ✓ a. You are upset because your breast milk has not come in yet?
 - b. Has he started suckling yet?
 - c. It always takes a few days for breast milk to come in.
4. I am anxious as it seems that my daughter is smaller than other children her age.
 - ✓ a. I can see you are worried about the growth of your daughter?
 - b. Would you like me to explain to you about how children grow and what affects their length?
 - c. What have you heard about how frequently to check the growth of children of your daughter's age?

5. Angelique brings Sammy to see you. He is nine months old. Angelique is worried. She says "Sammy is still breastfeeding and I feed him three other meals a day, but I am so upset, he still looks so thin". What would you say to Angelique to empathize with how she feels?

Possible answers include:

You are concerned about how Sammy looks?

You are worried about Sammy?

6. Catherine comes to the clinic. She is pregnant with her first baby and has found out she has HIV. She says: "I am frightened that my mother-in-law might find out". What would you say to Catherine to empathize with how she feels?

Possible answers include:

You are frightened about what your mother-in-law will think?

You are worried about your mother-in-law finding out?

III. Group or individual exercise (Homework)

Exercise 8.d Translating judging words

- Each participant should look at the list of Judging Words on page 53 of his/her Manual, following instructions provided. Refer to the instructions at the time you provide general orientation to the participants.

JUDGING WORDS			
Well	Normal	Enough	Problem
good	correct	adequate	fail
bad	proper	inadequate	failure
badly	right	satisfied	succeed
	wrong	plenty of	success
		sufficient	

- Participants to look at the box USING AND AVOIDING JUDGING WORDS, also on page 53 of their Manuals.
- They should suggest translations of the four common words in the local language. It will be desirable for participants to discuss their suggestions as a group.
- Afterwards, they will write the agreed translations, if working in group, or translation by each, if working alone into the box in their Manuals.
- Then participants should think of a Non-judging question. This should be a similar question, which does not use the judging word. Remind them that judging questions are often closed questions, and that they can often avoid using a judging word if they use an open question.

USING AND AVOIDING JUDGING WORDS			
English	Local language	Judging question	Non-judging question
Well	Does he suckle well?	How is he suckling?
Normal	Are his stools normal?	What are his stools like?
Enough	Is he gaining enough weight?	How is your baby growing?
Problem	Do you have any problems breastfeeding?	How is breastfeeding going for you?

IV. Review results

- Review the answers with each one of the participants assigned to you, make sure the participant understands.
- Make these points about the list on judging words:
 - The words in bold at the top of each group are words that are used most commonly. These are the words that we will work with in the exercises.
 - Below each of the common words is a list of other words with similar meanings.
 - For example, 'adequate' and 'sufficient' appear below 'enough'.
 - Words with opposite meanings are in the same group. For example 'good' and 'bad'.
 - All of these are judging words, and it is important to avoid them.
- Give participants the Answer Sheets for Exercises 8.a-8.c.

Session 9

Practical Session 1

Listening and Learning Measuring Children

Objectives

After completing this session participants will be able to:

- demonstrate appropriate listening and learning skills when talking with a mother while measuring her child
- Weigh children
- Measure length
- Measure height

Session outline

120 minutes

Participants are together as a class led by one trainer to prepare for the session.

Participants work in small groups of 3-4 each with one trainer for the practical session in a ward or clinic.

- | | |
|-----------------------------------|-------------|
| I. Prepare the participants | 20 minutes |
| II. Conduct the clinical practice | 100 minutes |

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Preparation

If you are leading the session:

- Make sure that you know where the practical session will be held, and where each trainer should take her group. If you did not do so in a preparatory week, visit the wards or clinic where you will go, introduce yourself to the staff members in charge, and make sure that they are prepared for the session (see Director's Guide).
- Ensure that the equipment is set up properly and conveniently in the room. There should be stations in different areas of the room, each with a scale and a length/height board. Assign pairs of participants to work at each station (or multiple pairs who will take turns)
- You will also need: paper towels or soft cloth to cover the length/height board; small toys or fruit to entertain the children and offer as presents to take home (according to availability)
- Study the instructions in the following pages, so that you can prepare the participants and conduct the practical session.
- Make sure that there are copies of the Practical Discussion Checklist available for each trainer.
- Find out what can be done if participants find that a child has a serious problem; for example, who to refer the child to.

If you are leading the small group:

- Study the instructions in the following pages, so that you are clear about how to conduct the clinical practice.
- Make sure that the equipment for your small group is set up properly and conveniently.
- Make sure that you have a copy of the Practical Discussion Checklist, to help you to conduct discussions.
- Make sure that the participants in your group each have a child age calculator, one copy of the list of Listening and Learning Skills Checklist and the Measuring weight, length and height worksheet. Have one or two spare copies with you.
- Find out where to take your group.
- Take note of the number of children present and their apparent ages. You will try to ensure that each participant measures at least one child who is less than 2 years old and one child who is between 2 and 5 years of age.
- Assign each pair to weigh and measure a child (When they have finished, you will assign them another child).

I. Prepare the participants (one trainer)**20 minutes**

- One trainer leads a preparatory session with all participants and the other trainers together.
- If you have to travel to another facility for the practical session, hold the preparatory session in the classroom before you leave. If necessary, this can take place on the evening or the morning before.
- Explain the following to the participants:
 - You are going to practise the 'listening and learning' skills that you learnt in Sessions 7 and 8 and measuring the growth of a child as discussed in Session 6.
 - You will need to take with you one copy of Listening and Learning Skills Checklist, the Measuring weight, length and height worksheet, pencil and paper to make notes.
 - You will work in groups of 2-4 with one trainer, for measuring you work in pairs.
 - You should follow the steps listed on the weighing and measuring job aid.
- What to do in the clinic:
 - Take it in turns to talk to a mother and measure her child whilst the other member(s) of the group observe.
 - Practise as many of the listening and learning skills as possible. Try to get the mother to tell you about herself, her situation and her child. You can talk about ordinary life, not only the measuring of her child.
 - The other participant(s) should stand quietly in the background if there is conversation with the mother and help their colleague when measuring.
 - Make general observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the participant ask open questions? Does the mother talk freely, and seem to enjoy it?
 - Make specific observations of the participant's listening and learning skills.
 - Mark a ✓ on your Listening and LEARNING SKILLS CHECKLIST when he/she uses a skill, to help you to remember for the discussion. Notice if he/she uses helpful non-verbal communication.
 - To measure growth, you will start by determining the child's date of birth, then age, etc. You should record results on the MEASURING WEIGHT, LENGTH AND HEIGHT WORKSHEET (page 57 of your manual).
 - If you find that the child has a serious problem, you should (add here the information you found in terms of whom to refer the mother to)
 - If a mother is extremely heavy, you may need to ask a lighter adult to hold the child on a taring scale.
 - Note if the participant makes a mistake, for example, if she uses a judging word, or if she asks a lot of questions to which the mother says 'yes' and 'no'.
 - For the measurement exercise, check your results by comparing with those of others who measured the same children
 - Consult with me or another facilitator if there are discrepancies that you cannot resolve.

- Remember that you are not counselling the mother at this point.
- When you have finished thank the mother.

II. Conduct the clinical practice (all trainers) 100 minutes

These notes are for the trainers. Trainers should read these notes to ensure that they know what to do. There is no need to read these notes to the participants.

- Take your group to the ward or clinic:
 - Introduce yourself and your group to the staff member in charge.
 - Ask which mothers and children it would be appropriate to talk to, and where they are.
 - Try to make sure that each participant works with at least one mother.
 - Take with you spare copies of the Listening and Learning Skills Checklist, Practical Discussion Checklist and the Measuring weight, length and height worksheet.
 - Observe participants closely as they work and correct their technique. There are many details to remember when measuring length and height, and guided practice is required.
 - Help participants learn to measure correctly and quickly by giving them feedback while they work.
 - Ensure that they record weight to the nearest 0.1 kg and length/height to the nearest 0.1 cm.
 - Two participants measuring one child may record different measurements. Retain these for use in the plotting exercise (in Session 15) to illustrate how such differences could lead to very different conclusions about the child's growth status. For the clinic exercise on counselling, measurements have to be taken accurately so as to identify problems correctly before counselling caregivers. Allowable differences between two measurers are 0.1 kg for weight and 0.7 cm for length or height.
 - Make note of the names of some children whose measurements would be interesting to plot on growth charts (for example, children who may be underweight, overweight, or stunted). There will be a group discussion in Session 15 in which you will demonstrate (using an overhead or PowerPoint projector) plotting the measurements of several children on growth charts to determine whether or not they have growth problems.
- In relation to listening and learning skills, guide the participant who is practising:
 - You do not need to correct every mistake that the participants make in relation to counselling skills immediately. If possible wait until the discussion afterwards. Then you can both praise what he/she did correctly and talk about anything he/she did incorrectly.
 - However, if the participant is making a lot of mistakes, or not making any progress, then you should help him/her. Try to help in a way that does not make her embarrassed in front of the mother and the group.

- You need to judge as participants work what will best help them to learn.
- Use your confidence and support skills to correct participants and to help them to develop confidence in their own clinical and counselling skills.
- When each pair of participants has had a chance to weigh and measure at least two children (one less than 2 years and one age 2-5 years), conclude the exercise and thank the mothers and children.
- For the listening and learning skills, discuss the participant's performance at the end of the session.
- Use the PRACTICAL DISCUSSION CHECKLIST to help you to lead the discussion.
- Ask the 'General Questions', and then ask the specific questions about 'LISTENING AND LEARNING'
- Go through the LISTENING AND LEARNING SKILLS CHECKLIST, and discuss how the participant practised them. First ask the participant himself/herself to say how well she thinks he/she did. Then ask the other participants. Encourage them to use their counselling skills in the way they give feedback to one another.
- Arrangements should have been made to give each child a small toy and to provide some token of thanks to each mother (whenever appropriate and feasible).
- At the end of the practical session ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on pages 55-58 of the Participant's Manual.



Practical Session 1

Measuring weight, length, and height worksheet

This will be a practical exercise in a clinic setting, or in the classroom if children and measuring equipment can be brought there. The mothers should be present, if possible, to tell the children's dates of birth and to assist with measuring and reassuring them.

Your facilitator will assign you to work in pairs. Each pair should do the following steps for at least two children, one who is less than 2 years old and one who is 2–5 years old.

Review records or ask the mother to determine the child's name, sex, and date of birth. Record this information in the inset box below on the left.

Use the age calculator to determine the child's age today.

Make a visual assessment of the child (e.g. does the child appear thin, fat, active, lethargic)?

- Observe the child for signs of marasmus or kwashiorkor. If there is any apparent oedema, test for oedema of both feet.
 - Weigh the child.
 - Measure the child's length or height.
 - Record results on the Visit Notes page below.
- } Each person take a turn.

Visit Notes

Date	Age today (Completed years/months or weeks)	Measurements (Record below; then plot on charts)		Reason for visit, observations, recommendations
		Weight (kg)	Length/Height (cm)	
<div style="border: 1px solid black; padding: 5px;"> Child 1: Sex: DOB: </div>				
<div style="border: 1px solid black; padding: 5px;"> Child 2: Sex: DOB: </div>				
<div style="border: 1px solid black; padding: 5px;"> Child 3: Sex: DOB: </div>				
<div style="border: 1px solid black; padding: 5px;"> Child 4: Sex: DOB: </div>				

PRACTICAL DISCUSSION CHECKLIST

Practical skills are best developed by introducing and demonstrating the skills, observing participants as they practise the skills, and giving feedback to participants on how well they performed. Feedback should include praise for things done well, and giving gentle suggestions for how to overcome difficulties. Use the checklist below to help guide your feedback discussions.

Questions to ask after each participant completes her turn practising (either in the clinic or using counselling stories)

To the participant who practised:

- What did you do well?
- What difficulties did you have?
- What would you do differently in the future?

To the participants who observed:

- What did the participant do well?
- What difficulties did you observe?

Listening and learning skills (give feedback on the use of these skills in all practical sessions)⁸

Which listening and learning skills did you use?

Was the mother willing to talk?

Did the mother ask any questions? How did you respond?

Did you empathize with the mother? Give an example.

Confidence and support skills (give feedback on the use of these skills during practical sessions after Session 12)

- Which confidence and support skills were used?
(check especially for praise and for two relevant suggestions)
- Which skills were most difficult to use?
- What was the mother's response to your suggestions?

Key messages for complementary feeding (give feedback on the use of these skills in practical Session 35)⁹

- Which messages for complementary feeding did you use?
(check especially for "only a few relevant messages")
- What was the mother's response to your suggestions?

General questions to ask at the end of each practical session (in the clinic or using counselling stories)

- What special difficulties or situations helped you to learn?
- What was the most interesting thing that you learned from this practical session?

⁸ See list of skills on the following page

⁹ See list of key messages on page 279 of Participant's Manual and 526 of Trainer's Guide

COUNSELLING SKILLS

Listening and learning skills:

- Use helpful non-verbal communication.
- Ask open questions.
- Use responses and gestures that show interest.
- Reflect back what the mother/caregiver says.
- Empathize - show that you understand how she/he feels.
- Avoid words that sound judging.

Session 10

Measuring: it's not so easy

Objectives

After completing this session participants will be able to:

- Identify common errors in measuring weight, length and height

Session outline

30 minutes

Participants are together as a class led by one trainer to prepare for the session.

- | | | |
|-----|--|------------|
| I. | Present slides and comment on the errors or good points observed | 27 minutes |
| II. | Conclude the session with a summary of key messages on measuring | 3 minutes |

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Slide show - assessing measuring techniques

Immediately after the exercise of measuring real children, show the PowerPoint presentation titled "Measuring—It's not so easy" (provided on a disk with the Facilitator's resource files) and discuss each slide. When you show each slide, ask the participants what they can observe about the position of the measurer or assistant or the position of the child. Slides show some good points of technique and some mistakes. Comments are provided below about each slide. There may be other valid comments too.

Slide 1: Measuring: It's not so easy

Measuring height

Slide 2: Child held in position at knees and tummy. Measurer is in good position.

Slide 3: Measurer on right leaning over to read tape. Assistant should be over to left, so that measurer can take position in front of the child.

Slide 4: Measurer is well down on the level of the child. She should hold the head board at its top centre. She should hold the child's head, not the assistant. The assistant should be over to left of board, so that measurer can be in front of the tape to read it.

Slide 5: Measurer should be holding child's head, not the assistant. Measurer should hold the board at its top centre. Assistant should check feet and hold knees. Child seems to be leaning toward assistant with weight not balanced equally on both feet.

Slide 6: Good position of child's head. Measurer is holding headboard correctly.

Measuring length

Slide 7: Diaper interferes with straightening of legs. Assistant is holding one shoulder, instead of holding both sides of head, so baby's torso is twisted.

Slide 8: Feet flat on board. Child is wearing a lot of clothes.

Slide 9: Feet not flat.

Slide 10: Measurement taken with one leg only. Head held in good position. Important to be certain torso is straight.

Slide 11: Head held in good position, knees controlled well. Difficult child measured well.

Slide 12: Going into position—most children get upset at this point when mother is laying them down, so measurer should be closer and ready to move quickly. Board should be closer to the edge of the table.

Slide 13: Knees held in good position by measurer. Child's torso is straight. Assistant is holding head in good position by holding hands over ears with thumbs on shoulders. Feet do not look flat yet; measurer should be working the footboard.

Slide 14: Good position of knees and feet. Measurer bends close to check feet and read tape accurately. Assistant in good position.

Slide 15: Poor head position. Dangerous to have toy in mouth.

Slide 16: Torso not straight. Person other than the measurer is holding the knees. (Too many helpers often do more harm than good.) Measurer could see child's body position better if child was undressed.

Slide 17: Cannot see this child's feet!

Slide 18: Child in good position, as we can see without clothes. Knees held well, legs and

torso are straight. (Too many helpers around head.)

Slide 19: Cooperative child!

Slide 20: Measurer took feet out of clothes so could see them. Measurer is holding knees and footboard correctly. Assistant holding head correctly. Would be better if child were undressed.

Slide 21: Child's body is very crooked. Head not in position. Assistant should be standing behind headboard.

Slide 22: Child in good position. Torso straight. Measurer and assistant are in good position.

Slide 23: Assistant should stand at head of child—no one is holding or checking head. Measurer should hold footboard by its centre support.

Slide 24: Clothes make it difficult to see the knees. Feet are not yet flat against footboard with toes pointing up. Mother should be on opposite side so that the measurer has more space. Assistant seems to have good control of the head.

Measuring weight

Slide 25: Scale gives error message when robe swings, covering and uncovering solar panel.

Slide 26: Notice person on left is holding back robe to keep it out of the way.

Slide 27: Too many clothes! Jeans, diaper, shirts can weigh a kg and more!

Slide 28: Child undressed so that this weight measurement will be accurate.

Slide 29: Child standing nicely on centre of scale. Clothes were not removed.

Concluding session on measuring

- When you have finished the slide show, take a moment to conclude the module. Ask participants if they have any questions about the module or how to weigh and measure children. Reinforce the following important points from the module:
 - Four pieces of information are essential for growth assessment: age, sex, weight and length or height. If any of these is incorrect, the growth assessment will be incomplete or inaccurate.
 - For correct age assessment, use any available written records or make a local events calendar to help determine children's ages as precisely as possible. The local events calendar has to be updated regularly.
 - Equipment needs to be in good working order and to be calibrated regularly.
 - Measuring children requires specific skills, speed and confidence. With practice everyone can improve their measuring skills.
- Ask participants if they have any questions on the Exercise C on Nalah and Toman (see answers at the end of your Guide for Session 6).
 - You will continue using the information you have recorded on Nalah and Toman to plot their growth. If your answers in Exercises B and C are incorrect, it won't be possible to plot their growth correctly.

Notes

Session 11

Positioning a Baby at the Breast

Practical Session: Positioning a Baby Using Dolls

Objectives

After completing this session participants will be able to:

- explain the 4 key points of positioning
- describe how a mother should support her breast for feeding
- demonstrate the main positions – sitting, lying, underarm and across
- help a mother to position her baby at the breast, using the 4 key points in different positions.

Session outline

75 minutes

Participants are all together for a demonstration led by one trainer. Another trainer helps with the demonstrations. For the practical session on positioning using dolls, participants are in groups of 3-4 with one trainer per group.

- | | | |
|------|--|------------|
| I. | Introduce the session | 5 minutes |
| II. | Demonstrate helping a mother to position her baby | 35 minutes |
| III. | Classroom Practical: positioning a baby using dolls (small groups) | 30 minutes |
| IV. | Summarize the session | 5 minutes |

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

Preparation

The demonstrations in this session need a lot of practice if they are to be effective. One trainer leads the session. Another trainer helps with the demonstration of helping a mother who is sitting and lying.

The day before the demonstration:

- Ask a trainer to help you with the demonstration.
- Explain that you want her to play a mother who needs help to position her baby. Ask her to decide on a name for herself and her 'baby'. She can use her real name if she likes.
- Explain what you want to happen as follows:
 1. You will demonstrate how to help a mother who is sitting.
 - She will sit holding the doll in the common way, with the doll across the front.
 - You will greet her and ask how breastfeeding is going, and she will say that it is painful and that she has sore nipples.
 - You will ask her to 'breastfeed' the doll, while you observe.
 - She will hold it in a poor position: loosely, supporting only its head, with its body away from hers, so that she has to lean forward to get her breast to its mouth. She will pretend that breastfeeding is painful. You will then help her to sit more comfortably and to improve the doll's position.
 - When the position is better, she should say "Oh! That feels better", and look happier. She can rub the other breast, to show that now she is feeling the ejection reflex.
 2. You will demonstrate how to help a mother who is lying down.
 - She will lie down, propped on her arm, with the doll far from her body, loosely held on the bed.
 - Practise giving the demonstration with the participant, so that you know how to follow the steps.
 - Decide the 'comfortable' position that you will help her to lie in.
 - Ask her to wear clothes such as a long skirt or trousers so that she feels comfortable lying down for this demonstration.
 - Find a cloth to cover the table, and a cloth to cover the 'mother's' legs. Find some pillows if these are appropriate in this community.

Early on the day of the demonstration:

- Arrange chairs, a footstool, and a bed, or a table that can be used for a bed to demonstrate breastfeeding lying down.
- You will need a doll and a model breast for the demonstration of common mistakes in positioning.
- Make sure that Slide 11/1 is ready. Alternatively, as there is only one slide in this session, you might prefer to read aloud the objectives on slide 8/1 without projecting them onto the screen.

I. Introduce the session**5 minutes**

- Show **Slide 11/1 - Session 11 Objectives** and read out the objectives:

11/1

Positioning a baby at the breast

After completing this session participants will be able to:

- explain the 4 key points of positioning
- describe how a mother should support her breast for feeding
- demonstrate the main positions – sitting, lying, underarm and across
- help a mother to position her baby at the breast, using the 4 key points in different positions

- Ask participants to turn to page 22 of their Manuals, and find the Breastfeed Observation Job Aid.
- Make these points:
- We are going to learn how to position a baby at the breast.
 - We will be using the 4 key points from the section on 'positioning' on the BREASTFEED OBSERVATION JOB AID.
 - There are several steps to follow when helping a mother to position her baby at the breast.
- Now ask participants to turn to page 62 of their Manuals and find the box HOW TO HELP A MOTHER TO POSITION HER BABY. Ask participants to take it in turns to read out the points.

HOW TO HELP A MOTHER TO POSITION HER BABY

- Greet the mother and ask how breastfeeding is going.
- Assess a breastfeed.
- Explain what might help, and ask if she would like you to show her.
- Make sure that she is comfortable and relaxed.
- Sit down yourself in a comfortable, convenient position.
- Explain how to hold her baby, and show her if necessary.

The four key points are:

 - Baby's head and body in line
 - Baby held close to mother's body
 - Baby's whole body supported
 - Baby approaches breast, nose to nipple.
- Show her how to support her breast:
 - With her fingers against her chest wall below her breast
 - With her first finger supporting the breast
 - With her thumb above
 - Her fingers should not be too near the nipple.
- Explain or show her how to help the baby to attach:
 - Touch her baby's lips with her nipple
 - Wait until her baby's mouth is opening wide
 - Move her baby quickly onto her breast, aiming his lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment. If the attachment is not good, try again.

- Now we will look at these points in more detail.
- Always assess a mother breastfeeding before you help her, using the points from the BREASTFEED OBSERVATION JOB AID.
- In Session 4 we talked about the importance of observing a mother interacting with her baby and breastfeeding. Take time to see what she does, so that you can understand her situation clearly. Do not rush to make her do something different.
- Give a mother help only if she has difficulty. Some mothers and babies breastfeed satisfactorily in positions that would make difficulties for others.
- This is especially true with babies more than about two months old. There is no point trying to change a baby's position if he is getting breast milk effectively, and his mother is comfortable.
- Let the mother do as much as possible herself. Be careful not to 'take over' from her. Explain what you want her to do. If possible, demonstrate on your own body to show her what you mean.

- Make sure that she understands what you do so that she can do it herself. Your aim is to help her to position her own baby. It does not help if you can get a baby to suckle, if his mother cannot.

II. Demonstrate helping a mother to position her baby 35 minutes

DEMONSTRATION 11.A DEMONSTRATE HOW TO HELP A MOTHER WHO IS SITTING

- Demonstrate how to help a mother to position her baby, going through the points in the box How to Help a Mother to Position her Baby on page 150 of the Trainer's Guide. Ask one of the other trainers to be a mother. You will demonstrate each of the points in the box in turn. When you have demonstrated a point, make sure that it is clear to the participants before you move to the next point.
- Greet the mother and ask how breastfeeding is going**
When you have greeted the 'mother' and asked how breastfeeding is going, the 'mother' should respond by saying that breastfeeding is painful.
- Assess a breastfeed**
Ask if you may see how (child's name) breastfeeds, and ask the 'mother' to put him to her breast in the usual way. She holds him loosely, away from her body, with his neck twisted, as you practised. Observe her breastfeeding for a few minutes.
- Explain what might help and ask if she would like you to show her**
Say something encouraging like: "He really wants your breast milk, doesn't he?"
Then say: "Breastfeeding might be less painful if (child's name) took a larger mouthful of breast when he suckles. Would you like me to show you how?" If she agrees, you can start to help her.
- Make sure that she is comfortable and relaxed**
Make sure the 'mother' is sitting in a comfortable and relaxed position – as you decided when you practised this demonstration beforehand.
Sit down yourself, so that you are also comfortable and relaxed, and in a convenient position to help. You cannot help a mother satisfactorily if you are in an awkward or uncomfortable position yourself or if you are bending over her.
Demonstrate the following points to the participants using a doll, a high chair, a low chair and a stool. Make sure the following points are clear:
 - A low seat is usually best, if possible one that supports the 'mother's' back.
 - If the seat is rather high, find a stool for her to put her feet onto. However, be careful not to make her knees so high that her baby is too high for her breast.
 - If she is sitting on the floor, make sure that her back is supported.
 - If she supports her baby on her knee, help her to hold the baby high enough so that she does not lean forward to put him onto her breast.

□ Explain how to hold her baby, and show her if necessary

Demonstrate how to help the mother to position her baby, making sure that the 4 key points of positioning are clear to the mother and to the participants.

When you have finished helping the 'mother' to position her baby, make these points to the participants, using a doll to demonstrate:

These four key points are the same as the points that you learnt to observe in the BREASTFEED OBSERVATION JOB AID.

- For point 1– Baby's head and body in line: A baby cannot suckle or swallow easily if his head is twisted or bent.
- For point 2 – Baby held close to mother's body: A baby cannot attach well to the breast if he is far away from it. The baby's whole body should almost face his mother's body. He should be turned away just enough to be able to look at her face. This is the best position for him to take the breast, because most nipples point down slightly. If he faces his mother completely, he may fall off the breast.
- For point 3 – Baby supported: Baby's whole body supported with the mother's arm along the baby's back. This is particularly important for newborns and young babies. For older babies, support of the upper part of the body is usually enough. A mother needs to be careful about using the hand of the same arm, which supports her baby's back, to hold his bottom. Holding his bottom may result in her pulling him too far out to the side, so that his head is in the crook (bend) of her arm. He then has to bend his head forward to reach the nipple, which makes it difficult for him to suckle.
- For point 4 – Baby approaches breast, nose to nipple: We will talk about this a little later when we discuss how to help a baby to attach to the breast.
- Try not to touch the mother or baby if possible. But if you need to touch them to show the mother what to do put your hand over her hand or arm, so that you hold the baby through her.

□ Show her how to support her breast

Demonstrate how to help the mother to support her breast.

When you have finished helping the 'mother' to support her breast, make these points to the participants, demonstrating on your own body or on a model breast:

- It is important to show a mother how to support her breast with her hand to offer it to her baby.
- If she has small and high breasts, she may not need to support them.
- She should place her fingers flat on her chest wall under her breast, so that her first finger forms a support at the base of the breast.
- She can use her thumb to press the top of her breast slightly. This can improve the shape of the breast so that it is easier for her baby to attach well.
- She should not hold her breast too near to the nipple.
- Holding the breast too near the nipple makes it difficult for a baby to attach and suckle effectively. The 'scissor' hold can block milk flow.

- ❑ Demonstrate to participants these ways of holding a breast, and explain that they make it difficult for a baby to attach:
 - holding the breast with the fingers and thumb close to the areola
 - pinching up the nipple or areola between your thumb and fingers, and trying to push the nipple into a baby's mouth
 - holding the breast in the 'scissor' hold – index finger above and middle finger below the nipple

❑ **Explain or show her how to help the baby to attach**

Demonstrate how to help the 'mother' to attach her baby.

When you have finished helping the 'mother' to attach her baby, make these points to the participants, using a doll and your own body or a model breast:

- Explain that she first holds the baby with his nose opposite her nipple, so that he approaches the breast from underneath the nipple.
- Explain how she should touch her baby's lips with her nipple, so that he opens his mouth, puts out his tongue, and reaches up.
- Explain that she should wait until her baby's mouth is opening wide, before she moves him onto her breast. His mouth needs to be wide open to take a large mouthful of breast.
- It is important to use the baby's reflexes, so that he opens his mouth wide to take the breast himself. You cannot force a baby to suckle, and she should not try to open his mouth by pulling his chin down.
- Explain or show her how to quickly move her baby to her breast, when he is opening his mouth wide.
- She should bring her baby to her breast. She should not move herself or her breast to her baby.
- As she brings the baby to her breast, she should aim her baby's lower lip below her nipple, with his nose opposite the nipple, so that the nipple aims towards the baby's palate, his tongue goes under the areola, and his chin will touch her breast.
- Hold the baby at the back of his shoulders – not the back of his head. Be careful not to push the baby's head forward.

❑ **Notice how she responds and ask her how her baby's sucking feels**

Ask the 'mother' how she feels. She should say something like "Oh, much better thank you." Then explain to the participants:

- Notice how the mother responds.
- Ask the mother how suckling feels.
- If suckling is comfortable for the mother, and she looks happy, her baby is probably well attached.

❑ **Look for signs of good attachment. If the attachment is not good, try again.**

Make these points to the participants:

- Look for all the signs of good attachment (which you cannot see with a doll). If the attachment is not good, try again.

- It often takes several tries to get a baby well attached. You may need to work with the mother again at a later time, or the next day, until breastfeeding is going well.
- Make sure that the mother understands about her baby taking enough breast into his mouth.
- If she is having difficulty in one position, try to help her to find a different position that is more comfortable for her.

DEMONSTRATION 11.B OTHER WAYS FOR A MOTHER WHO IS SITTING TO POSITION HER BABY

- Ask participants to turn to page 66 of their Manuals to look at other ways that mothers can position their babies.
- Demonstrate these positions using a doll.

Fig. 11.2 A mother holding her baby in the underarm position

Useful for:

- twins
- blocked duct
- difficulty attaching the baby



Fig. 11.3 A mother holding her baby with the arm opposite the breast

Useful for:

- very small babies
- sick babies



DEMONSTRATION 11.C DEMONSTRATE HOW TO HELP A MOTHER WHO IS LYING DOWN

- Ask the other trainer who is helping to lie in the way that you practised. The 'mother' should lie down propped on one elbow, with the doll far from her body, loosely held on the bed.
- Demonstrate helping the 'mother' to lie down in a comfortable, relaxed position. Explain that the same steps are followed in the box How to Help a Mother to Position her Baby.
- During or after the demonstration make these points clear to participants:
 - To be relaxed, the mother needs to lie down on her side in a position in which she can sleep. Being propped on one elbow is not relaxing for most mothers.
 - If she has pillows, a pillow under her head and another under her chest may help.
 - Exactly the same four key points on positioning are important for a mother who is lying down.
 - She can support her baby with her lower arm. She can support her breast if necessary with her upper arm.
 - If she does not support her breast, she can hold her baby with her upper arm.
 - A common reason for difficulty attaching when lying down, is that the baby is too 'high' near the mother's shoulders, and his head has to bend forward to reach the breast.
 - Breastfeeding lying down is useful:
 - when a mother wants to sleep, so that she can breastfeed without getting up
 - soon after a Caesarean section, when lying on her back or side may help her to breastfeed her baby more comfortably.

Fig. 11.4 A mother breastfeeding her baby lying down



Session 12

Building Confidence and Giving Support

Objectives

After completing this session, participants will be able to:

- list the 6 confidence and support skills
- give an example of each skill
- demonstrate the appropriate use of the skills when counselling on infant and young child feeding.

Session outline

**45
minutes**

Participants are all together for a demonstration led by one trainer.

- | | | |
|------|---|------------|
| I. | Introduce the session | 5 minutes |
| II. | Demonstrate six skills for building confidence and giving support | 35 minutes |
| III. | Summarize the session | 5 minutes |

Preparation

- Refer to the Introduction for guidance on how to give a demonstration, and on giving a presentation with slides.
- You need one board or flipchart.
- Make sure that Slides 12/1-12/9 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Make copies of all the DEMONSTRATIONS 12.A-12.D. Study the instructions for DEMONSTRATIONS 12.A-12.D, so that you are clear about the ideas they illustrate, and you know what to do.
- Ask different participants to help you to give the DEMONSTRATIONS 12.A-12.D. Explain what you want them to do.
- Give each of the participants a copy of the demonstration that she has to read.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**5 minutes**

- Show **Slide 12/1 - Session 12 Objectives** and read out the objectives:

12/1

Building confidence and giving support

After completing this session participants will be able to:

- list the 6 confidence and support skills
- give an example of each skill
- demonstrate the appropriate use of the skills when counselling on infant and young child feeding

- Make these introductory points:
- In this session you will learn about the next counselling skills: 'Building confidence and giving support'.
 - A mother easily loses confidence in herself. This may lead to her feeling that she is a failure and giving in to pressure from family and friends.
 - You may need these skills to help her to feel confident and good about herself.
 - It is important not to make a mother feel that she has done something wrong.
 - A mother easily believes that there is something wrong with herself, how she is feeding her child, or with her breast milk if she is breastfeeding. This reduces her confidence.
 - It is important to avoid telling a mother what to do.
 - Help each mother to decide for herself what is best for her and her baby. This increases her confidence.

II. Demonstrate the six skills for building confidence and giving support 35 minutes

- Tell participants that you will now explain and demonstrate six skills for building a mother's confidence and giving her support.
- Explain that these skills are also important when counselling caregivers and other family members.
- Write 'CONFIDENCE AND SUPPORT SKILLS' on a board or flipchart. List the skills on the board as you demonstrate them.

Skill 1. Accept what a mother thinks and feels

- Write 'ACCEPT WHAT A MOTHER THINKS AND FEELS' on the list of confidence and support skills.
- Explain the skill:
 - Sometimes a mother thinks something that you do not agree with – that is, she has a mistaken idea.
 - Sometimes a mother feels very upset about something that you know is not a serious problem.
Ask: How will she feel if you disagree with her, or criticize, or tell her that it is nothing to be upset or to worry about?
Wait for a few replies and then continue.
 - You may make her feel that she is wrong. This reduces her confidence. She may not want to say any more to you.
 - So it is important not to disagree with a mother.
 - It is also important not to agree with a mistaken idea. You may want to suggest something quite different. That can be difficult if you have already agreed with her.
 - Instead, you just accept what she thinks or feels. Accepting means responding in a neutral way, and not agreeing or disagreeing.

- Give an example of accepting what a mother THINKS. Ask the two participants whom you have prepared to give DEMONSTRATION 12.A to read out the words of the mother and health worker. After each response from the health worker ask the participants whether the response was agreeing, disagreeing or accepting.
- Introduce the role-play by making the following points:
 - We will now see a role-play showing acceptance of what a mother thinks. This mother has a one-week-old baby.

DEMONSTRATION 12.A ACCEPTING WHAT A MOTHER THINKS	
Mother:	“My milk is thin and weak, and so I have to give bottle feeds.”
Health worker:	“Oh no! Milk is never thin and weak. It just looks that way.” (nods, smiles.)
Ask:	Did the health worker agree, disagree or accept?
Comment:	This is an inappropriate response, because it is disagreeing.
Mother:	“My milk is thin and weak, so I have to give bottle feeds.”
Health worker:	“Yes – thin milk can be a problem.”
Ask:	Did the health worker agree, disagree or accept?
Comment:	This is an inappropriate response because it is agreeing.
Mother:	“My milk is thin and weak, so I have to give bottle feeds.”
Health worker:	“I see. You are worried about your milk.”
Ask:	Did the health worker agree, disagree or accept?
Comment:	This is an appropriate response because it shows acceptance.

- Make these additional points:
 - Reflecting back and simple responses are useful ways to show acceptance. Later in the discussion, you can give information to correct a mistaken idea.
 - In a similar way, empathizing can show acceptance of a mother’s feelings.
 - If a mother is worried or upset, and you say something like, “Oh, don’t be upset, it is nothing to worry about,” she may feel that she was wrong to be upset.
 - This reduces a mother’s confidence in her ability to make her own decisions.

- Ask the two participants whom you have prepared to give DEMONSTRATION 12.B to read out the words of the mother and health worker.
- Introduce the role-play by making the following points:
 - The last role-play showed acceptance of what a mother thinks. We will now see a role-play showing acceptance of what a mother feels. This mother has a nine-month-old baby.

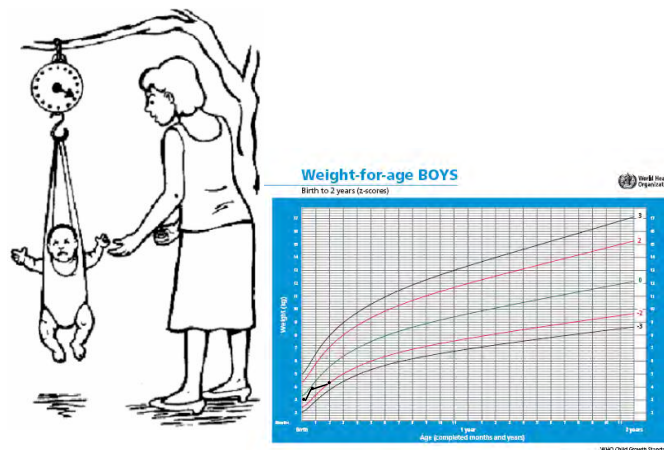
DEMONSTRATION 12.B ACCEPTING WHAT A MOTHER FEELS	
Mother (in tears):	“It is terrible, (child’s name) has a cold and his nose is completely blocked and he can’t breastfeed. He just cries and I don’t know what to do.”
Health worker:	“Don’t worry; your baby is doing very well.”
Ask:	Was this an appropriate response?
Comment:	This is an inappropriate response, because it did not accept the mother’s feelings and made her feel wrong to be upset.
Mother (in tears):	“It is terrible, (child’s name) has a cold and his nose is completely blocked and he can’t breastfeed. He just cries and I don’t know what to do.”
Health worker:	“Don’t cry – it’s not serious. (Child’s name) will soon be better”
Ask:	Was this an appropriate response?
Comment:	This is an inappropriate response. By saying things like “don’t worry” or “don’t cry” you make a mother feel it is wrong to be upset and this reduces her confidence.
Mother (in tears):	“It is terrible, (child’s name) has a cold and his nose is completely blocked and he can’t breastfeed. He just cries and I don’t know what to do.”
Health worker:	“You are upset about (child’s name) aren’t you?”
Ask:	Was this an appropriate response?
Comment:	This is an appropriate response because it accepts how the mother feels and makes her feel that it is alright to be upset. Notice how, in this example, empathizing was used to show acceptance. So this is another example of using a listening and learning skill to show acceptance.

Skill 2. Recognize and praise what a mother and baby are doing right

- Write 'RECOGNIZE AND PRAISE WHAT A MOTHER AND BABY ARE DOING RIGHT' on the list of confidence and support skills.
- Explain the skill:
 - As health workers, we are trained to look for problems. Often, this means that we see only what we think people are doing wrong, and try to correct them.
Ask: How does it make a mother feel if you tell her that she is doing something wrong, or that her baby is not doing well?
Wait for a few replies and then continue.
 - It may make her feel bad, and this can reduce her confidence.
 - As counsellors, we must look for what mothers and babies are doing right.
 - We must first recognize what they do right; and then we should praise or show approval of the good practices.
 - Praising good practices has these benefits:
 - it builds a mother's confidence
 - it encourages her to continue those good practices
 - it makes it easier for her to accept suggestions later.
 - In some situations it can be difficult to recognize what a mother is doing right. But any mother whose child is living must be doing some things right, whatever her socio-economic status or education.

- Show **Slide 12/2** and explain the situation that it illustrates:

12/2



- Explain Slide 12/2:
 - Here is a baby being weighed, and his mother. The baby is exclusively breastfed. Beside the mother and baby is the baby's growth chart. His growth chart shows that he has gained a little weight over the last month. However, his growth line is not following the reference curves. It is rising too slowly. This shows that the baby's growth is slow.

Show **Slide 12/3:**

- Read out the remarks, and ask participants to say which one helps to build the mother's confidence.

12/3

Which of these remarks will help to build the mother's confidence?

- "Your baby's growth line is going up too slowly."
- "I don't think your baby is gaining enough weight."
- "Your baby gained some weight last month just on your breast milk."

- The correct response is the last one: "Your baby gained some weight last month just on your breast milk".

Skill 3. Give practical help

- Write 'Give Practical Help' on the list of confidence and support skills.
- Explain the skill:
 - Sometimes practical help is better than saying anything. For example:
 - when a mother feels tired or dirty or uncomfortable
 - when she is hungry or thirsty
 - when she has had a lot of information already
 - when she has a clear practical problem.

Ask: *What kind of practical help might you offer?*

Wait for a few replies and then continue.
 - Some ways to give practical help are these:
 - Help to make her clean and comfortable.
 - Give her a drink, or something to eat.
 - Hold the baby yourself, while she gets comfortable, or washes, or goes to the toilet.
 - It also includes practical help with feeding – such as helping a mother with positioning and attachment, expressing breast milk, relieving engorgement or preparing complementary feeds.

Show **Slide 12/4** and explain the situation that it illustrates:



Explain Slide 12/4:

- This mother is lying in bed soon after delivery. She looks miserable and depressed. She is saying to the health worker: “No, I haven’t breastfed him yet. My breasts are empty and it is too painful to sit up.”

Then show **Slide 12/5**:

Read out the remarks, and ask participants to say which response is the more appropriate.

12/5

Which response is more appropriate?

- “You should let your baby suckle now to help your breast milk to come in.”
- “Let me try to make you more comfortable, and then I’ll bring you a drink.”

- Give this explanation:
 - The appropriate response is the second one, in which the health worker offers to give practical help. She will make the mother comfortable before she helps her to breastfeed.
 - Of course it is important for the baby to breastfeed soon. But it is more likely to be successful if the mother feels comfortable.

Skill 4. Give a little, relevant information

- Write 'GIVE A LITTLE RELEVANT INFORMATION' on the list of confidence and support skills.
- Explain the skill:
 - Mothers often need information about feeding. It is important to share your knowledge with them. It may also be important to correct mistaken ideas.
 - However, sometimes health workers know so much information that they think they need to tell it all to the mother.
 - It is a skill to be able to listen to the mother and choose just two or three pieces of the most relevant information to give at this time.
 - Try to give information that is relevant to her situation **now**. Tell her things that she can use today, not in a few weeks' time.
 - Explaining the reason for a difficulty is often the most relevant information when it helps a mother to understand what is happening.
 - Try to give only one or two pieces of information at a time, especially if a mother is tired, and has already received a lot of information.
 - Give information in a positive way, so that it does not sound critical, or make the mother think that she has been doing something wrong. This is especially important if you want to correct a mistaken idea.
 - For example, instead of saying "Thin porridge is not good for your baby", you could say: "Thick foods help the baby to grow".
 - Before you give information to a mother build her confidence. Accept what she says, and praise what she does well. You do not need to give new information or to correct a mistaken idea immediately.

Show **Slide 12/6** and explain the situation that it illustrates:



Explain Slide 12/6:

- This baby is three months old. His mother has recently started giving some formula feeds in a bottle in addition to breastfeeding. The baby has developed diarrhoea. The mother is saying to the health worker: “He has started to have loose stools. Should I stop breastfeeding?”

Then show **Slide 12/7**:

Read out the responses, and ask participants to say which one gives information in a positive way.

12/7

Which response gives positive information?

- “It is good that you asked before deciding. Diarrhoea usually stops sooner if you continue to breastfeed.”
- “Oh no, don’t stop breastfeeding. He may get worse if you do that.”

Give this explanation:

- Response 2 is critical, and may make her feel wrong and lose confidence. Response 1 is positive, and should not make her feel wrong or lose confidence.

Skill 5. Use simple language

- Write 'USE SIMPLE LANGUAGE' on the list of confidence and support skills.
- Explain the skill:
 - Health workers learn about diseases and treatments using technical or scientific terms. When these terms become familiar, it is easy to forget that people who are not health workers may not understand them.
 - It is important to use simple, familiar terms, to explain things to mothers.
 - We will now see a demonstration. The health worker is talking to a mother of a six-month-old child.
- Ask the two participants whom you have prepared to give DEMONSTRATION 12.C to read the words of the mother and health worker. Discuss briefly what the participants have observed after each section.

DEMONSTRATION 12.C USING SIMPLE LANGUAGE

Health worker: "Good morning (name). What can I do for you today?"

Mother: "Can you tell me what foods to give my baby, now that she is six months old."

Health worker: "I'm glad that you asked. Well now, the situation is this. Most children need more nutrients than breast milk alone when they are six months old because breast milk has less than 1 milligram of absorbable iron and breast milk has about 450 calories, so less than the 700 calories that are needed. The vitamin A needs are higher than what is provided by breast milk and also the zinc and other micronutrients."

"However, if you add foods that aren't prepared in a clean way it can increase the risk of diarrhoea and if you give too many poor quality foods the child won't get enough calories to grow well."

Ask: What did you observe?

Comment: **The health worker is providing too much information. It is not relevant to the mother at this time. She is using words that are unlikely to be familiar.**

- Now we will see another mother receiving information in a different way. Again, listen for the skills listed.
- Ask the two participants whom you have prepared to give DEMONSTRATION 12.D to read the words of the mother and health worker.

DEMONSTRATION 12.D USING SIMPLE LANGUAGE

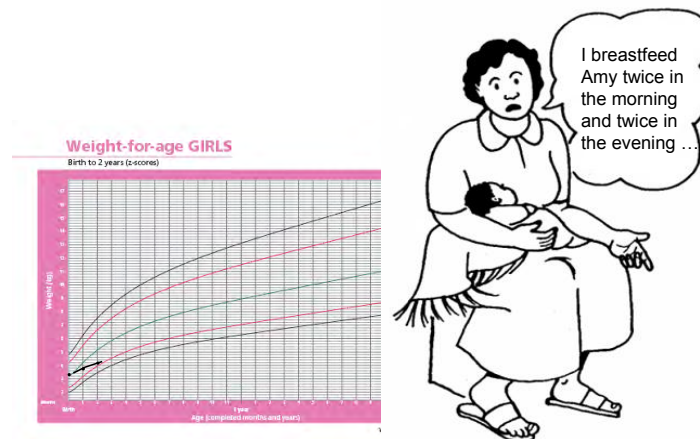
Health worker:	“Good morning (name). How can I help you?”
Mother:	“Can you tell me what foods to give my baby, now that she is six months old.”
Health worker:	“You are wondering about what is best for your baby. I’m glad you have come to talk about it. It is usually a good idea to start with a little porridge to get him used to the taste of different foods. Just two spoons twice a day to start with.”
Ask:	What did you observe this time?
Comment:	The health worker explains about starting complementary foods in a simple way.

Skill 6. Make one or two suggestions, not commands

- Write ‘MAKE ONE OR TWO SUGGESTIONS NOT COMMANDS’ on the list of confidence and support skills.
- Explain the skill:
- You may decide that it would help a mother if she does something differently – for example, if she feeds the baby more often, or holds him in a different way.
 - However, you must be careful not to tell or command her to do something. This does not help her to feel confident.
 - When you counsel a mother, you suggest what she could do. Then she can decide if she will try it or not. This leaves her feeling in control, and helps her to feel confident.

Show **Slide 12/8** and explain the situation that it illustrates:

12/8



- Make one or two suggestions
- Explain Slide 12/8:
 - Amy breastfeeds only four times a day, and she is gaining weight too slowly. Her mother thinks that she does not have enough breast milk.

Then show **Overhead 12/9**:

- Read out the responses, and ask participants to say which is a command and which a suggestion.

12/9

Which of these responses is a command, and which is a suggestion?

- “You must feed Amy at least 10 times a day.”
- “It might help if you feed Amy more often.”

- Give this explanation:

- Response 1 is a command. It tells Amy’s mother what she must do. She will feel bad and lose confidence if she cannot do it.
- The second response is a suggestion. It allows Amy’s mother to decide if she will feed Amy more often or not.
- Another way to make a suggestion is to ask a question, for example:
“Have you thought of feeding her more often? Sometimes that helps.”

III. Summarize the session 5 minutes

- Ask participants if they have any questions, and try to answer them.
 - You now have a list of six skills on the flipchart. Post it on the wall. Read the list through, to remind participants of the six skills.
- Ask participants to find the list of skills for BUILDING CONFIDENCE AND GIVING SUPPORT on page 69 of their Manual. Ask them to try to memorize it. Explain that they will use these skills for Practical Session 2.

CONFIDENCE AND SUPPORT SKILLS
<ul style="list-style-type: none"> ▪ Accept what a mother thinks and feels ▪ Recognize and praise what a mother and baby are doing right ▪ Give practical help ▪ Give a little, relevant information ▪ Use simple language ▪ Make one or two suggestions, not commands.

Notes

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Session 13 - Homework

Building Confidence and Giving Support Exercises – Part 1

Objectives

After completing this session participants will be able to:

- demonstrate appropriate use of the 6 confidence and support skills
- provide examples of each skill in relation to breastfeeding

Session outline

Participants work in groups or alone

- | | | |
|------|--|-----------|
| I. | Introduce the session | 2 minutes |
| II. | Participants finalize exercises (homework) | |
| III. | Review results | |

Preparation

- Make sure that Answer Sheets are available to give to participants after they have completed all exercises and you have provided feedback.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

- Make these introductory points:
- Ask participants to turn to page 71 of their Manual
- Explain what they will do:
 - You will now practise the 6 confidence and support skills that you learnt about in Session 12.
 - The examples in this session are mostly infants who are breastfeeding. Later in the course you will do more exercises using examples of children who are receiving complementary feeds.
 - All the exercises are individual written exercises.
 - For each exercise, read the instructions How to do the exercise and the Example of what to do.
 - Then write your answers to the questions in the section which says To answer.
 - If possible use pencil, so that it is easier to correct the answers.
 - Trainers will give feedback individually, and will give you Answer Sheets after you have completed your exercises.

II. Written exercises (Homework)

Exercise 13.a Accepting what a mother THINKS

- How to do the exercise:

Examples 1-2 are mistaken ideas which mothers might hold.

Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.

Beside each response write whether the response agrees, disagrees or accepts.

Example:

Mother of a six-month-old baby:

“My baby has diarrhoea so it is not good to breastfeed now”.

“You do not like to give him breast milk just now?”

Accepts

“It is quite safe to breastfeed a baby when he has diarrhoea.”

Disagrees

“It is often better to stop breastfeeding a baby when he has diarrhoea.”

Agrees

To answer:

1. Mother of a one-month-old baby:
 "I give him drinks of water, because the weather is so hot now."
- "Oh, that is not necessary! Breast milk contains plenty of water." *Disagrees*
- "Yes, babies may need extra drinks of water in this weather." *Agrees*
- "You feel that he needs drinks of water sometimes?" *Accepts*
2. Mother of a nine-month-old baby:
 "I have not been able to breastfeed for two days, so my milk is sour."
- "Breast milk is not very nice after a few days." *Agrees*
- "You are worried that your breast milk may be sour?" *Accepts*
- "But milk never goes sour in the breast!" *Disagrees*

- How to do the exercise:

Examples 3-5 are some more mistaken ideas which mothers might hold.

Make up a response that accepts what the mother says, without disagreeing or agreeing.

Example:

Mother of a one-week-old baby: "I don't have enough milk because my breasts are so small".

"Mm. Mothers often worry about the size of their breasts?"

"I see you are worried about the size of your breasts"

"Ah ha"

To answer:

3. "The first milk is not good for a baby – I cannot breastfeed until it has gone." *"You do not want him to have the first milk?"*
4. "I don't let him suckle for more than ten minutes, because it would make my nipples sore." *"You are frightened that you might have sore nipples?"*
5. "I need to give him formula now that he is two months old. My breast milk is not enough for him now". *"I see....."*

Exercise 13.b Accepting what a mother FEELS

- How to do the exercise:

After the Stories A, and B below, there are three responses.

Mark with a ✓ the response which shows acceptance of how the mother feels.

Example:

Purla's baby boy has a cold and a blocked nose, and is finding it difficult to breastfeed. As Purla tells you about it, she bursts into tears.

Mark with a ✓ the response which shows that you accept how Purla feels.

- a. Don't worry - he is doing very well.
- b. You don't need to cry - he will soon be better.
- ✓ c. It's upsetting when a baby is ill, isn't it?

To answer:

Story A.

Marion is in tears. She says that her breasts have become soft again, so her milk must be less, but the baby is only three weeks old.

- a. Don't cry - I'm sure you still have plenty of milk.
- ✓ b. You are really upset about this, I know.
- c. Breasts often become soft at this time - it doesn't mean that you have less milk!

Story B.

Dora is very bothered. Her baby sometimes does not pass a stool for one or two days. When he does pass a stool, he pulls up his knees and goes red in the face. The stools are soft and yellowish brown.

- a. You needn't be so bothered - this is quite normal for babies.
- b. Some babies don't pass a stool for four or five days.
- ✓ c. It really bothers you when he does not pass a stool, doesn't it?

Exercise 13.c Praising what a mother and baby are doing right

- How to do the exercise:

For Story C below, there are three responses. They are all things that you might want to say to the mother.

Mark with a ✓ the response which praises what the mother and baby are doing right, to build the mother's confidence.

For Story D make up your own response which praises the mother.

Example:

A mother is breastfeeding her three-month-old baby, and giving drinks of fruit juice. The baby has slight diarrhoea.

Mark the response which praises what she is doing right.

- a. You should stop the fruit juice - that's probably what is causing the diarrhoea.
- ✓ b. It is good that you are breastfeeding - breast milk should help him to recover
- c. It is better not to give babies anything but breast milk until they are about six months old.

To answer:**Story C.**

The mother of a three-month-old baby says that he is crying a lot in the evenings, and she thinks that her milk supply is decreasing. The baby gained weight well last month.

- a. Many babies cry at that time of day - it is nothing to worry about.
- ✓ b. He is growing very well - and that is on your breast milk alone.
- c. Just let him suckle more often - that will soon build up your milk supply.

Story D.

A four-month-old baby is completely fed on replacement feeds from a bottle. He has diarrhoea. The growth chart shows that he weighed 3.5 kilos at birth, and that he has only gained 200 grams in the last two months. The bottle smells very sour.

Possible answer:

I am glad that you came to the clinic, and it is very helpful that you brought his weight chart.

Exercise 13.d Giving a little, relevant information

- How to do the exercise:

Below is a list of six mothers with babies of different ages.

Beside them are six pieces of information (a, b, c, d, e and f) that those mothers may need; but the information is not opposite the mother who needs it most.

Match the piece of information with the mother and baby in the same set for whom it is MOST RELEVANT AT THAT TIME.

After the description of each mother there are six letters.

Put a circle round the letter which corresponds to the information which is most relevant for her. As an example, the correct answer for Mother 1 is already marked in brackets.

To answer:

Mothers 1-6		Information
1. Mother returning to work	a b c d (e) f	a. Foremilk normally looks watery, and hindmilk is thicker
2. Mother with a 12-month-old baby	a b c d e (f)	b. Exclusive breastfeeding is best until a baby is six months old
3. Mother who thinks that her milk is too thin	(a) b c d e f	c. More suckling makes more milk
4. Mother who thinks that she does not have enough breast milk	a b (c) d e f	d. Colostrum is all that a baby needs at this time
5. Mother with a two-month-old baby who is exclusively breastfed	a (b) c d e f	e. Night breastfeeds are good for a baby and help to keep up the milk supply
6. A newly delivered mother who wants to give her baby prelacteal feeds	a b c (d) e f	f. Breastfeeding is valuable for two years or more

Exercise 13.e Using simple language

▪ **How to do the exercise:**

Below are two pieces of information that you might want to give to mothers.

The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

Example:

Information:

Colostrum is all that a baby needs in the first few days.

Using simple language:

“The first yellowish milk that comes is exactly what a baby needs for the first few days.”

To answer:

Information:

1. Exclusive breastfeeding is best up to six months of age.

Using simple language:

“Breast milk alone is all a baby needs until he is about six months old.”

2. To suckle effectively, a baby needs to be well attached to the breast.

“To get the milk, your baby needs to take a big mouthful of breast.”

Exercise 13.f Making one or two suggestions, not commands

▪ **How to do the exercise:**

Examples 1-2 are some commands which you might want to give to a breastfeeding mother.

Rewrite the commands as suggestions.

The box below gives some examples of ways to make suggestions, not commands. You may find this helpful when doing the exercises below.

MAKING SUGGESTIONS, NOT COMMANDS

Commands use the imperative form of verbs (give, do, bring) and words like always, never, must, should.

Suggestions include:

Have you considered....?

Would it be possible....?

What about trying...to see if it works for you?

Would you be able to?

Have you thought about....? Instead of....?

You could choose between....and....and....

It may not suit you, but some mothers..... a few women....

Perhaps....might work.

Usually....Sometimes....Often....

Example:

Command: “Keep the baby in bed with you so that he can feed at night!”

Suggestions: *“It might be easier to feed him at night if he slept in bed with you.”*
“Would it be easier to feed him at night if he slept with you?”

To answer:

1. Command: Do not give your baby any drinks of water or glucose water, before he is at least six months old!

Suggestions: *“You may find that breastfeeding is all that he needs - extra water is not usually necessary”.*

“Have you thought of giving him just breastfeeds? Babies can get all the water that they need from breast milk”

2. Command: Feed him more often, whenever he is hungry, then your milk supply will increase!

Suggestions: *“A good way to build up your milk supply is to breastfeed your baby more often.”*

“Would you be able to breastfeed him more often? That is a good way to build up your milk supply.”

Give participants the Answer Sheets for Session 13 once they have completed the exercises and you have provided feedback.

If some participants had difficulties with the exercises, arrange to help them later.

Session 14

Plotting points for growth indicators

Objectives

After completing this session participants will be able to:

- Identify axes on growth indicator charts
- Plot single points for height-for-age, weight-for-age and weight-for-height charts

Session outline

**60
minutes**

I.	Introduce the session	2 minutes
II.	Present Slides 14/2-14/6	15 minutes
III.	Oral drill PPT slides 01-07	5 minutes
IV.	Continuing case studies - written exercise C	38 minutes

Preparation

- Ensure that Slides 14/1-14/ 6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Set up PowerPoint slides 01-07 for the oral drill on plotting points

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

- Show **Slide 14/1 - Session 14 Objectives** and read out the objectives:

14/1

Session 14 objectives

After completing this session participants will be able to:

- Identify axes on growth indicator charts
- Plot single points on height-for-age, weight-for-age and weight-for-height charts

II. Present Slides 14/2 - 14/6**13 minutes**

- Make these points:
- We will start with very basic steps in plotting points, for example, identifying what the horizontal and vertical axes of a graph stand for and then we will have a drill to see if things that should be obvious are in fact obvious.

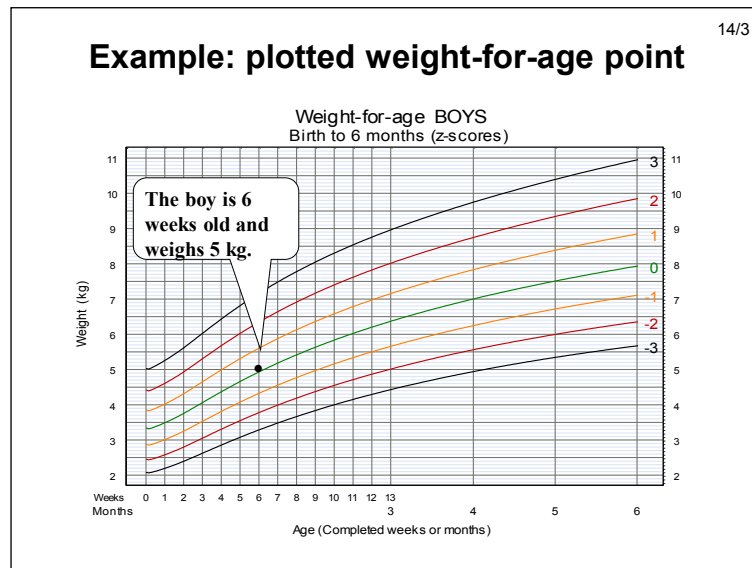
Show **Slide 14/2 - Plot points for growth indicators** and make the points that follow:

Plot points for growth indicators 14/2

- Select charts in the Growth Record based on the child's age at this visit
- Is the child growing normally?
- Note plotting convention in this course
- The x-axis (horizontal)
- The y-axis (vertical)
- Plotted point

- Growth indicators are used to assess growth considering together a child's age and measurements.
- The purpose is to determine whether a child is growing "normally" or has a growth problem or trend towards a growth problem that should be addressed.
- In order to plot points, one needs to understand certain terms related to graphs and the plotting convention that applies in this course:

Show **Slide 14/3 - Plotted weight-for-age point** and make the points that follow:



- On this graph, age (in weeks or months) is on the x axis; weight in kilograms is on the y axis. The horizontal lines represent 0.1 kg (100 g) increments. A point has been plotted for an infant boy who is 6 weeks old and weighs 5 kg.
- x-axis – the horizontal reference line at the bottom of the graph. In the Growth Record graphs, some x-axes show age and some show length/height. Plot points on vertical lines corresponding to completed age (in weeks, months, or years and months), or to length or height rounded to the nearest whole centimetre.
- y-axis – the vertical reference line at the far left of the graph. In the Growth Record graphs, the y-axes show length/height or weight. Plot points on or between horizontal lines corresponding to length/height or weight as precisely as possible.
- plotted point – the point on a graph where a line extended from a measurement on the x-axis (e.g. age) intersects with a line extended from a measurement on the y-axis (e.g. weight).

Show **Slide 14/4 - Plot length/height-for-age** and make the points that follow:

14/4

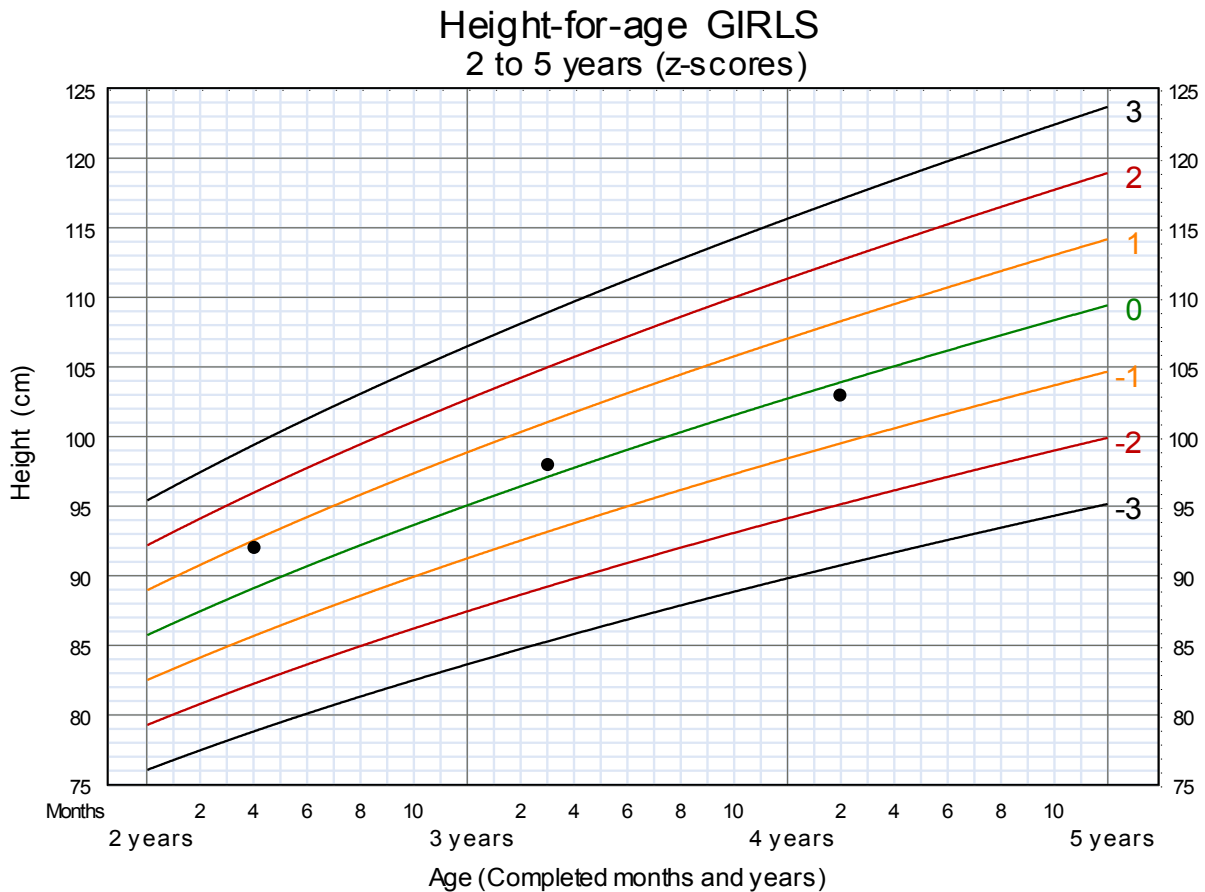
Plot length/height-for-age

- Indicator of stunting or excess height
- Length from 0 to 23 mo and height from 2 y
- Age on x-axis and length/height on y-axis
- Plot age **on** vertical line showing completed wk, mo, yr & mo, not in the middle
- Plot length/height **on or between** horizontal lines to closest estimated measurement
- Connect points from several visits to see trend
- Do the plotted points make sense?

- Length/height-for-age reflects attained growth in length or height at the child's age at a given visit. This indicator can help identify children who are stunted (short) due to prolonged undernutrition or repeated illness. Children who are tall for their age can also be identified, but tallness is rarely a problem unless it is excessive and may reflect uncommon endocrine disorders.
- Charts for length-for-age for younger age groups (birth to 6 months, and 6 months to 2 years) are given on pages 29 and 33 of the Growth Record. A chart for height-for-age (for children 2 years and older) is given on page 37. In each of these charts, the x-axis shows age, and the y-axis shows length or height in centimetres. Age is plotted in completed weeks from birth until age 3 months; in completed months from 3 to 12 months; and then in completed years and months.
- To plot length/height-for-age, plot completed weeks, months, or years and months on a vertical line (not between vertical lines). For example, if a child is 5 ½ months old, the point will be plotted on the line for 5 months (not between the lines for 5 and 6 months).
- Plot length or height on or between the horizontal lines as precisely as possible. For example, if the measurement is 60.5 cm, plot the point midway between the horizontal lines 60 and 61 cm.
- When points are plotted for two or more visits, connect adjacent points with a straight line to better observe the trend.
- Judge whether a plotted point seems sensible, and if necessary, re-measure the child. For example, a baby's length should not be shorter than at the previous visit. If it is, one of the measurements was wrong.
- Please do the short answer exercise on the page 81 of your manual

Example – Anna

The following graph shows Anna's height-for-age at three visits. The horizontal lines represent 1 cm increments. At the first visit, Anna was 2 years and 4 months of age and was 92 cm in height.



SHORT ANSWER EXERCISE

1. Connect the plotted points on the growth chart for Anna above.
2. Fill in the blanks in the sentences below to describe the meaning of the points plotted.
 - a) At her second visit, Anna was _____ in height at age _____ years and _____ months.
 - b) At her third visit, Anna was _____ in height at age _____ years and _____ months.

Show **Slide 14/5 - Plot weight-for-age** and make the points that follow:

14/5

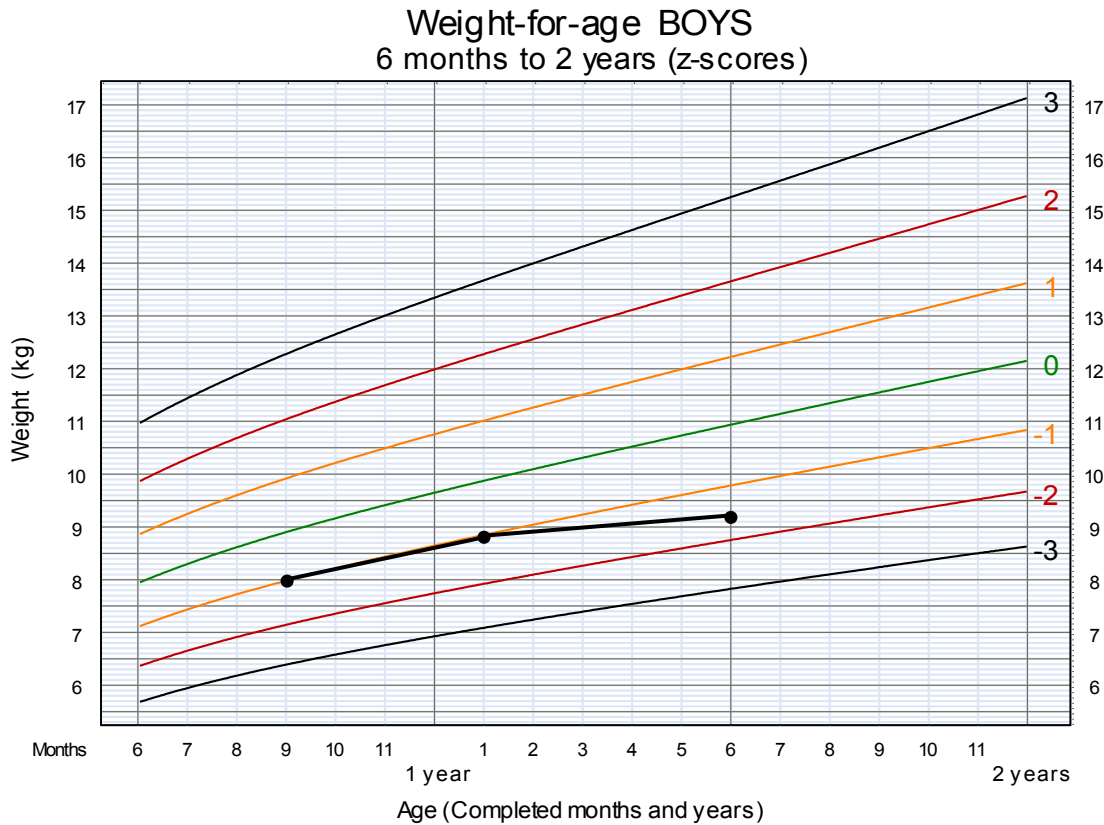
Plot weight-for-age

- Indicator of underweight due to thinness or shortness
- Not used to classify overweight
- Not valid in case of oedema
- Age on x-axis and weight on y-axis
- Plot age on vertical line showing completed wk, mo, yr & mo, not in the middle
- Plot weight on or between horizontal lines to closest estimated measurement
- Connect points from several visits to see trend

- Weight-for-age reflects body weight relative to the child's age on a given day. This indicator is used to assess whether a child is underweight or severely underweight, but it is not used to classify a child as overweight or obese. Because weight is relatively easily measured, this indicator is commonly used, but it cannot be relied upon in situations where the child's age cannot be accurately determined, such as refugee situations. It is important to note also that a child may be underweight either because of short length/height (stunting) or thinness or both.
- Note: If a child has oedema of both feet, fluid retention increases the child's weight, masking what may actually be very low weight. Plot this child's weight-for-age and weight-for-length/height, but mark clearly on the growth charts (close to the plotted point) that the child has oedema. This child is automatically considered severely undernourished and should be referred for specialized care.
- Weight-for-age charts for three age groups are given on pages 30, 34, and 38 of the Growth Record. On each of these charts, the x-axis shows age, and the y-axis shows weight in kilograms. Age is plotted in completed weeks from birth until age 3 months; in completed months from 3 to 11 months; and then in completed years and months.
- To plot weight-for-age, plot completed weeks, months, or years and months on a vertical line (not between vertical lines).
- Plot weight on a horizontal line or in the space between lines to show weight measurement to 0.1 kg, e.g. 7.8 kg.
- When points are plotted for two or more visits, connect adjacent points with a straight line to better observe trends.
- Please do the short answer exercise on the page 82-83 of your manual.

Example – Amahl

The following graph shows weight-for-age at three visits of a boy named Amahl. The horizontal lines represent 0.1 kg (100 g) increments.




SHORT ANSWER EXERCISE

Refer to Amahl's weight-for-age chart above to answer the following questions:

1. How much did Amahl weigh at age 9 months?
2. How old was Amahl at the visit when he weighed a little less than 9 kg?
3. What was Amahl's age and weight at the last visit shown?
4. Plot a point for Amahl's next visit, when he is age 1 year and 11 months and weighs 11.2 kg. Draw a line to connect this visit to the previous one.

Show **Slide 14/6 - Plot weight-for-length/height** and make the points that follow:

14/6

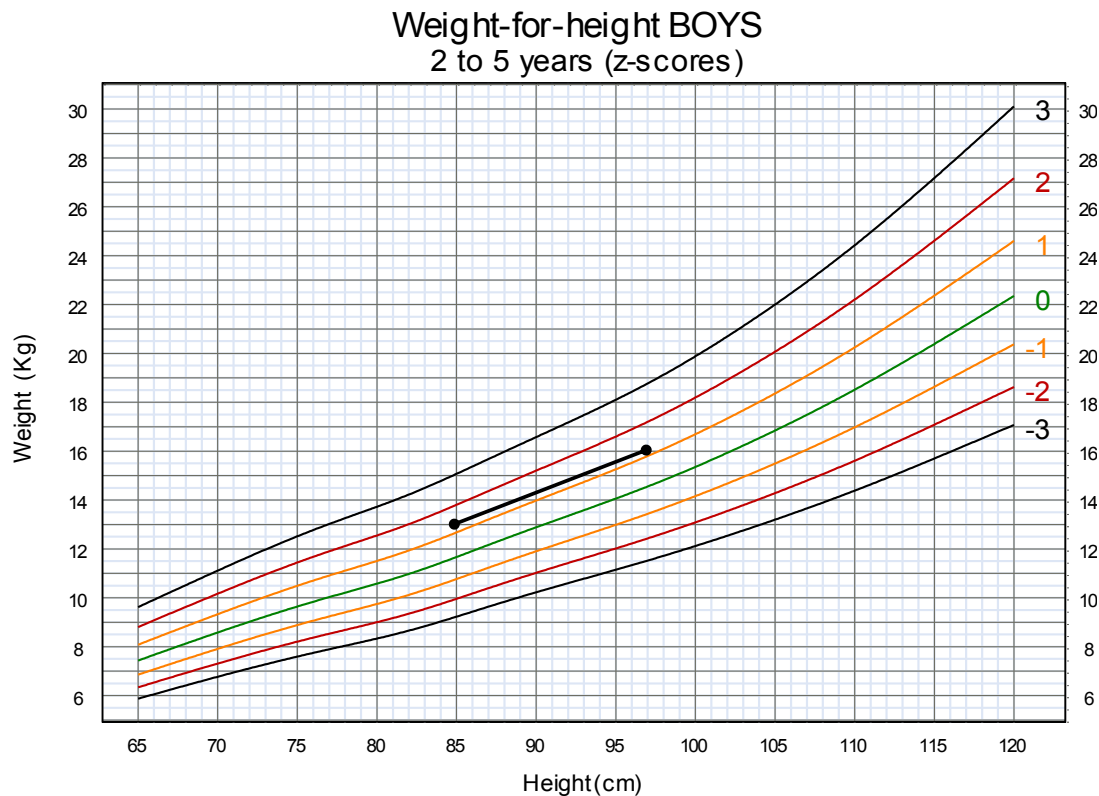
Plot weight-for-length/height

- Measure of weight in proportion to length/height
- Wasting – result of acute illness or food shortage that leads to severe weight loss
- WL/H also indicator of overweight/obesity
- Not valid in case of oedema
- Length/height on x-axis and weight on y-axis
- Plot L/H **on** vertical line rounded up or down to the nearest whole cm
- Plot weight **on or between** horizontal lines to closest estimated measurement
- Connect points from several visits to see trend

- Weight-for-length/height reflects body weight in proportion to attained growth in length or height. This indicator is especially useful in situations where children's ages are unknown (e.g. refugee situations). Weight-for-length/height charts help identify children with low weight-for-height who may be wasted or severely wasted. Wasting is usually caused by a recent illness or food shortage that causes acute and severe weight loss, although chronic undernutrition or illness can also cause this condition. These charts also help identify children with high weight-for-length/height who may be at risk of becoming overweight or obese.
- Charts for weight-for-length are given on pages 31 and 35 of the Growth Record. The chart for infants from birth to 6 months (page 31) is an enlargement of part of the chart for children from birth to 2 years (page 35); the enlargement is provided to allow more room for plotting and detecting small changes in the growth of infants. A chart for weight-for-height (for children age 2 to 5 years) is given on page 39. In these charts, the x-axis shows length or height in centimetres, and the y-axis shows weight in kilograms.
- To plot weight-for-length/height:
 - Plot length or height on a vertical line (e.g. 75 cm, 78 cm). It will be necessary to round the measurement to the nearest whole centimetre (i.e. round down 0.1 to 0.4 and round up 0.5 to 0.9), and follow the line up from the x-axis to wherever it intersects with the weight measurement.
 - Plot weight as precisely as possible given the spacing of lines on the chart.
 - When points are plotted for two or more visits, connect adjacent points with a straight line to better observe the trend.
- Please do the short answer exercise on the page 84 of your manual

Example – Tran

This chart shows Tran's weight-for-height at two visits. The horizontal lines represent 0.5 kg (500 g) increments while the vertical lines represent 1 cm increments. At the first visit, Tran is 2 years and 2 months old. He is 85 cm in height and weighs 13 kg.



SHORT ANSWER EXERCISE

Refer to Tran's weight-for-height chart to answer the following questions:

1. How tall is Tran at the second visit shown on the graph?
2. How much does Tran weigh at the second visit?
3. Plot the point for Tran's next visit, when he is 112 cm tall and weighs 19 kg. Connect the plotted point to the point for previous visit.

<input type="checkbox"/> Conduct an oral drill using overheads 1 to 7	5 minutes
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- The purpose of this drill is for participants to practise reading points on the growth charts.
- You will project the growth charts, and participants will take turns reading the points. For example, a participant will say, "This girl weighed ___ kg at age ___ months" or "This boy had a length of ___ cm and weighed ___ kg." If the participant hesitates, point to the graph and ask questions to prompt a response, such as, "Looking here at the ages along the x-axis, how old was the child at this visit?"
- A few of the overheads (# 5, 6, and 7) illustrate possible mistakes in measurement. If participants notice these mistakes, congratulate them. If they do not notice, ask questions such as, "What seems unusual about this growth chart? Do you think there could have been a mistake? What type of mistake?"
- Participants have not yet learned to interpret the plotted points in terms of the growth curves or definitions of growth problems, so do not try to identify growth problems or interpret the child's growth pattern during this drill. Participants should focus simply on reading the points correctly and identifying possible measurement mistakes.
- Points on overheads 1–7 should be read as follows:

Overhead 1: At age 1 year and 4 months, this boy weighed about 9.5 kg. At age 1 year and 10 months, this boy weighed 11.5 kg.

Overhead 2: At age 2 years and 7 months, this boy was 94 cm in height.
At age 3 years and 8 months, this boy was 103 cm in height.

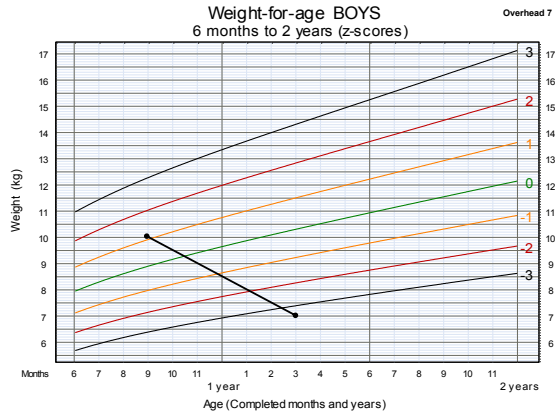
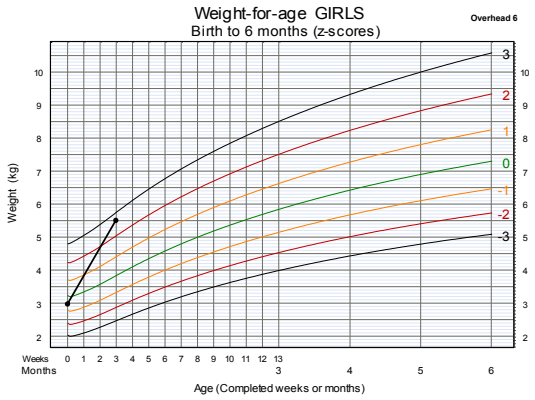
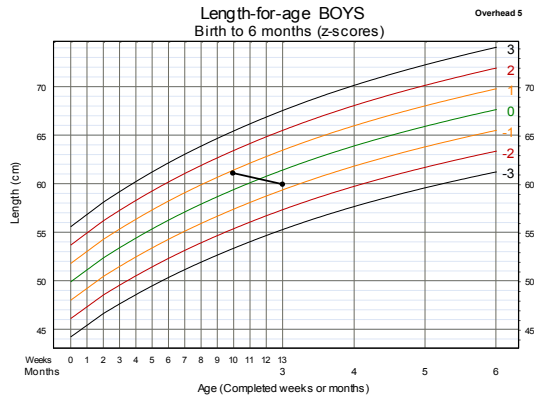
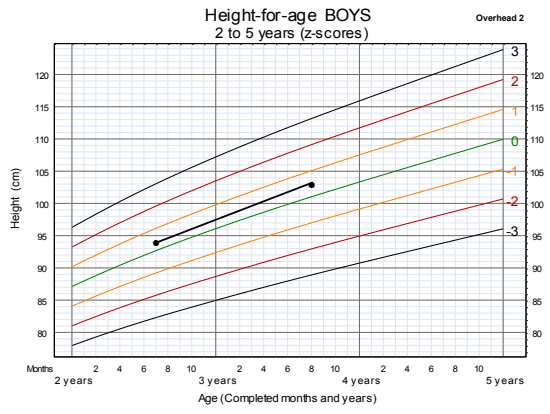
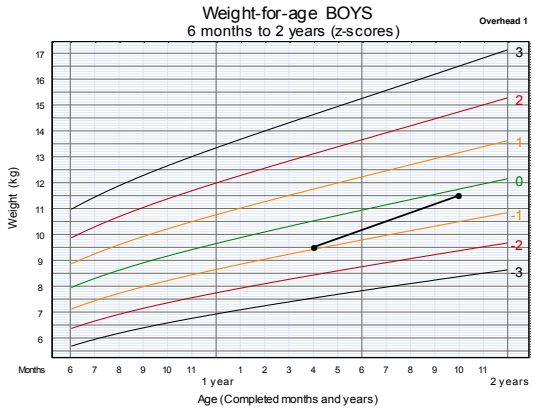
Overhead 3: At the first visit, this girl was 65 cm in length and weighed 9 kg. At the second visit, this girl was about 82 cm in length and weighed about 12.7 kg. (*It is necessary to estimate where the second point is located between the lines.*)

Overhead 4: (*Excluded because it refers to BMI-for-age.*)

Overhead 5: The growth chart suggests that this boy was 61 cm in length at age 10 weeks and 60 cm in length at age 3 months. That would mean he got shorter! One of the length measurements may have been inaccurate. Possibly the baby was measured with bent knees at age 3 months. Another possibility is that the measurements were correct, but one of them was graphed incorrectly. It would be a good idea to check the measurements recorded in the Visit Notes of this child's *Growth Record*.

Overhead 6: This growth chart shows that the girl weighed 3 kg at birth and 5.5 kg at 3 weeks old. This is a very unlikely weight gain from birth to 3 weeks. It is possible that there was a mistake in reading or recording the weight, or in graphing the child's age, at the second visit. Perhaps the child was actually 3 months old instead of 3 weeks old at the second visit. It would be a good idea to check the Visit Notes.

Overhead 7: According to the graph, this boy weighed 10 kg at 9 months and 7 kg at 1 year 3 months, showing a loss of 3 kg. This is a dramatic change in weight-for-age. Either there was a mistake in measuring or recording the child's weight or age, or this child is dying.



- Ask the participants to work individually on the continuing case study**
38 minutes



Written Exercise D

Continuing Case Studies – Nalah and Toman

In session 5 you began a Girl's Growth Record for Nalah and a Boy's Growth Record for Toman. Get out these Growth Records now. In this exercise you will plot these children's measurements on the appropriate growth charts in each booklet.

Nalah

1. On the Personal Data page of Nalah's Girl's Growth Record, you have recorded her birth weight as 2.9 kg and her length as 49 cm. Look at the Visit Notes in Nalah's Girl's Growth Record. You have recorded information from 4 clinic visits there, including age, weight and length at each visit.
2. Find the three growth charts suitable for Nalah's age group in the Girl's Growth Record.
3. Use the information from Nalah's Personal Data page and Visit Notes to plot points on each growth chart. Plot and connect points for all five points available for Nalah on each growth chart.

► **If you have difficulties, talk with a facilitator at any time.**

Toman

1. Look at the Visit Notes page of Toman's Boy's Growth Record. You have recorded information from 4 visits there, including age, weight and length at each visit.
2. Find the three growth charts suitable for Toman's age group in the Boy's Growth Record.
3. Use the information from Toman's Visit Notes to plot points on each growth chart. Plot and connect points for all four visits on each growth chart.

**When you have finished this exercise,
review your answers with a facilitator.**

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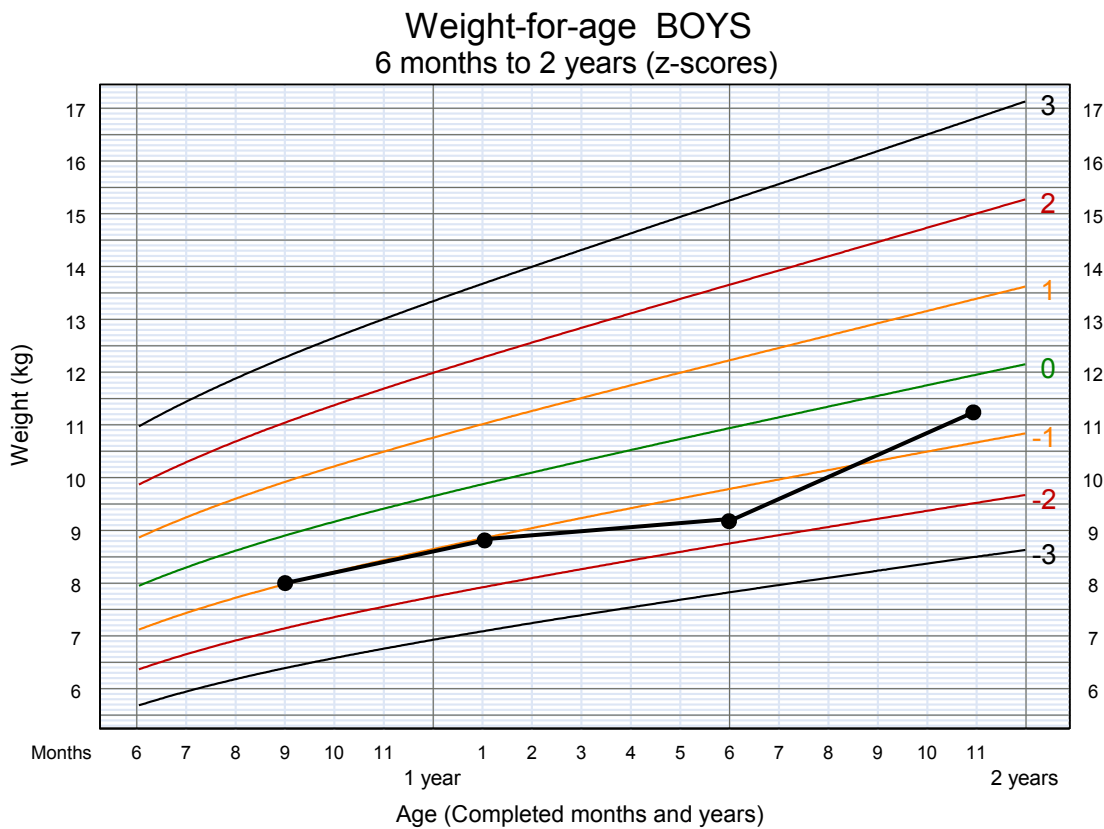
Key to short answer exercises (Anna, Amahl and Tran)

Anna

1. The dots on the graph should be connected.
2. 98 cm at 3 years and 3 months
3. 103 cm at 4 years and 2 months

Amahl

1. 8 kg
2. 1 year and 1 month
3. 1 year and 6 months, 9.1 or 9.2 kg
4. Completed graph for Amahl:

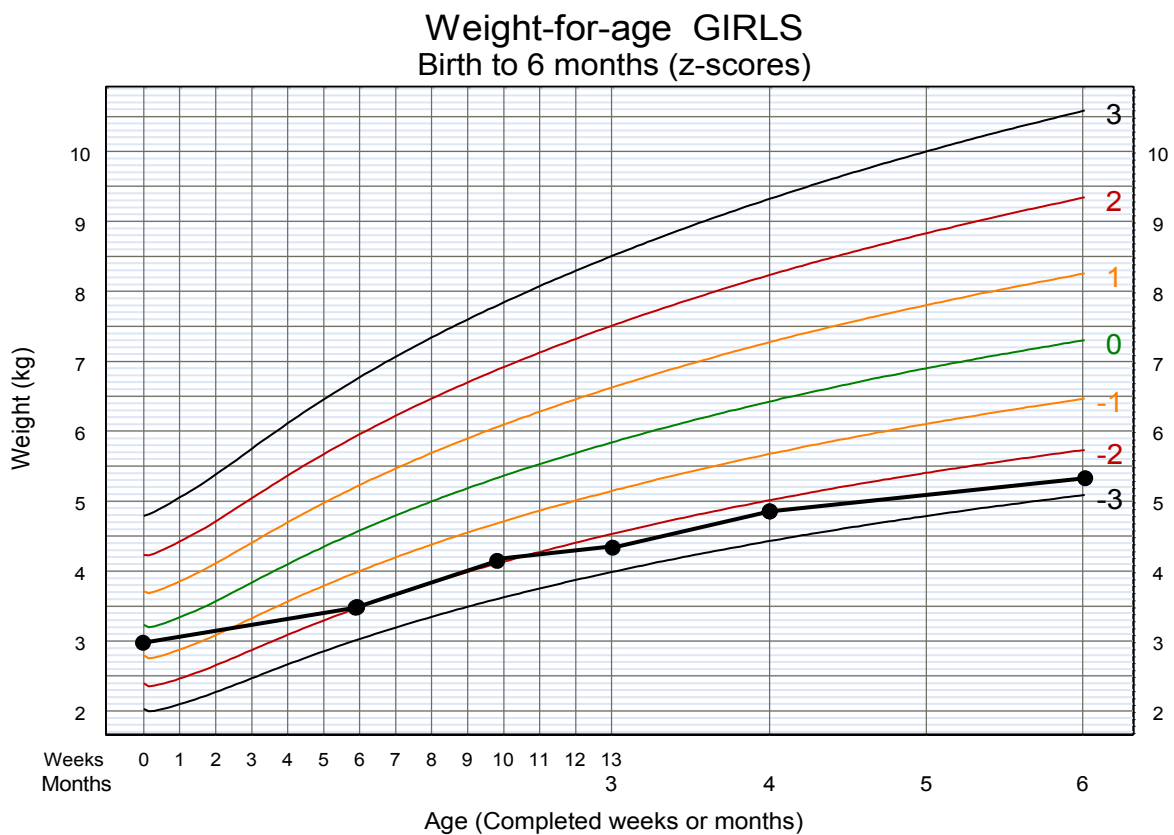
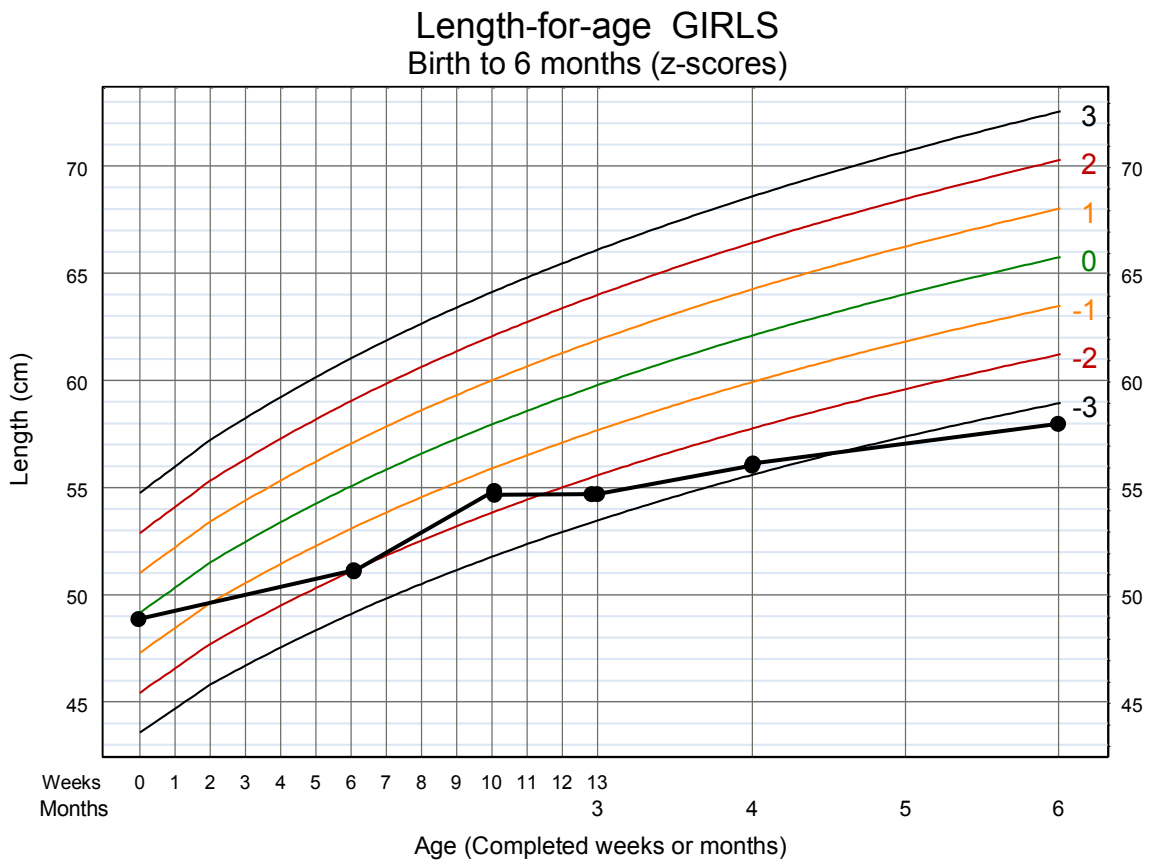


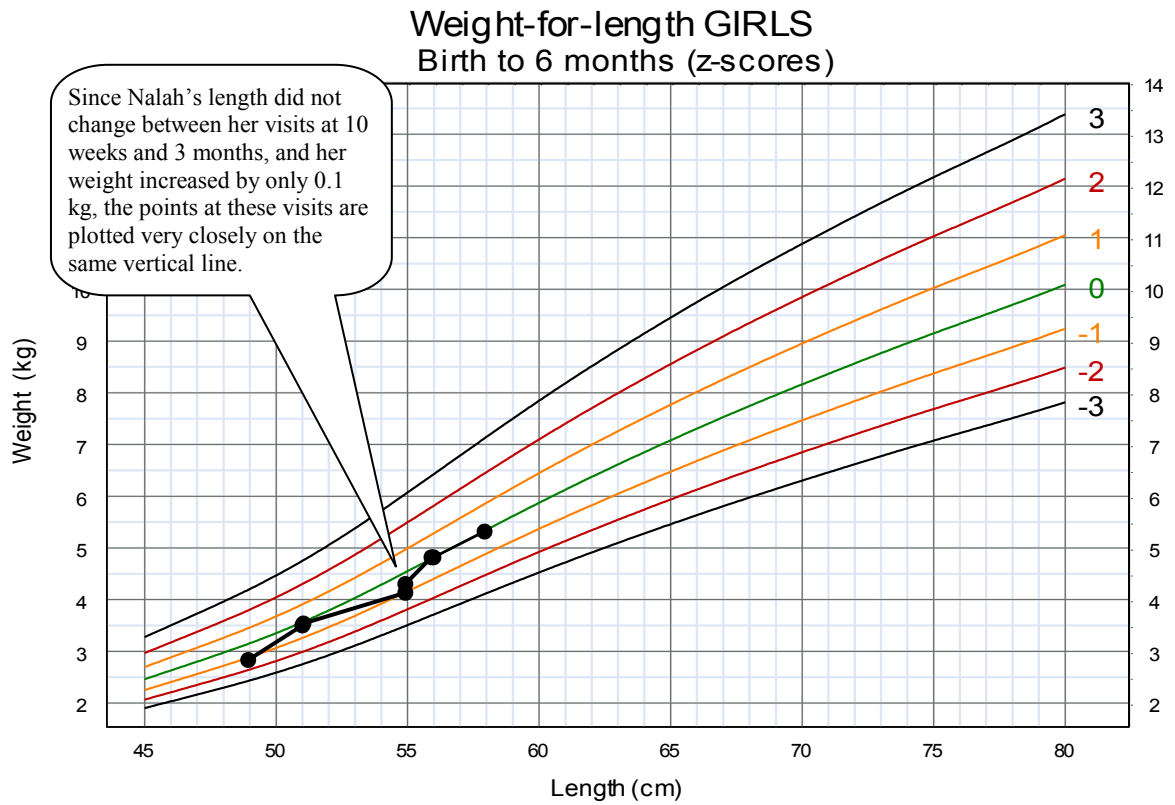
Tran

1. about 97 cm
2. 16 kg
3. Completed graph for Tran:

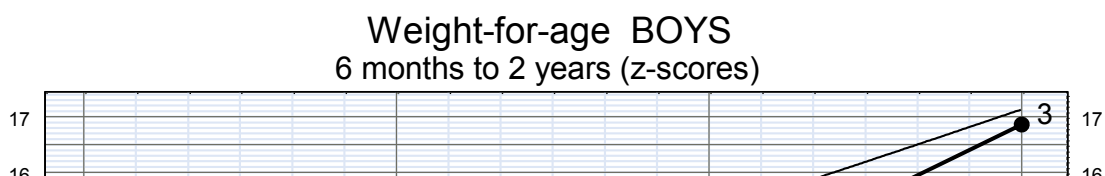
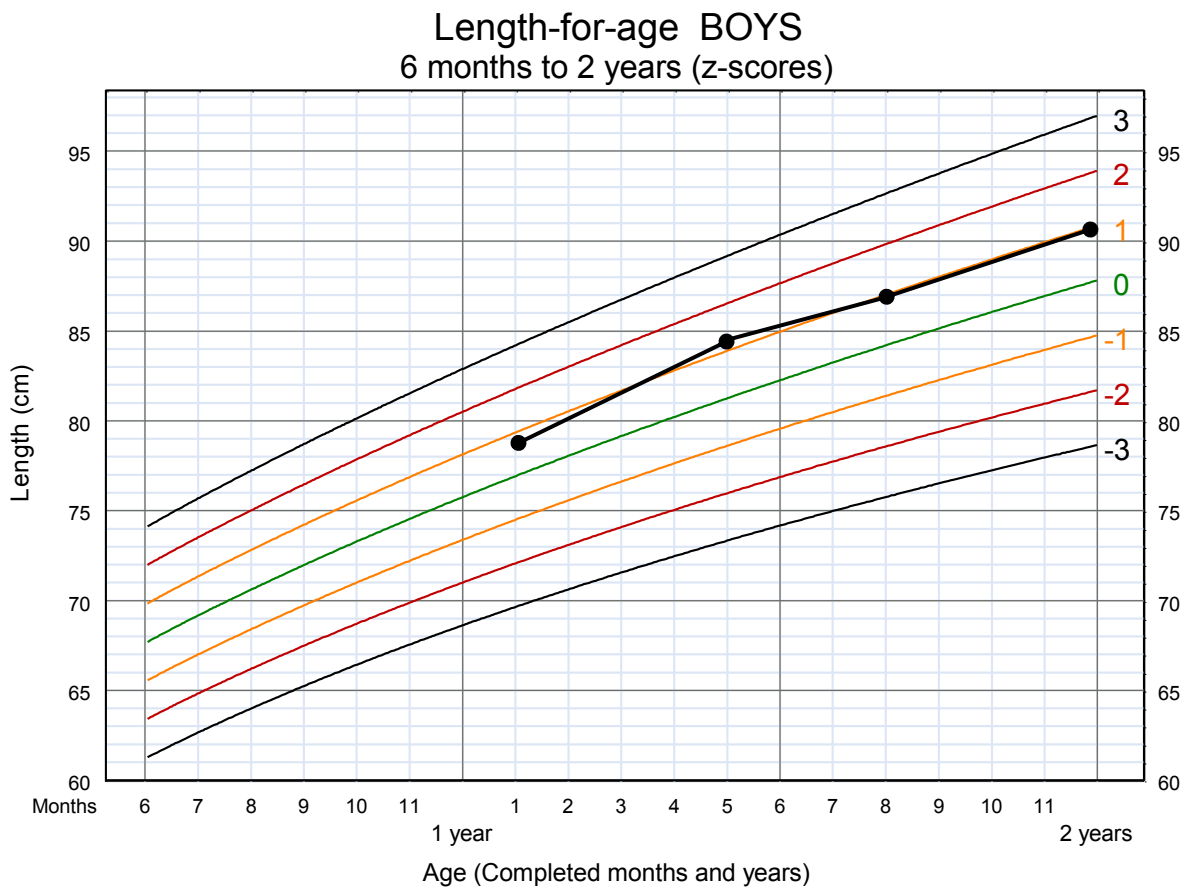


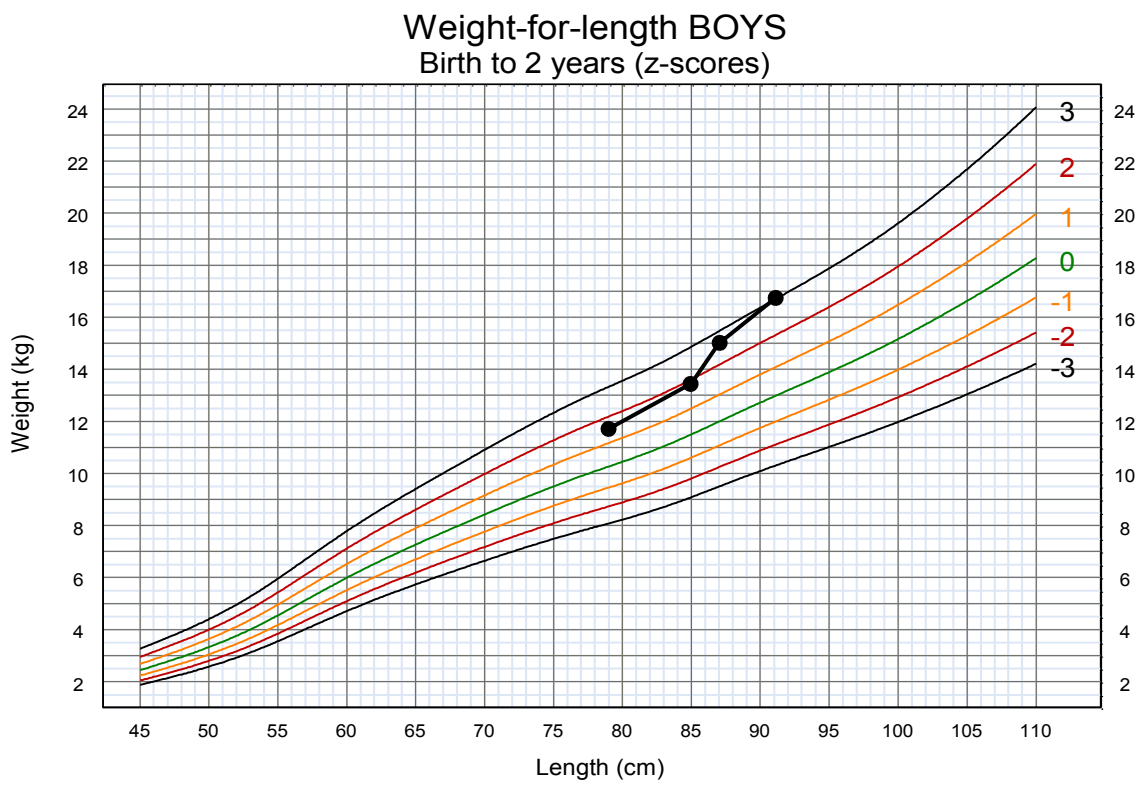
Answers to Written Exercise D: Continuing Case Studies
Nalah's plotted growth trends





Continuing Case Studies – Toman's plotted growth trends





Session 15

Interpreting plotted points for growth indicators

Objectives

After completing this session participants will be able to:

- Identify growth problems from plotted points on a single indicator chart
- Define a growth problem using several indicator charts and observations

Session outline

120 minutes

I.	Introduce the session	2 minutes
II.	Present Slides 15/2-15/3	10 minutes
III.	Study growth curves and malnutrition classifications in Growth Record	30 minutes
IV.	Study graphs (Part. Manual pp 89-91) and photos (Mod E: 9, 10, 11)	15 minutes
V.	Present Slide 15/4	5 minutes
VI.	Study graphs (Part. Manual pp 92-94) and photos (Mod E:12, 1, 2, 8)	15 minutes
VII.	Group discussion of measurements taken in Practical Session 1	35 minutes
VIII.	Growth assessment of 2 girls (Slides 15/5-15/8)	8 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Ensure that Slides 15/1-15/4 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- The participants and you should have Module E (Photo Booklet) of the *WHO Child Growth Assessment Course*.
- In preparation for the discussion on how to interpret several indicators, plot the measurements of children measured in Practical Session 1 on blank charts of appropriate age and sex (see Folder: *Session 15 Blank growth charts*). Plot points on the charts for length/height-for-age, weight-for-age and weight-for-length/height.
- Ask three participants to do the same for children they measured and to present following your example. (Participants recorded the measurements of these children on the Measuring weight, length and height worksheet in Session 9.) If possible, select children with a variety of growth problems.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

- Show **Slide 15/1 - Session 15 Objectives** and read out the objectives:

15/1

Session 15 objectives

After completing this session participants will be able to:

- Identify growth problems from plotted points on a single indicator chart
- Define a growth problem using several indicator charts and observations

II. Present Slide 15/2**5 minutes**

- Make these remarks:
- In Session 14 we learned how to plot points on different indicator graphs. Here we will be looking at what those points mean for single and for combinations of the indicators.

Show **Slide 15/2 - Interpret plotted points** and make the points that follow:

15/2

Interpret plotted points for growth indicators

- Growth curves to help you interpret plotted points
- Median and z-score (standard deviation = SD) lines
- Positive and negative z-scores
- The farther from the median, the more likely that there is a growth problem
- Consider other facts when interpreting points (health condition, parent size, etc)

- Ask participants to open a growth record to any page with a growth chart
- The curved lines printed on the growth charts will help you interpret the plotted points that represent a child's growth status.
 - The line labelled 0 on each chart represents the median, which is, generally speaking, the average.
 - The other curved lines are z-score lines,¹⁰ which indicate distance from the average. The median and the z-score lines on each growth chart were derived from measurements of children in the WHO Multicentre Growth Reference Study.
 - Z-score lines on the growth charts are numbered positively (1, 2, 3) or negatively (-1, -2, -3).
 - In general, a plotted point that is far from the median in either direction (for example, close to the 3 or -3 z-score line) may represent a growth problem
 - To interpret points, consider other factors, such as the growth trend, the health condition of the child and the height of the parents.
 - Take out a Growth Record and turn to page 29.
 - Next to each growth chart in the Growth Record, there is a list of the growth problems represented by plotted points that are above or below certain z-score lines. Read points as follows:
 - A point between the z-score lines -2 and -3 is "below -2."
 - A point between the z-score lines 2 and 3 is "above 2."

¹⁰ Z-scores may also be called standard deviation (SD) scores. See the annex of this module for a more complete explanation of z-scores or SD scores.

III. Study growth curves and malnutrition classifications 35 minutes

- Show Slide 15/3 - Identify growth problems and make the points that follow:

15/3

Identify growth problems from plotted points

- Review list of problems in each indicator chart
- stunted, severely stunted (length/height-for-age) - pp 29, 33, 37
- underweight, severely underweight (weight-for-age) - pp 30, 34, 38
- wasted, severely wasted (weight-for-length/height) - pp 31, 35, 39
- possible risk of overweight, overweight, obese (weight-for-length/height) - pp 31, 35, 39

- This is part study, part discussion with whole group
- Take time now to study the pages in the Growth Record that present the different indicators and what forms of malnutrition they are used to define.
 - stunted, severely stunted (length/height-for-age) - pp 29, 33, 37
 - underweight, severely underweight (weight-for-age) - pp 30, 34, 38
 - wasted, severely wasted (weight-for-length/height) - pp 31, 35, 39
 - possible risk of overweight, overweight, obese (weight-for-length/height) - pp 31, 35, 39
 - see table on page 88 of your manuals for a summary of the definitions of growth problems in terms of z-scores
 - Notice that an indicator is included in a certain definition if it is plotted above or below a particular z-score line. If it is plotted exactly on the z-score line, it is considered in the less severe category. For example, weight-for age on the -3 line is considered “underweight” as opposed to “severely underweight.”
- Give participants time to study the growth conditions classification table on page 88 of their manual before running a drill to check their understanding of the classifications.

Growth Problems

Compare the points plotted on the child's growth charts with the z-score lines to determine whether they indicate a growth problem. Measurements in the shaded boxes are in the normal range.

Z-score*	Growth indicators			
	Length/height-for-age	Weight-for-age	Weight-for-length/height	BMI-for-age
Above 3	<i>See note 1</i>	<i>See note 2</i>	<i>Obese</i>	<i>Obese</i>
Above 2			<i>Overweight</i>	<i>Overweight</i>
Above 1			<i>Possible risk of overweight (See note 3)</i>	<i>Possible risk of overweight (See note 3)</i>
0 (median)				
Below -1				
Below -2	<i>Stunted (See note 4)</i>	<i>Underweight</i>	<i>Wasted</i>	<i>Wasted</i>
Below -3	<i>Severely stunted (See note 4)</i>	<i>Severely underweight (See note 5)</i>	<i>Severely wasted</i>	<i>Severely wasted</i>

*The z-score label in this column refers to a range. For example 'above 2' means 2.1 to 3.0; 'median' includes -1.1 to 1.0; 'below -2' refers to -2.1 to -3.0, etc.

Notes:

1. A child in this range is very tall. Tallness is rarely a problem, unless it is so excessive that it may indicate an endocrine disorder such as a growth-hormone-producing tumour. Refer a child in this range for assessment if you suspect an endocrine disorder (e.g. if parents of normal height have a child who is excessively tall for his or her age).
2. A child whose weight-for-age falls in this range may have a growth problem, but this is better assessed from weight-for-length/height or BMI-for-age.
3. A plotted point above 1 shows possible risk. A trend towards the 2 z-score line shows definite risk.
4. It is possible for a stunted or severely stunted child to become overweight.
5. This is referred to as very low weight in IMCI training modules. (*Integrated Management of Childhood Illness, In-service training. WHO, Geneva, 1997*).

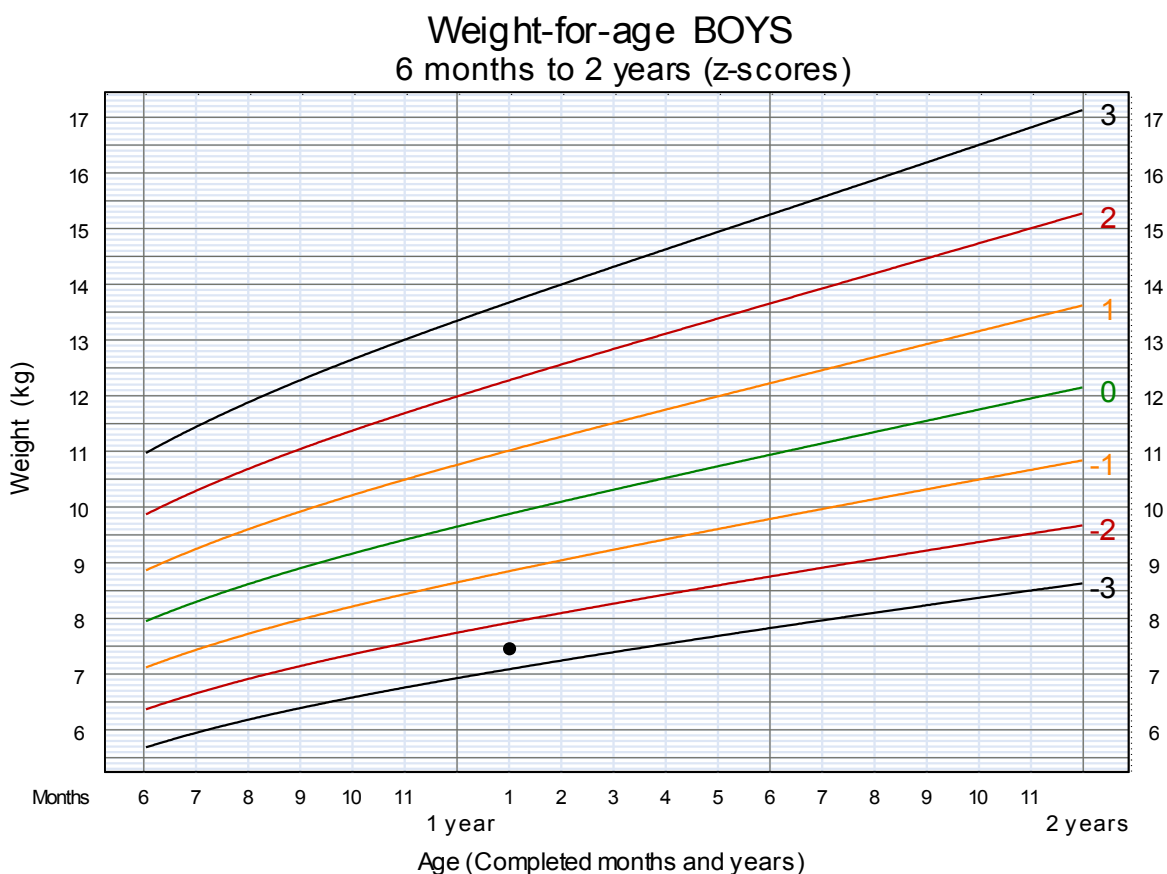
- Run a spontaneous drill of which indicator to use to define different growth/malnutrition conditions
- A child's length-for-age is -2.0, is he stunted or not? NO
 - A boy's weight-for-height is 1.35, what is his current status? POSSIBLE RISK OF OVERWEIGHT
 - This girl has a weight-for-age 2.9, what is her problem? UNDEFINED
 - With height-for-age -2.8 and weight-for-height 2.1, what is this girl's problem? STUNDED AND OVERWEIGHT
 - A child with weight-for-length -3.2 is SEVERELY WASTED
 - What is the status of a child whose weight-for-age is -1.89? UNDEFINED
 - The status of a child with weight-for-height 3.2 OBESE
- :

IV. Study and discuss graphs below and photos (Mod E) 15 minutes

- Study and discussion with whole group of correspondence between the charts below and photos 9, 10, and 11 in Module E
 - We are now going to look at examples of some of the growth problems described above. The examples are illustrated by selected growth charts and photos to show correspondence between growth indicators and clinical observations.
 - Take time now to study the examples in your Participant's manual (pages 89-91) and refer as directed to the photos in E: Photo Booklet (From the *WHO Training Course on Child Growth Assessment. Geneva, 2008*).

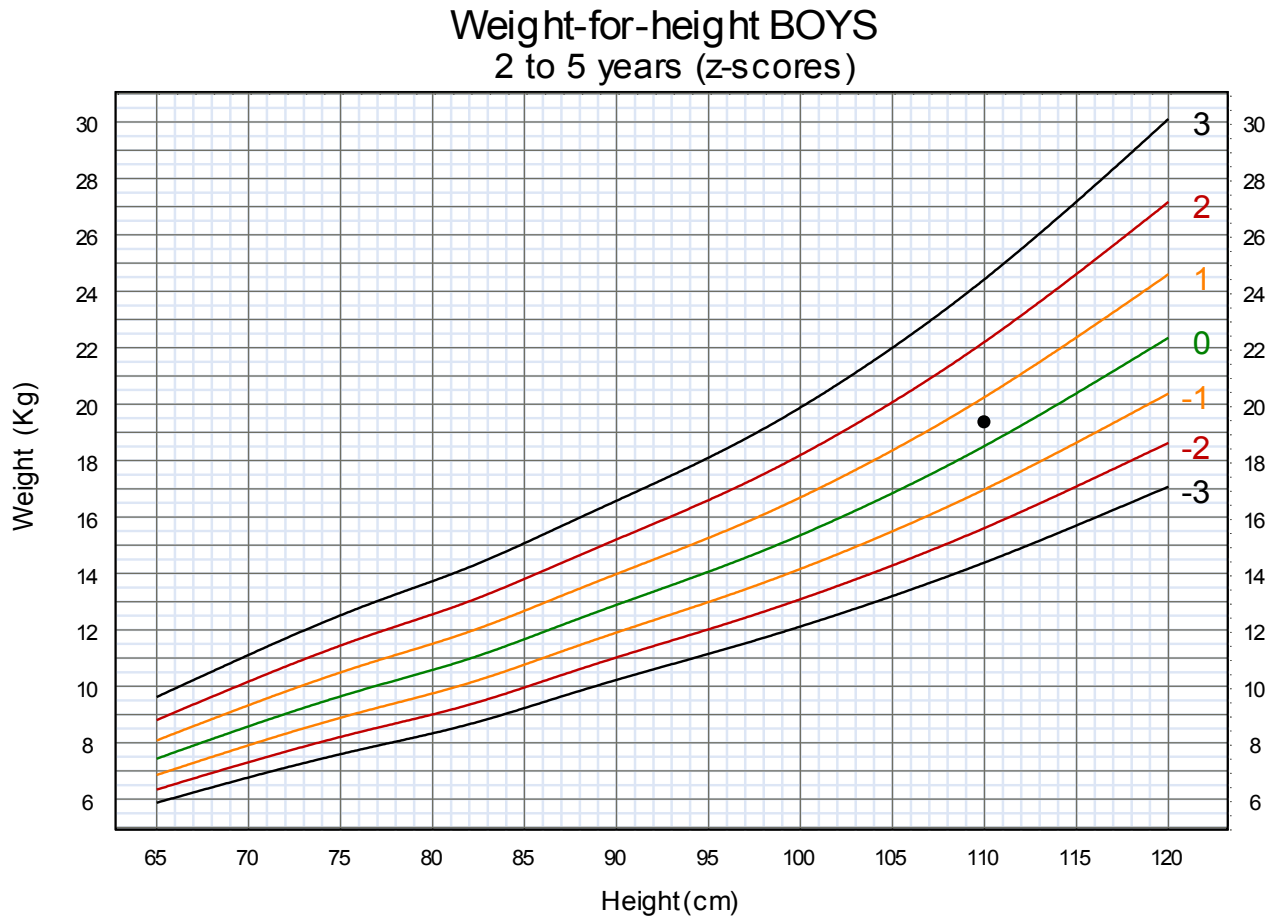
Example – Underweight boy, photo 9

The following weight-for-age chart is for a boy who is 1 year and 1 month old. He weighs 7.5 kg and is 70.3 cm in length. Notice that his weight-for-age is below the -2 z-score line, so he is considered underweight. This boy is pictured in photo 9 in *E: Photo Booklet*. Look at his photo now.



Example – Normal weight boy, photo 10

Look at photo 10 of a boy aged 3 years and 11 months. He weighs 19.5 kg and is 109.6 cm tall. His weight-for-age is above the 1 z-score line, and his height-for-age is above the 1 z-score line (charts not shown). His weight-for-height, shown on the chart below, is in the normal range.



Example – Obese boy, photo 11

Look at photo 11 of a boy who is 3½ months old. He weighs 10 kg and is 63 cm long. On the length-for-age chart he is above the median. His weight-for-length chart, shown below, indicates that he is obese. Notice that his weight-for-length is above the 3 z-score line.



Consider all growth charts and clinical observations

- Show **Slide 15/4 - Consider all growth charts and observations** and make the points that follow:

15/4

Consider all growth charts and observations

- Consider all growth charts together: there may be a problem with one but not the others
- Low weight-for-age could be due to wasting or shortness: look at WL/H and LA when there is a problem with WA
- A stunted child may have a normal weight-for-height, but have low weight-for-age
- Weight-for-length/height is usable even when age is not known
- Looking at the growth charts all together is useful to determine nature of growth problems

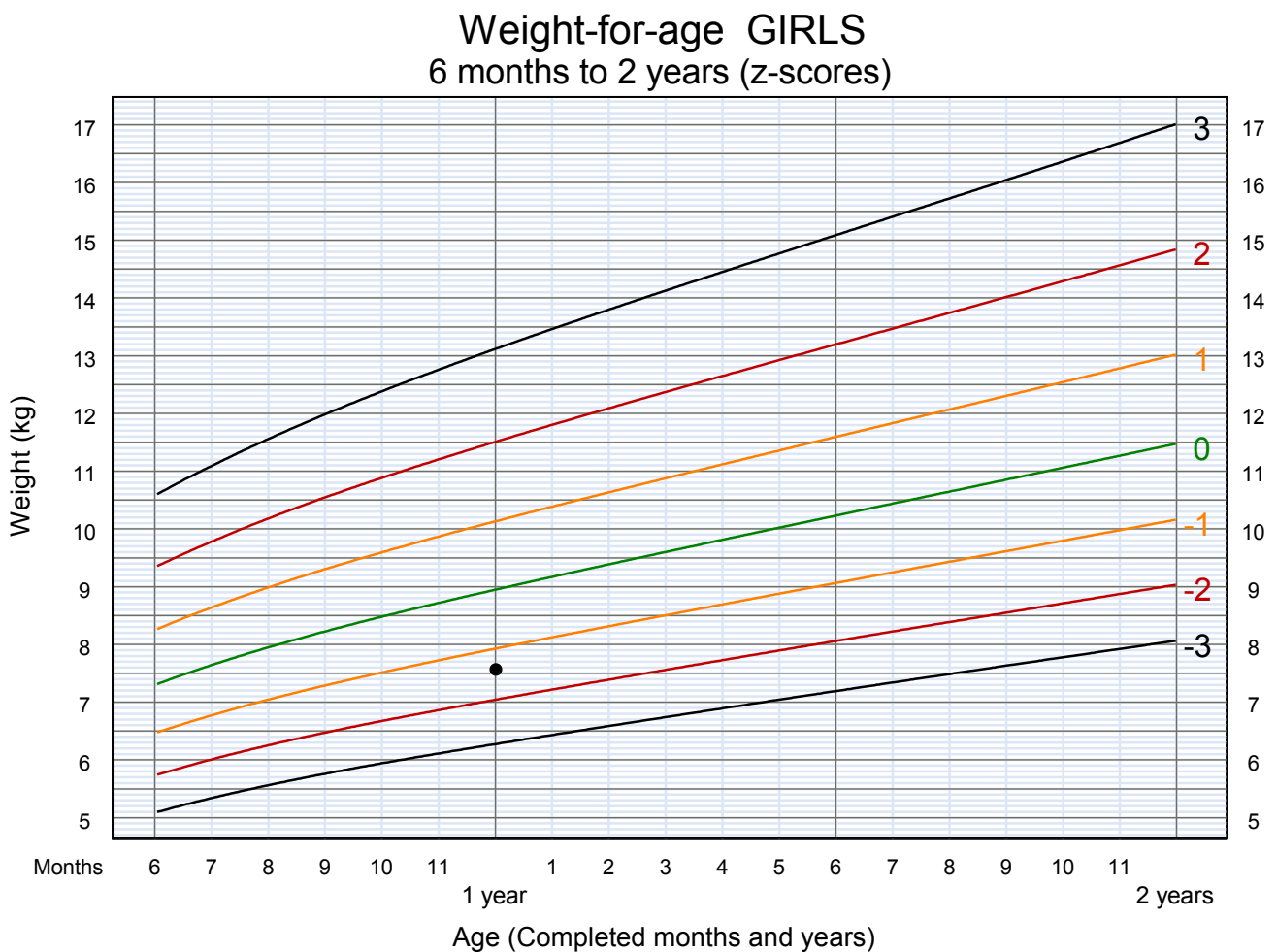
- It is important to consider all of a child's growth charts together as their growth problem may be evident in one chart but not the others. For example, if a child is underweight according to the weight-for-age chart, you must also consider the child's length-for-age and weight-for-length. Focus more on the weight-for-length/height and the length/height-for-age charts.
- A stunted child may have a normal weight-for-height, but have low weight-for-age due to shortness.
- Weight-for-length/height is usable even when age is not known.
- Looking at the growth charts all together will help you to determine the nature of growth problems.

VI. Study graphs (Part. Manual pp 92-94) and photos (Mod E) 15 minutes

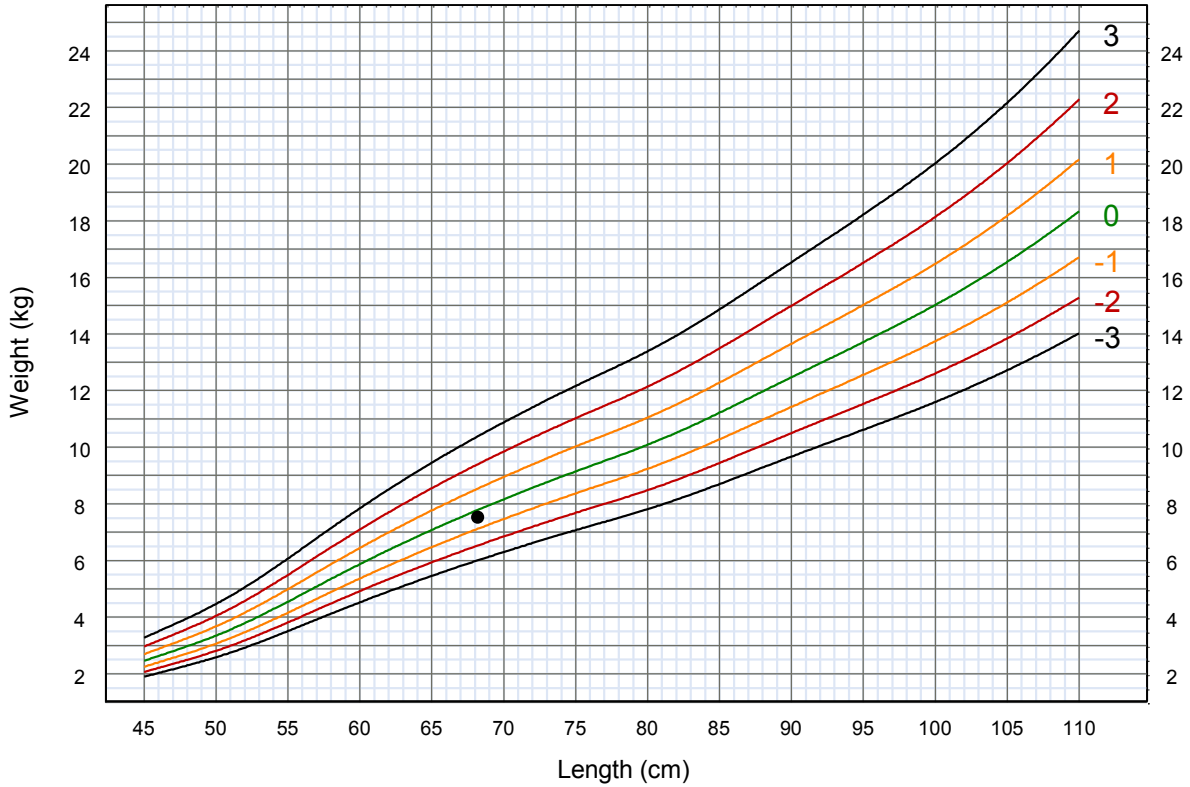
- Study and discussion with whole group of correspondence between charts below and photos 12, 1, 2 and 8 in Module E
 - Study the examples presented in the Participant's Manual (pages 92-94) and refer as directed to the corresponding photos in E: Photo Booklet (From the *WHO Training Course on Child Growth Assessment. Geneva, 2008*).

Example – stunting, photo 12

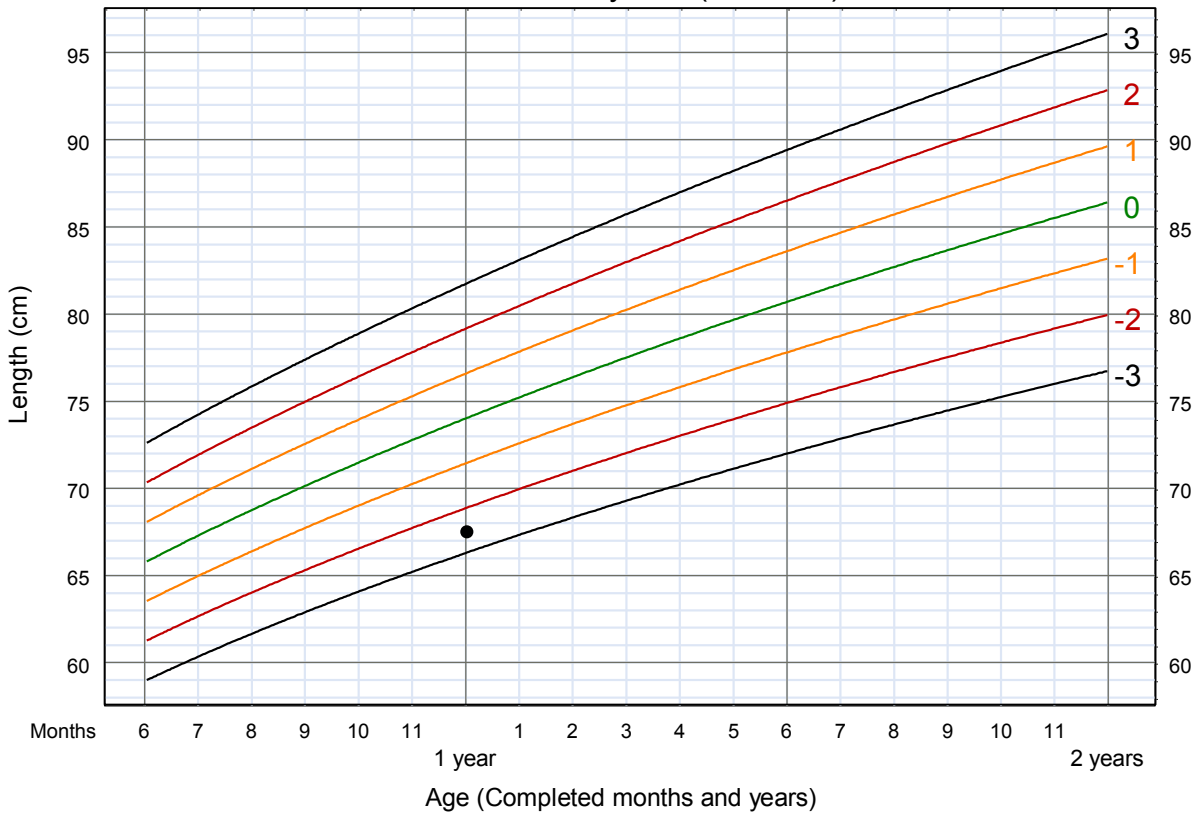
The girl in photo 12 is aged 1 year 0 months, is 67.8 cm long, and weighs 7.6 kg. Her weight-for-age chart is shown below, and her length-for-age and weight-for-length charts are on the next page. Notice that her weight-for-age is low, but still in the normal range. Her weight-for-length is on the median, so she has a completely normal appearance. Her length-for-age is below the -2 z-score line, however, showing that she is stunted.



Weight-for-length GIRLS Birth to 2 years (z-scores)



Length-for-age GIRLS 6 months to 2 years (z-scores)



When interpreting the growth charts, remember to consider your observation of the child's appearance. A child who is below -1 in weight-for-length may be fine if he appears lean (fleshed out) rather than wasted (too thin). A child who is above 1 in weight-for-length may be fine if he appears heavy (sturdy, mostly muscular) as opposed to having noticeable fat.

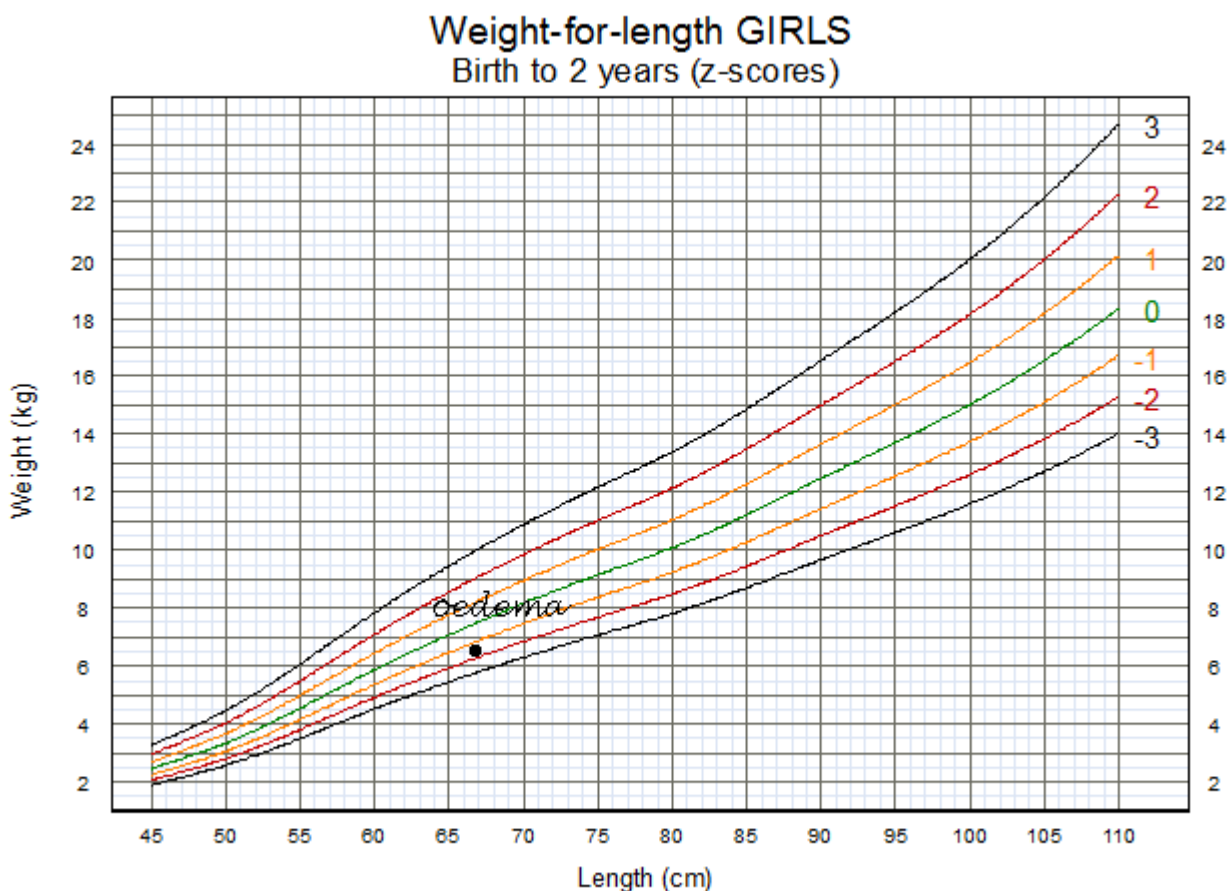
Clinical signs of marasmus and kwashiorkor require special attention. The wasting associated with marasmus (photos 1-3) will be apparent in the child's graphs for weight-for-age and weight-for-length/height. However, the oedema (fluid retention) associated with kwashiorkor (photos 4-8) can hide the fact that a child has very low weight. When you plot the weight of a child who has oedema of both feet, it is important to note on the growth chart that the child has oedema. A child with oedema of both feet is assumed to have a z-score below -3 and should be referred for specialized care.

Example – marasmus, photos 1 and 2

Look at photos 1 and 2, which show a child with marasmus. It is clear that the child needs immediate referral.

Example – oedema of both feet, photo 8

Look at photo 8, which shows a girl with oedema of both feet. She is aged 1 year and 8 months, weighs 6.5 kg and is 67 cm long. Since she has oedema of both feet, she should be referred. Her weight-for-length is graphed below; it appears to be above the -2 z-score line because her fluid retention masks her low weight.



VII. Group discussion of measurements in Practical Session 1

35 minutes

- When everyone is ready, announce the group discussion. Lead the discussion of the first child as follows:
- Put up the first chart plotted for a selected child. Show the plotted point on the growth chart as you explain how it was plotted and what it means. For example, say, "I plotted the point on the vertical line for Maria's age and on the horizontal line for her height. This point shows that Maria is 90 cm in height at age 2 years and 3 months."
- Ask participants if the plotted point shows that the child has any growth problem, and if so, what growth problem. If there is a growth problem, ask participants whether they could have guessed it simply by looking at the child.
- Repeat steps 1 and 2 for each of the relevant growth charts for the child. As you show the plotted points on the other growth charts, discuss what each additional chart reveals. For example "If you found that a child was stunted but normal weight-for-length, what does this reveal?"
- Ask the participant to present the next child in the same way. Ask questions of participants as needed to analyse each chart and each child's growth problems.

VIII. Growth assessment of two girls - Slides 15/5-15/8

8 minutes

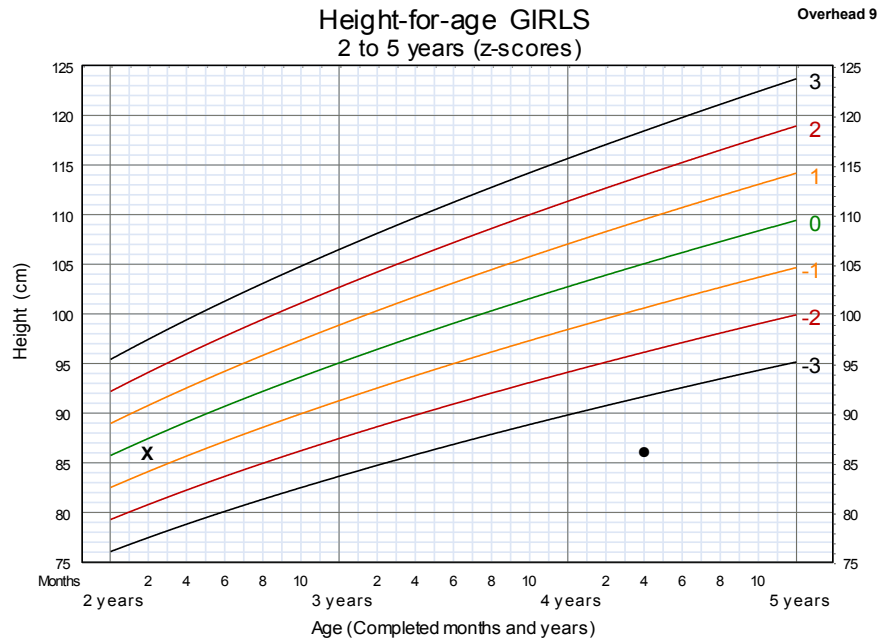
- After discussing several of the real children measured in Session 9, use slides 15/5 to 15/8 for the following discussion.
 - These slides show measurements for two girls on the same graphs. One girl is indicated by the mark X and the other by a round point. (Remind participants that they would never really graph measurements for two children on the same chart; these examples are intended simply for discussion.)
 - Slides 15/5 to 15/8 show that two children can have the same measurements and very different z-scores. These two girls have the same height and weight. However, they are two years apart in age. Their ages make the difference in their z-scores and the identification of growth problems.

Slide 15/5: Measurements for two girls

	Age	Height	Weight	BMI
Girl X	2 yr 2 mo	86 cm	12 kg	16.2
Girl ●	4 yr 4 mo	86 cm	12 kg	16.2

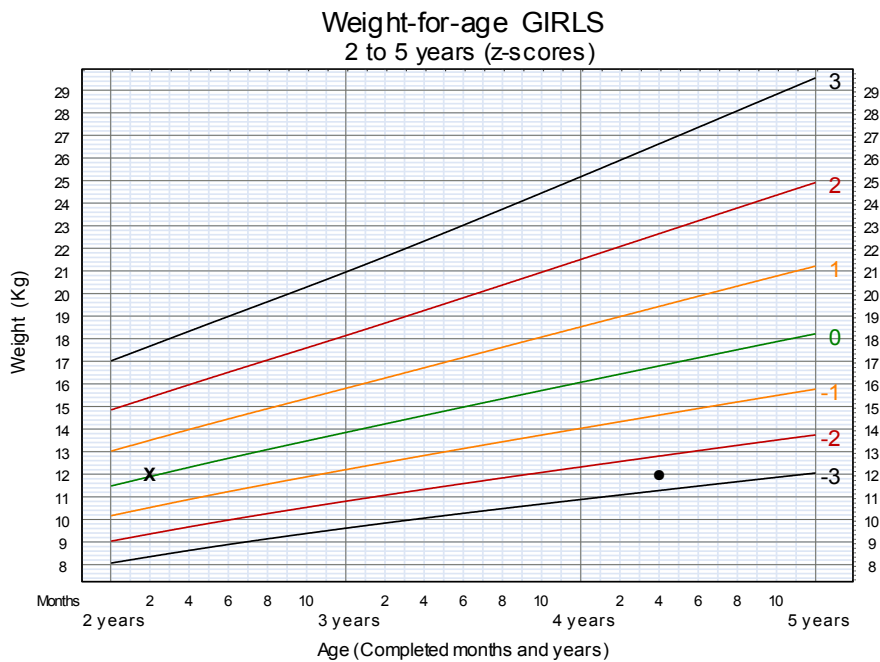
Slide 15/5: The girls' measurements are the same, but their ages are two years apart.

Slide 15/6: Height-for-age



Slide 15/6: Girl x is just below the median in height-for-age. Girl • is well below the -3 z-score line (severely stunted).

Slide 15/7: Weight-for-age



Slide 15/7: Girl x is on the median in weight-for-age. Girl • is below the -2 z-score line (underweight).

Session 16

Practical Session 2

Building Confidence and Giving Support Assessing a breastfeed and Positioning a Baby at the Breast

Objectives

After completing this session participants will be able to:

- demonstrate appropriate listening and learning skills when counselling a mother on feeding her infant
- demonstrate appropriate confidence and support skills when counselling a mother on feeding her infant
- assess a breastfeed using the Breastfeed Observation Job Aid
- demonstrate how to help a mother to position and attach her baby at the breast.

Session outline

120 minutes

Participants are together as a class led by one trainer to prepare for the session.

Participants work in small groups of 3-4 each with one trainer for the practical session in a ward or clinic.

- | | | |
|-----|-------------------------------|-------------|
| I. | Prepare the participants | 20 minutes |
| II. | Conduct the clinical practice | 100 minutes |

Preparation

- Study the instructions in the following pages, and ask all trainers who will lead groups to study the instructions also. You conduct Practical Session 2 in a similar way to Practical Session 1, but there are some differences. Make sure that you and the other trainers are clear about the differences.
- Make sure that there are copies of the PRACTICAL DISCUSSION CHECKLIST AVAILABLE for each trainer.
- Make sure that there are two copies of the BREASTFEED OBSERVATION JOB AID and one copy of the list of COUNSELLING SKILLS CHECKLIST available for each participant and trainer.

- ☐ If you are leading the small group:
 - Study the instructions in the following pages, so that you are clear about how to conduct the clinical practice.
 - Make sure that you have a copy of the PRACTICAL DISCUSSION CHECKLIST, to help you to conduct discussions.
 - Make sure that the participants in your group each have two copies of the Breastfeed Observation Job Aid, and one copy of the list of Listening and Learning Skills Checklist. Have one or two spare copies with you.
 - Find out where to take your group.

As you follow the text, remember:

- ☐ Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

I. Prepare the participants (one trainer)

20 minutes

One trainer leads a preparatory session with all participants and the other trainers together.

If you have to travel to another facility for the practical session, hold the preparatory session in the classroom before you leave. If necessary, this can take place on the evening or the morning before.

- ☐ Explain the following to the participants:
 - You are going to practise the 'listening and learning' skills that you learnt in Sessions 7 and 8 and assessing a breastfeed, with mothers in the ward.
 - You are also going to practise the 'confidence and support' skills that you learnt in Sessions 12 and 13, and helping a mother to position her baby.
 - It is important that you all practise helping a mother to position her baby at the breast, or to overcome any other difficulty. Often you will find that babies are sleepy. In this case you could say to the mother something like: "I see your baby seems to be sleepy now, but can we just go through the way to hold him when he is ready". Then go through the 4 key points of positioning with the mother. If you do this quite a few babies will wake up and want another feed when their nose is opposite the nipple.
 - You will need to take with you one copy of the COUNSELLING SKILLS CHECKLIST, two copies of the BREASTFEED OBSERVATION JOB AID, pencil and paper to make notes.
 - You will work in groups of 2-4 with one trainer.

What to do in the ward:

- Take it in turns to talk to a mother whilst the other members of the group observe.
- Introduce yourself to the mother and ask her permission to talk to her. Introduce the group and say they are interested in infant feeding. If a mother is not feeding, ask the mother to give a feed in the normal way at any time that her baby seems ready.

- Try to find a chair or a stool to sit on.
- Practise as many of the listening and learning skills as possible. Try to get the mother to tell you about herself, her situation and her baby. You can talk about ordinary life, not only about breastfeeding.
- Practise as many of the six confidence and support skills as possible. In particular, try to do these things:
 - praise the things that the mother and baby are doing right
 - give the mother two pieces of relevant information that are useful to her now.
- The other participants should stand quietly in the background. Try to be as still and quiet as possible.
- Make general observations of the mother and baby. Notice for example: does she look happy? Does she have formula or a feeding bottle with her?
- Make general observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the participant ask open questions? Does the mother talk freely, and seem to enjoy it?
- Make specific observations of the participant's listening and learning skills.
- Mark a ✓ on your Counselling Skills Checklist when he/she uses of skill, to help you remember for the discussion.
- When a mother breastfeeds observe the feed using the Breastfeed Observation Job Aid and put ticks in the boxes.
- Notice if the participant makes a mistake, for example, if she uses a judging word, or if she asks a lot of questions to which the mother says 'yes' and 'no'.
- When a mother breastfeeds observe the feed using the Breastfeed Observation Job Aid and put ticks in the boxes.
- Remember that you are not helping the mother at this point. If a mother needs help your trainer will take the opportunity to demonstrate how to help the mother to you.
- When you have finished thank the mother.

Caution participants about MISTAKES TO AVOID.

MISTAKES TO AVOID

Do not say that you are interested in breastfeeding.

The mother's behaviour may change. She may not feel free to talk about formula feeding.

You should say that you are interested in 'infant feeding' or in 'how babies feed'.

Be careful that the forms do not become a barrier.

The participant who talks to the mother should not make notes while she is talking. She needs to refer to the forms to remind her what to do, but if she wants to write, she should do so afterwards. The participants who are observing can make notes.

II. Conduct the clinical practice (all trainers)

100 minutes

These notes are for the trainers. Trainers should read these notes to ensure that they know what to do. There is no need to read these notes to the participants.

Take your group to the ward or clinic:

- Introduce yourself and your group to the staff member in charge.
- Ask which mothers and babies it would be appropriate to talk to, and where they are.
- Try to find a mother and baby who are breastfeeding, or a mother who thinks that her baby may want to feed soon. If this is not possible, talk to any mother.
- Try to make sure that each participant talks to at least one mother.
- Each time the participants have finished a counselling session with a mother, take them into another room or a corner to discuss your observations.
- Take with you spare copies of the BREASTFEED OBSERVATION JOB AID, COUNSELLING SKILLS CHECKLIST, PRACTICAL DISCUSSION CHECKLIST.

Guide the participant who is practising:

- Keep in the background, and try to let the participant work without too much interference.
- You do not need to correct every mistake that she makes immediately. If possible wait until the discussion afterwards. Then you can both praise what she did right and talk about anything she did not do right.
- However, if she is making a lot of mistakes, or not making any progress, then you should help her. Try to help in a way that does not make her embarrassed in front of the mother and the group.
- Also, if she starts to help or advise the mother, remind her that she should not do that during this practical session.
- Additionally, if a mother and baby show something important that the participants may not have observed, you can quietly draw their attention to it.
- You need to judge as participants work what will best help them to learn.
- Use your confidence and support skills to correct participants and to help them to develop confidence in their own clinical and counselling skills.

Discuss the participant's performance:

- Take the group away from the mother, and discuss what they observed.
- Use the PRACTICAL DISCUSSION CHECKLIST to help you to lead the discussion. Try not to spend too long going through the practical session with each participant. It is important that everyone has a chance to practise their skills. Use your counselling skills when giving feedback.
- Ask the 'General Questions', and then ask the specific questions about 'Listening and Learning' and about 'Assessing a breastfeed'.
- Ask the 'Confidence and support' questions in later practical sessions.
- Go through the COUNSELLING SKILLS CHECKLIST, and discuss how the participant practised them. First ask the participant him/herself to say how well he/she thinks she did. Then ask

the other participants. Try to encourage the participants to use their counselling skills in the way they give feedback to other participants.

- Go through the BREASTFEED OBSERVATION JOB AID, and discuss how many of the signs the group noticed. Ask them to decide if the baby was well or poorly positioned and attached.

Teach about mothers who need help:

- If at any time there is a mother who needs help, or who illustrates a particular situation, take the opportunity to teach about it.
- Ask a participant who identifies a mother needing help to report it to you. Ask the staff of the ward or clinic if they would like you to help the mother. If they agree, give the mother the necessary help, together with the participant.
- Ask the staff to be present if possible, and make sure that they understand what you suggest to the mother so that they can provide follow-up.
- Explain and demonstrate the situation to the other participants. This may take you ahead of what has been covered so far in the course, but it is important not to miss a good learning opportunity.
- If possible, suggest that participants revisit the mothers whom they talked to, to follow them up the next day.
- Encourage participants to observe health care practices:

Encourage participants, while they are in a ward or clinic, to notice:

- if babies room-in with their mothers
 - whether or not babies are given formula, or glucose water
 - whether or not feeding bottles are used
 - the presence or absence of advertisements for baby milk
 - whether sick mothers and babies are admitted to hospital together
 - how low-birth-weight babies are fed
 - if the child eats any food or drinks during the session
 - whether the child was given a bottle or soother / pacifier while waiting
 - what was the interaction like between the mother and the child
 - any posters or other information on feeding in the area.
- Explain that participants should not comment on their observations, or show any disapproval, while in the health facility. They should wait until the trainer invites them to comment privately, or in the classroom.
 - At the end of the practical session ask participants if they have any questions, and try to answer them.
 - Explain that a summary of this session can be found on pages 87-96 of the *Participant's Manual*.

Notes

PRACTICAL DISCUSSION CHECKLIST

Practical skills are best developed by introducing and demonstrating the skills, observing participants as they practise the skills, and giving feedback to participants on how well they performed. Feedback should include praising participants for things done well, and giving gentle suggestions for how to overcome difficulties. Use the checklist below to help guide your feedback discussions.

Questions to ask after each participant completes her turn practising (either in the clinic or using counselling stories)

To the participant who practised:

- What did you do well?
- What difficulties did you have?
- What would you do differently in the future?

To the participants who observed:

- What did the participant do well?
- What difficulties did you observe?

Listening and learning skills (give feedback on the use of these skills in all practical sessions)¹¹

- Which listening and learning skills did you use?
- Was the mother willing to talk?
- Did the mother ask any questions? How did you respond?
- Did you empathize with the mother? Give an example.

Confidence and support skills (give feedback on the use of these skills during practical sessions after Session 12)

- Which confidence and support skills were used?
(check especially for praise and for two relevant suggestions)
- Which skills were most difficult to use?
- What was the mother's response to your suggestions?

Key messages for complementary feeding (give feedback on the use of these skills in practical Session 35)¹²

- Which messages for complementary feeding did you use?
(check especially for "only a few relevant messages")
- What was the mother's response to your suggestions?

General questions to ask at the end of each practical session (in the clinic or using counselling stories)

- What special difficulties or situations helped you to learn?
- What was the most interesting thing that you learned from this practical session?

¹¹ See list of skills on the following page

¹² See list of key messages on page 267 of Participant's Manual and 526 of Trainer's Guide

COUNSELLING SKILLS

Listening and learning skills:

- Use helpful non-verbal communication.
- Ask open questions.
- Use responses and gestures that show interest.
- Reflect back what the mother/caregiver says.
- Empathize - show that you understand how she/he feels.
- Avoid words that sound judging.

Building confidence and giving support skills:

- Accept what the caregiver thinks and feels.
- Recognize and praise what a mother/caregiver and child are doing right.
- Give practical help
- Give relevant information.
- Use simple language.
- Make one or two suggestions, not commands

Session 17

Interpreting trends on growth charts

Objectives

After completing this session participants will be able to:

- Interpret trends on growth charts
- Determine whether a child is growing normally, has a growth problem or is at risk of a growth problem

Session outline

120 minutes

I.	Introduce the session	2 minutes
II.	Present Slides 17/2-17/7	45 minutes
III.	Group discussion on interpreting growth trends (Slides 17/8-17/13)	15 minutes
IV	Individual written exercise D	55 minutes
V	Summarize the session	3 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Ensure that Slides 17/1-17/13 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

- Show **Slide 17/1 - Session 17 Objectives** and read out the objectives:

17/1

Session 17 Objectives

After completing this session participants will be able to:

- Interpret trends on growth charts
- Determine whether a child is growing normally, has a growth problem or is at risk of a growth problem

II. Present Slides 17/2 - 17/7**45 minutes**

- Make these remarks:
- We saw in Session 15 that even if you have just one set of measurements, you can get a good picture of growth status by looking at different indicators.
 - Could someone illustrate for us why looking at one indicator may not be enough?
 - In this session we will go further and look at growth trends that we can draw when a child has multiple visits.

Show **Slide 17/2 - Interpreting trends** and make the points that follow:

Interpret trends on growth charts 17/2

- Points from several visits show trends of normal growth, an existing problem or risk of a problem
- "Normal" growth generally runs parallel to the z-score lines (tracking)
- Look out when a growth lines crosses z-score lines, inclines/declines sharply or remains flat
- Risk depends on where the line originates
- Consider the child's whole situation when interpreting trends

- To identify trends in a child's growth, look at points for growth indicators plotted at a series of visits. Trends may indicate that a child is growing consistently and well, or they may show that a child has a growth problem, or that a child is "at risk" of a problem and should be reassessed soon.
- "Normally" growing children follow trends that are, in general, parallel to the median and z-score lines. Most children will grow in a "track," that is, on or between z-score lines and roughly parallel to the median; the track may be below or above the median.
- The following situations may indicate a problem or suggest risk:
 - A child's growth line crosses a z-score line and keeps going.
 - There is a sharp incline or decline in the child's growth line.
 - The child's growth line remains flat (stagnant); i.e. there is no gain in weight or length/height.
- Whether or not the above situations actually represent a problem or risk depends on where the change in the growth trend began and where it is headed. For example, if a child has been ill and lost weight, a rapid gain (shown by a sharp incline on the graph) can be good and indicate "catch-up growth." Similarly, for an overweight child a slightly declining or flat weight growth trend towards the median may indicate desirable "catch-down." It is very important to consider the child's whole situation when interpreting trends on growth charts.

Show **Slide 17/3 - Crossing z-score lines** and make the points that follow:

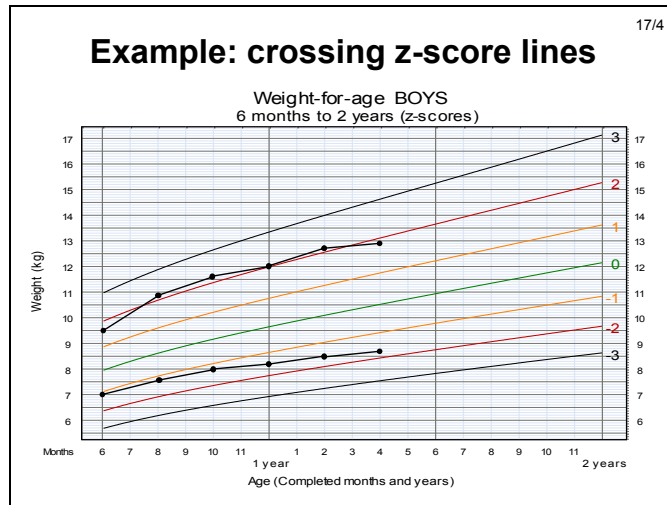
Crossing z-score lines

17/3

- Growth lines that cross z-score lines (not just those that are labelled on the chart) indicate possible risk.
- Children who are growing and developing normally will generally be on or between -2 and 2 z-scores of a given indicator.
- The growth of an individual child plotted over time is expected to track fairly close to the same z-score.

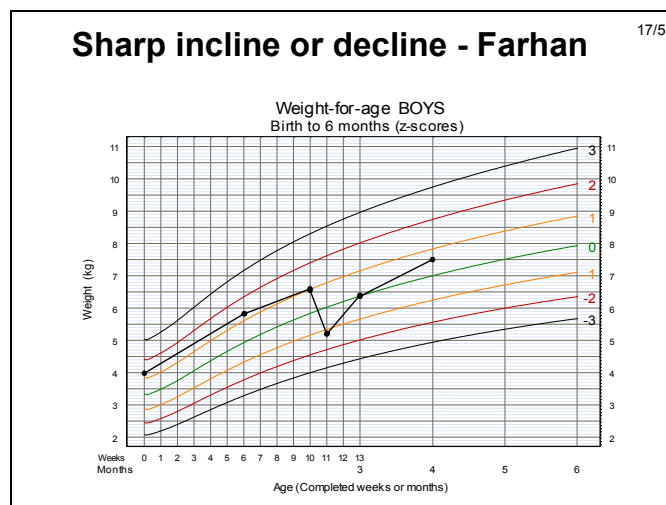
- Growth lines that cross z-score lines (not just those that are labelled on the chart) indicate possible risk.
- Children who are growing and developing normally will generally be on or between -2 and 2 z-scores of a given indicator.
- The growth of an individual child plotted over time is expected to track fairly close to the same z-score.

□ Show Slide 17/4 - Crossing z-score lines and make the points that follow:



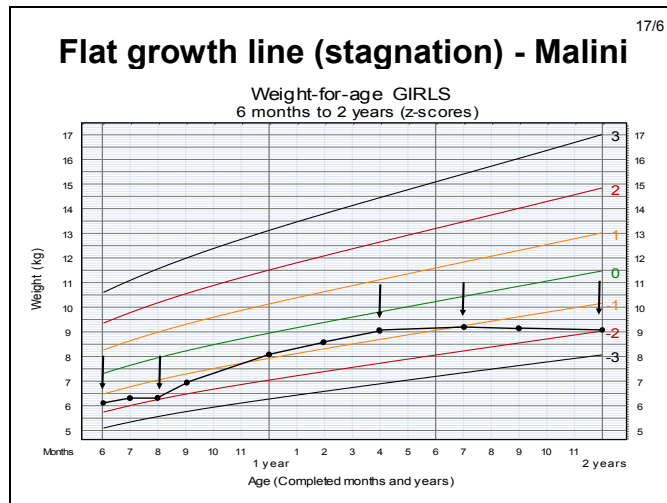
- The figure in the slide presents two theoretical growth lines. In one of the lines growth generally tracks along 2 z-score crossing it from time to time in a pattern that indicates no risk. The other line shows a boy's weight falling away from his expected growth track. Although his growth line remains between -1 and -2 z-score, this child has in fact crossed z-scores following a systematic trend that indicates risk.
- A growth line tending towards the median, is probably a good change. If it tends away from the median, this likely signals a problem or risk of a problem.
- If the growth line is inclining or declining so that it may cross a z-score line soon, consider whether the change may be problematic. In the example graph, if the trend in the lower growth line continues, it will soon cross the cut-off line (-2 z-score) that defines underweight. If a trend towards stunting, overweight or underweight is noticed in time, it may be possible to intervene in good time to prevent a problem.

☐ Show **Slide 17/5 - Sharp incline or decline** and make the points that follow:



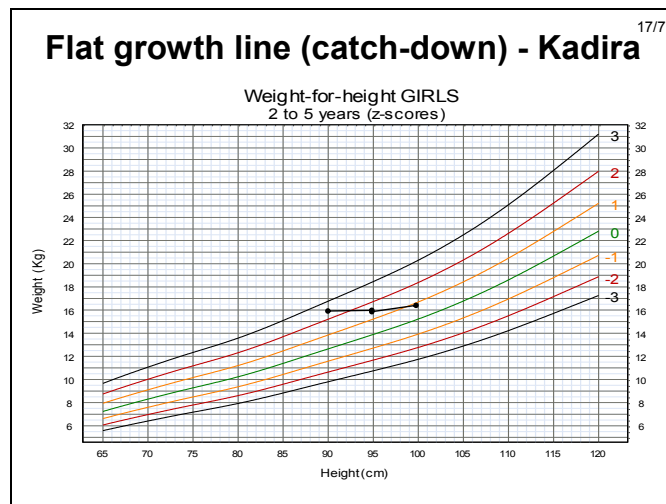
- Any sharp incline or decline in a child’s growth line requires attention. If a child has been ill or severely undernourished, a sharp incline is expected during the re-feeding period as the child experiences “catch-up” growth. Otherwise, a sharp incline is not good, as it may signal a change in feeding practices that will result in overweight.
- If a child has gained weight rapidly, look also at height. If the child grew in weight only, this is a problem. If the child grew in weight and height proportionately, this is probably catch-up growth from previous undernutrition, because of improvement in feeding or cure of previous infection. In this situation, the weight-for-age and height-for-age charts should show inclines, while the weight-for-height growth line tracks steadily along the z-score curves.
- A sharp decline in the growth line of a normal or undernourished child indicates a growth problem to be investigated and remedied.
- Even if a child is overweight, he or she should not have a sharp decline in the growth line, as losing too much weight rapidly is undesirable. The overweight child should instead maintain his weight while increasing in height; i.e. the child should “grow into his weight.”
- Example – Farhan
- Farhan’s weight-for-age chart shows a sharp decline from age 10 to 11 weeks, when he had diarrhoea and lost 1.3 kg. The chart shows a sharp incline after the episode of diarrhoea, during re-feeding, as Farhan gained back most of the lost weight.

Show Slide 17/6 - Flat growth line (stagnation) and make the points that follow:



- A flat growth line, also called stagnation, usually indicates a problem. If a child's weight stays the same over time as height or age increases, the child most likely has a problem. If height stays the same over time, the child is not growing. The exception is when an overweight or obese child is able to maintain the same weight over time, bringing the child to a healthier weight-for-height.
- If an overweight child is losing weight over time, and the weight loss is reasonable, the child should continue to grow in height. However, if the child experiences no growth in height over time, there is a problem. This problem would be evident as a flat growth line on the height-for-age chart.
- For children in age groups where the growth rate is fast, as shown by steep growth curves (e.g. during the first 6 months of life), even one month's stagnation in growth represents a possible problem.
- Example – Malini's weight-for-age chart shows a flat growth line (stagnation) from age 6 months to 8 months and again from about 1 year and 4 months to 2 years. These periods of stagnation correspond to times when Malini had malaria episodes (indicated by arrows). From 8 months up to 1 year and 4 months, she grew. Due to periods of stagnation, Malini's weight-for-age is about to cross the -2 z-score line.

Show Slide 17/7 - Flat growth line (catch-down) and make the points that follow:

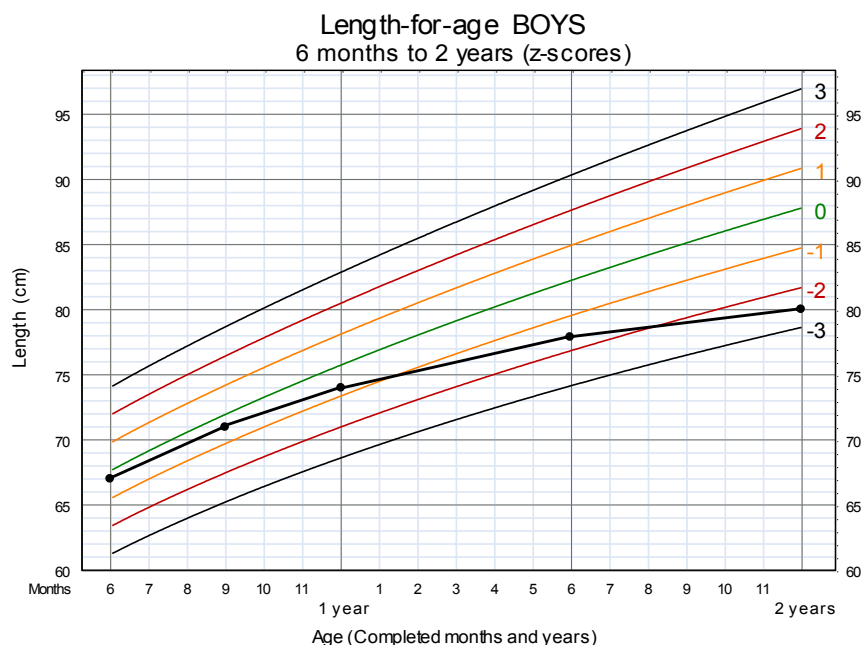


- Unlike the flat line on Malini’s chart, the flat line on Kadira’s weight-for-height chart below shows a good trend. Kadira was overweight, but her weight remained about the same while she grew in height. She is no longer overweight.

III. Group Discussion - interpreting growth trends 15 minutes

- Lead a discussion of the growth trends apparent on the charts for each child. Use the questions below to guide the discussion. Possible answers are given below each question.
 - Slides 17/8-17/10 show **Ben’s growth charts** with 5 visits from age 6 to 24 months.

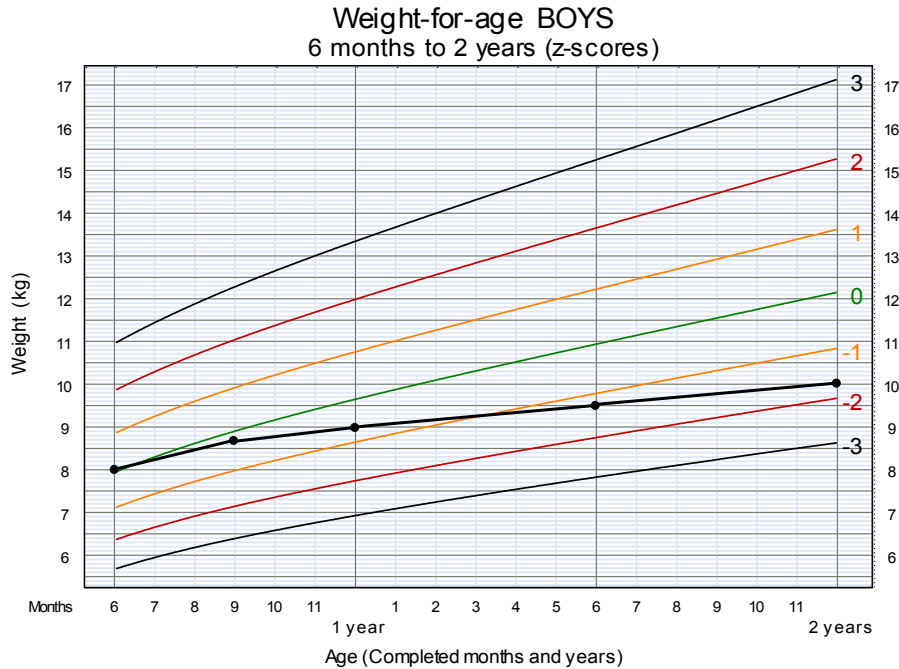
Slide 17/8: Ben's height-for-age



- What trend is shown on Ben’s **length-for-age** chart? Has his growth line crossed any z-score lines systematically, and if so, in what direction? Does this chart show a growth problem or trend towards a growth problem?

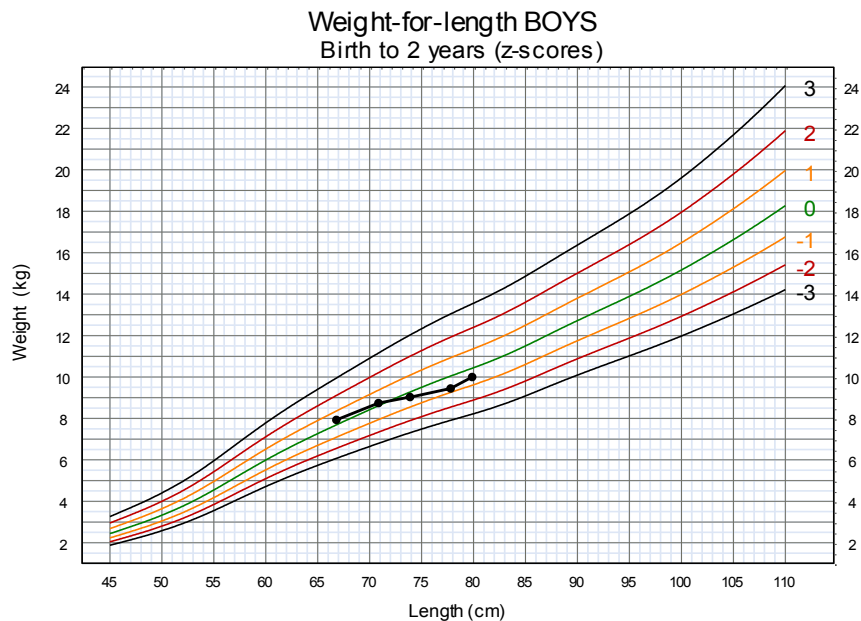
- Ben's length-for-age was close to the median at age 6 months, but over the next 18 months his growth line trended systematically downward and crossed the -1 and the -2 z-score lines. By age 24 months he was stunted.

Slide 17/9: Ben's weight-for-age



- What trend is shown on Ben's **weight-for-age** chart? Has his growth line crossed any z-score lines systematically, and if so, in what direction? Does this chart show a growth problem or trend towards a growth problem?
 - Ben's weight-for-age was on the median at age 6 months, but over the next 18 months his growth line trended systematically away from the median, crossed the -1 z-score line, and by 2 years was close to the -2 z-score line.

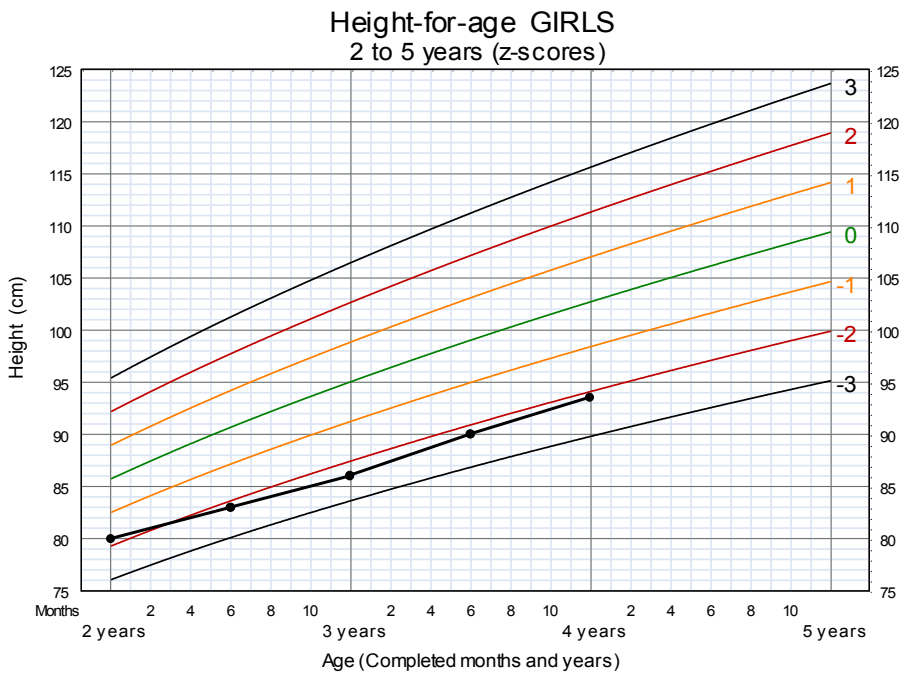
Slide 17/10: Ben's weight-for-length



- What trend is shown on Ben's **weight-for-length** chart? Does this chart show a growth problem or trend towards a growth problem?
 - Unlike his weight-for-age and length-for-age, Ben's weight-for-length has stayed close to the median. No problem is evident on the weight-for-length chart.
- Using Ben as an example, stress the importance of looking at trends on all three growth charts. If you only looked at the weight-for-length chart, you might think that Ben was growing well. However, when you look at the weight-for-age and height-for-age charts, problem trends become apparent.

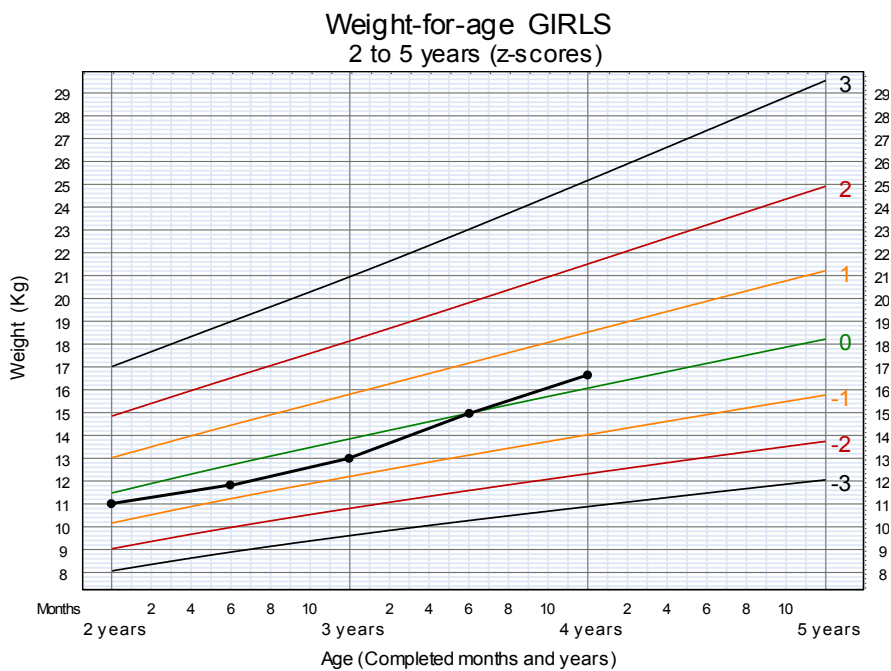
Slides 17/11-17/13 show Delia's growth charts with 5 visits from age 2 to 4 years.

Slide 17/11: Delia's height-for-age



- What trend is shown on Delia's **height-for-age** chart? Does this chart show a growth problem or trend towards a growth problem?
 - For almost two years Delia's height-for-age has stayed just below the -2 z-score line. She is stunted. The stunting does not seem to be getting any worse.

Slide 17/12: Delia's weight-for-age



- What trend is shown on Delia's **weight-for-age** chart? Does this chart show a growth problem or trend towards a growth problem?
 - At age two years Delia's weight-for-age was slightly below the median; then over the next two years it climbed to a point slightly above the median. No problem is evident from this chart alone.

Slide 17/13: Delia's weight-for-height



- What trend is shown on Delia's **weight-for-height** chart? Has her growth line crossed any z-score lines systematically, and if so, in what direction? Does this chart show a growth problem or trend towards a growth problem?
 - Delia's weight-for-height is trending upward. Over a period of two years, her growth line has crossed the 1 and 2 z-score lines. She has become overweight. Although her weight is normal for her age, it is high for her stunted height.
- Again, use this example to stress the importance of looking at trends on all of the growth charts. If you look only at Delia's weight-for-age, she appears to be growing normally. If you look only at her height-for-age, you might think that she is just a short child tracking along a low z-score but since her stunting is not getting any worse, she is fine. However, if you look at weight-for-length, the growth problem of overweight becomes apparent.

Participants work individually on the continuing case study 55 minutes



Written Exercise E

Continuing Case Studies – Nalah and Toman

In Exercise D, Session 14, you plotted points on the growth charts in Nalah's and Toman's Growth Records. In this exercise you will review the growth charts for Nalah and Toman to identify:

- each child's growth patterns
- any current growth problem(s)
- any growth trend(s) that may become a problem

To describe growth problems, use the definitions given on page 88 of the *Participant's Manual*, and next to the growth charts in the Growth Record. To describe growth patterns and trends, point out whether the growth line shows an incline or decline, whether it is tracking along or between certain z-score lines, whether it has crossed a z-score line, etc.

Nalah

Review the growth charts that you completed in Nalah's Girl's Growth Record. Then write short answers to the questions below:

1. a) Describe the growth trend shown on Nalah's length-for-age chart.

 b) Does Nalah's length-for-age chart show a current growth problem or risk of a problem, and if so, what is it?

2. a) Describe the growth trend shown on Nalah's weight-for-age chart.

 b) Does Nalah's weight-for-age chart show a current growth problem or risk of a problem, and if so, what is it?

3. a) Describe the growth trend shown on Nalah's weight-for-length chart.

 b) Does Nalah's weight-for-length chart show a current growth problem or risk of a problem, and if so, what is it?

4. Summarize Nalah's growth pattern over the first 6 months of life below.

Toman

Review the growth charts that you completed in Toman's Boy's Growth Record. Then write short answers to the questions below:

1. a) Describe the growth trend shown on Toman's length-for-age chart.

b) Does Toman's length-for-age chart show a current growth problem or risk of a problem, and if so, what is it?

2. a) Describe the growth trend shown on Toman's weight-for-age chart.

b) Does Toman's weight-for-age chart show a current growth problem or risk of a problem, and if so, what is it?

3. a) Describe the growth trend shown on Toman's weight-for-length chart.

b) Does Toman's weight-for-length chart show a current growth problem or risk of a problem, and if so, what is it?

4. Briefly summarize Toman's growth pattern from age 1 year and 1 month to age 2 years.

**When you have finished this exercise,
review your answers with a facilitator.**

Answers to Written Exercise E:

Continuing Case Studies - Interpretation of growth trends

Nalah

1. a) Nalah was an average length at birth but has experienced periods of slow growth and stagnation. Her length-for-age has thus dropped from the median at birth to below -3 z-score at 6 months.
b) At 6 months, Nalah is severely stunted.
2. a) Nalah's weight at birth was just below the median but because of periods of very slow growth (e.g., birth to 6 weeks, 10 to 13 weeks), followed by inadequate catch-up growth (e.g., at 6 to 10 weeks and at 3 to 4 months), her weight-for-age has dropped systematically to below -2 z-score at 6 months.
b) Nalah is underweight.
3. a) Nalah's weight-for-length has fluctuated between -1 z-score and the median since birth and at 6 months is tracking along the median.
b) The weight-for-length chart shows the stagnation in length that occurred when Nalah was 55 cm long but currently it does not indicate a growth problem or risk of a problem.
4. Although Nalah was average length at birth, she became severely stunted by the age of 6 months. Her growth in both length and weight stagnated between age 10 weeks and 13 weeks, perhaps because of the episode of diarrhoea for which she was seen at the end of this period. Her weight has stayed appropriate for her length, so problems are not apparent on the weight-for-length chart. However, she is severely stunted and underweight according to the length-for-age and weight-for-age charts.

Toman

1. a) His length-for-age has been consistent, staying very close to the 1 z-score line.
b) No problem or risk of a problem is evident on the length-for-age chart.
2. a) Toman's weight is increasing too rapidly in relation to his age. His weight-for-age line has crossed the 2 z-score line and continued rising.
b) The weight-for-age chart shows that Toman is very heavy for his age, but a judgment of whether he has a problem with overweight should be based on his weight-for-height.
3. a) Toman's weight is increasing too rapidly in relation to his length. His weight-for-length has crossed the 2 z-score line and reached the 3 line.
b) The weight-for-length chart shows that Toman is overweight and is at risk of becoming obese.
4. Toman has grown normally in length, tracking along line 1 z-score. But his weight has increased too rapidly for his length and his age, as shown on two of the growth charts (weight-for-age, and weight-for-length), where his growth lines are near or on the 3 z-score line. He is overweight and has a definite trend towards obesity.

Session 18

Taking a Feeding History

Objectives

After completing this session participants will be able to:

- take a feeding history of an infant 0-6 months
- demonstrate appropriate use of the FEEDING HISTORY JOB AID, 0-6 MONTHS.

Session outline

20 minutes

Participants are all together for a demonstration led by one trainer

I.	Introduce the session	2 minutes
II.	Explain how to take a feeding history	3 minutes
III.	Explain the FEEDING HISTORY JOB AID, 0-6 MONTHS	3 minutes
IV.	Demonstrate how to use the FEEDING HISTORY JOB AID, 0-6 MONTHS	10 minutes
V.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for general information about how to give a demonstration.
- Study the session notes so that you are clear about what to do.
- For DEMONSTRATION 18.A: USING THE FEEDING HISTORY JOB AID, 0-6 MONTHS: Ask a participant to play the part of Mrs Green and ask one of the other trainers to play the part of Nurse Jane. Plot two local growth charts for Lucy: one for the demonstration, and one to be passed around the participants during the demonstration. Make sure that you have practised this demonstration beforehand.
- Make sure Slide 18/1 is ready. As there is only one slide, you might prefer to read aloud the objectives without projecting them onto the screen.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

I. Introduce the session**2 minutes**

- Show **Slide 18/1 - Session 18 Objectives** and read out the objectives:

13/1

Taking a feeding history

After completing this session participants will be able to:

- take a feeding history of an infant 0-6 months
- demonstrate appropriate use of FEEDING HISTORY JOB AID, 0-6 MONTHS

- Explain why it is necessary to take a history:
- In this session we will learn how to take a feeding history of a child aged 0-6 months. The baby may be breastfeeding or receiving another form of milk and may, or may not, be receiving complementary feeds.
 - The FEEDING HISTORY JOB AID, 0-6 MONTHS will help you to remember the main questions to ask for any infant.
 - As you become more experienced your counselling skills will help you to learn more about different situations.

II. Explain how to take a feeding history**3 minutes**

- Ask participants to turn to page 106 of their Manual and find the box HOW TO TAKE A FEEDING HISTORY, 0-6 MONTHS.
- Ask participants to take turns to read out the points.

HOW TO TAKE A FEEDING HISTORY, 0-6 MONTHS

Greet the woman in a kind and friendly way.

Use the mother's name and the baby's name (if appropriate).

Ask her to tell you about herself and her baby in her own way, starting with the things that she feels are important.

Look at the child's growth chart.

It may tell you some important facts and save you asking some questions.

Ask the questions that will tell you the most important facts.

The FEEDING HISTORY JOB AID, 0-6 MONTHS is a guide to the facts that you may need to learn about. Decide what you need to know from each of the six sections.

Be careful not to sound critical.

Use confidence and support skills.

Try not to repeat your questions.

If you need to repeat a question, first say: "Can I make sure that I have understood clearly?" and then, for example "You said that (name) had both diarrhoea and pneumonia last month?"

Take time to learn about more difficult, sensitive things.

For example:

- . What does the baby's father say? Her mother? Her mother-in-law?
- . Is she happy about having the baby now? About the baby's sex?

Some mothers tell you these things spontaneously. Others tell you when you empathize, and show that you understand how they feel. Others take longer. If a mother does not talk easily, wait, and ask again later, or on another day, perhaps somewhere more private.

III. Explain the FEEDING HISTORY JOB AID, 0-6 MONTHS**3 minutes**

- Ask participants to look at the FEEDING HISTORY JOB AID, 0 TO 6 MONTHS, on page 107 of their Manual. Notice that the job aid has six sections. Ask participants to make themselves familiar with the form. Make these points:
 - Try to memorize the headings:
 - Feeding
 - Health
 - Pregnancy, birth and early feeds (where applicable)
 - Mother's condition and family planning
 - Previous infant feeding experience
 - Family and social situation.
 - When you know the headings you will find it easier to remember the different points in each section.
 - Remember to use your counselling skills when you are taking a history from a mother. Try to ask questions in an open way, although you may also have to ask some closed questions if you need specific information.
 - Remember to use other counselling skills, such as reflecting back, empathy, and praise, in between questions so that the mother is encouraged to talk more and to feel confident.

FEEDING HISTORY JOB AID, 0-6 MONTHS	
Age of child Particular concerns about feeding of child	
Feeding Milk (breast milk, formula, cow's milk, other) Frequency of milk feeds Length of breastfeeds/quantity of other milks Night feeds Other foods in addition to milk (when started, what, frequency) Other fluids in addition to milk (when started, what, frequency) Use of bottles and how cleaned Feeding difficulties (breastfeeding/other feeding)	
Health Growth chart (birth weight and length, weight and length now) Urine frequency per day (6 times or more), if less than 6 months Stools (frequency, consistency) Illnesses	
Pregnancy, birth, early feeds (where applicable) Antenatal care Feeding discussed at ante-natal care Delivery experience Rooming-in Prelacteal feeds Postnatal help with feeding	
Mother's condition and family planning Age Health – including nutrition and medications Breast health Family planning	
Previous infant feeding experience Number of previous babies How many breastfed and for how long If breastfed – exclusive or mixed fed Other feeding experiences	
Family and social situation Work situation Economic situation Family's attitude to infant feeding practices	

IV. Demonstrate how to use the FEEDING HISTORY JOB AID, 0-6 MONTHS

10 minutes

- Explain that you will demonstrate how to use the FEEDING HISTORY JOB AID, 0-6 MONTHS. Ask the participants whom you have prepared to read the words of the health worker and the mother. Pass Lucy's growth chart around the participants during the demonstration.
- Ask participants to follow the FEEDING HISTORY JOB AID, 0-6 MONTHS on page 107 of their Manual as you give the demonstration.
- Ask them to listen for counselling skills.

DEMONSTRATION 18.A TAKING A FEEDING HISTORY, 0-6 MONTHS

Health Worker: "Good morning, I am Nurse Jane. May I ask your name, and your baby's name?"

Mother: "Good morning, nurse; I am Mrs Green and this is my daughter Lucy."

Health Worker: "She is lovely – how old is she?"

Mother: "She is 5 months now."

Health Worker: "Yes – and she is taking an interest in what is going on, isn't she? Tell me, what milk have you been giving her?"

Mother: "Well, I started off breastfeeding her, but she is so hungry and I never seemed to have enough milk so I had to give her bottle feeds as well."

Health Worker: "Oh dear, it can be very worrying when a child is always hungry. You decided to start bottle feeds? What are you giving her?"

Mother: "Well, I put some milk in the bottle and then mix in a spoonful or two of cereal."

Health Worker: "When did she start these feeds?"

Mother: "Oh, when she was about 2 months old."

Health Worker: "About 2 months. How many bottles do you give her each day?"

Mother: "Oh, usually two – I mix up one in the morning and one in the evening, and then she just sucks it when she wants to – each bottle lasts quite a long time."

Health Worker: "So she just takes the bottle little by little? What kind of milk do you use?"

Mother: "Yes – well, if I have formula, I use some of that; or else I just use cow's milk and mix in some water, or sweetened milk, because they are cheaper. She likes the sweet milk!"

Health Worker: "Formula is very expensive isn't it? Tell me more about the breastfeeding. How often is she doing that now?"

Mother: "Oh she breastfeeds when she wants to – quite often in the night, and about 4 or 5 times in the day – I don't count. She likes it for comfort."

Health Worker: "She breastfeeds at night?"

Mother: "Yes she sleeps with me."

Health Worker: "Oh that makes it easier, doesn't it? Did you have any other difficulties with breastfeeding, apart from worrying about not having enough?"

Mother: "No, it wasn't difficult at all."

Health Worker: "Do you give her anything else yet? Any other foods or drinks?"

Mother: "No – I won't give her food for a long time yet. She is quite happy with the bottle feeds."

Health Worker:	“Can you tell me how you clean the bottles?”
Mother:	“I just rinse them out with hot water. If I have soap I use that, but otherwise just water.”
Health Worker:	“OK. Now can you tell me about how Lucy is. Has she got a growth record? Can I see it? [mother hands over growth record] Thank you, now let me see.... She was 3.5 kilograms when she was born, she was 5.5 kilograms when she was 2 months old, and now she is 6.0 kilograms. You can see that she gained weight fast for the first two months, but it is a bit slower since then. Can you tell me if Lucy has had any illnesses?”
Mother:	“Well, she had diarrhoea twice last month, but she seemed to get better. Her stools are normal now.”
Health Worker:	“Can I ask about the earlier days – how was your pregnancy and delivery?”
Mother:	“They were normal.”
Health Worker:	“What did they tell you about feeding her when you were pregnant, and soon after she was born? Did anyone show you what to do?”
Mother:	“Nothing – they told me to breastfeed her, but that was all. The nurses were so busy, and I came home after one day.”
Health Worker:	“They just told you to breastfeed?”
Mother:	“Yes – but I didn’t have any milk in my breasts even then, so I gave her some glucose water until the milk started.”
Health Worker:	“It is confusing isn’t it when your breasts feel soft after delivery? You need help then, don’t you?”
Mother:	“Yes.”
Health Worker:	“Can I ask about you? How old are you?”
Mother:	“Sure – I am 22.”
Health Worker:	“And how is your health?”
Mother:	“I am fine.”
Health Worker:	“How are your breasts?”
Mother:	“I have had no trouble with my breasts.”
Health Worker:	“May I ask if you are thinking about another pregnancy at any time? Have you thought about family planning?”
Mother:	“No – I haven’t thought about it – I thought that you can’t get pregnant when you are breastfeeding.”
Health Worker:	“Well, it is possible if you are also giving other feeds. We will talk about it more later if you like. Is Lucy your first baby?”
Mother:	“Yes. And I do not want another one just yet.”
Health Worker:	“Tell me about how things are at home – are you going out to work?”
Mother:	“No – I am a housewife now. I may try to find a job later when Lucy is older.”
Health Worker:	“Who else do you have at home to help you?”
Mother:	“Lucy’s father is with me. He has a job as a driver and he is very fond of Lucy, but he thinks she should not breastfeed at night – he thinks she breastfeeds too much and he wants her to sleep in another bed. But I am not sure..... He says that too much breastfeeding is what gives her diarrhoea.”

- Discuss the demonstration. Ask the group to think about the technique of taking a feeding history. Participants may look at the demonstration on pages 108-109 of their Manual to help them to answer the following questions:
 - Did Nurse Jane use Listening and Learning skills to obtain information – can you give some examples?
 - (Encourage participants to give specific examples of open questions and reflection)
 - What examples of empathy did you hear the health worker use?
 - (Examples of empathy included: “Oh dear, it can be very worrying when a child is always hungry.” “It is confusing isn’t it when your breasts feel soft after delivery.”)
 - Did Nurse Jane ask some questions from all six sections of the FEEDING HISTORY JOB AID, 0-6 MONTHS?
 - Did she leave out any important questions?
 - Did asking questions from each section of the form help her to understand the difficulties?
 - What were the feeding difficulties in this situation?
 - (*These included: perceived milk insufficiency at two months leading to introduction of bottle feeds; giving cereal in the bottles; use of non-modified cow’s milk and sweetened milk if the formula runs out; inappropriate cleaning of the feeding bottles; two episodes of diarrhoea; poor growth since two months; no help with early breastfeeds; early introduction of glucose water; attitude of Lucy’s father*).

V. Summarize the session**2 minutes**

- Ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on pages 105-110 of the *Participant’s Manual*.

Session 19

Common Breastfeeding Difficulties

Objectives

After completing this session participants will be able to identify the causes of, and help mothers with, the following difficulties:

- 'not enough milk'
- a crying baby
- breast refusal

Session outline

60 minutes

Participants are all together for a lecture presentation by one, two or three trainers.

I.	Introduce the session	3 minutes
II.	'Not enough milk'	20 minutes
III.	Crying baby	20 minutes
IV.	Refusal to breastfeed	15 minutes
V.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for guidance on how to give a presentation with slides.
- Make sure that Slides 19/1-19/5 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- This is a long session which divides easily into 3 sections: 'not enough milk', crying baby and refusal to breastfeed. Trainers can divide the session.
- Prepare flipcharts or boards to write up lists of ideas.
- If you do not have enough flipchart stands, post up sheets of flipchart paper of the wall to write on. Make sure that the room is arranged so that participants can see the lists.
- There is a lot of information in the 'Further Information' section. Make sure that you have read this as it may help you to answer participants' questions.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**3 minutes**

- Show **Slide 19/1 - Session 19 Objectives** and read out the objectives:

19/1

Common breastfeeding difficulties

After completing this session participants will be able to identify causes of, and help mothers with, the following difficulties:

- 'not enough milk'
- a crying baby
- breast refusal

- Make these introductory points:
- In previous sessions we have looked at ways to find out how mothers are managing with breastfeeding.
 - These include:
 - good counselling skills to encourage a mother to tell you what is worrying her
 - assessing a breastfeed, using your skills of observation to see if a baby is well positioned and well attached
 - taking a detailed feeding history.
 - There are many reasons why mothers stop breastfeeding or start to mix feed, even if they decided, antenatally, to breastfeed exclusively.
 - When helping mothers with difficulties you will need to use all the skills you have learnt so far. Lay counsellors and community health workers have important roles to support mothers through these difficulties, as mothers may not visit a health facility to seek help.
 - We will start by looking at mothers with 'not enough milk'.

II. 'Not enough milk'**20 minutes**

- Show **Slide 19/2 - 'Not enough milk'** and make the points that follow:

19/2

'Not enough milk'

- This is one of the most common reasons for stopping breastfeeding
- Usually when a mother **thinks** she does not have enough breast milk, her baby is getting all he needs
- Sometimes a baby does **not** get enough breast milk. But this is usually because of ineffective suckling. It is rarely because his mother cannot produce enough

- One of the most common reasons for a mother to stop breastfeeding is that she thinks she does not have enough milk.
- Usually, even when a mother thinks that she does not have enough breast milk, her baby is, in fact, getting all that he needs.
- Almost all mothers can produce enough breast milk for one or even two babies.
- They can almost all produce more than their babies need.
- Sometimes a baby does not get enough breast milk. But it is usually because he is not suckling enough, or not suckling effectively. It is rarely because his mother cannot produce enough.
- So it is important to think not about how much milk a mother can produce, but about how much milk a baby is getting.

Discuss how to decide if a baby is getting enough milk or not

- Develop a list of reasons that make mothers think that they do not have enough milk.

Ask: *What makes mothers think that they do not have enough milk?*

Write participants' replies on a flipchart. *Do not take too long over this.*

Continue until you have a list of at least six signs, and if possible until someone has said 'poor weight gain'.

- The first step in helping mothers with insufficient milk is to confirm if the baby is receiving enough breast milk or not.
- There are only two reliable signs that a baby is not receiving enough breast milk.

Show **Slide 19/3 - Reliable signs** and read out the reliable signs from the overhead:

19/3

Reliable signs that a baby is not getting enough milk

Poor weight gain

Small amount of concentrated urine

- less than 6 times per day

Make these points:

- Babies' weight gain is variable, and each child follows his or her own pattern.
- You cannot tell from a single weighing if a baby is growing satisfactorily- it is necessary to weigh several times over a few days at least
- A baby who is below his or her birth weight at the end of the second week needs assessment.
- From 2 weeks, babies who are breastfed may gain from about 500 g to 1 kg or more each months. All these weight gains are normal.
- Look at the baby's growth record if available, measure the baby now, and arrange to measure him/her again in one week's time.
- An exclusively breastfed baby who is getting enough milk usually passes dilute urine at least 6-8 times in 24 hours.
- A baby who is not getting enough breast milk passes urine less than six times a day (often less than four times a day).
- His urine is also concentrated, and may be strong smelling and dark orange in colour.
- If a baby is having other drinks, for example water, as well as breast milk, you cannot be sure he is getting enough milk if he is passing lots of urine.

- Show **Slide 19/4 - Possible signs** and read out the signs:

19/4

Possible signs that a baby is not getting enough breast milk

- Baby not satisfied after breastfeeds
- Baby cries often
- Very frequent breastfeeds
- Very long breastfeeds
- Baby refuses to breastfeed
- Baby has hard, dry, or green stools
- Baby has infrequent small stools
- No milk comes out when mother expresses
- Breasts did not enlarge (during pregnancy)
- Milk did not 'come in' (after delivery)

- Although these signs may worry a mother, there may be other reasons for them, so they are not reliable. For example, a baby may cry often because he has colic, although he might be getting plenty of milk (we will discuss colic later in this session).

- Explain that participants can find the complete list of **Reliable** and **Possible** signs on page 112 of their Manuals.

Discuss the reasons why a baby may not get enough breast milk

- Make these points:

- Once you have decided, using the reliable signs, that a baby is not getting enough breast milk, it is important to find out why, before you can help the mother.

Ask: *Can you think of any reasons why a baby may not get enough breast milk?*

Wait for a few replies. *Continue if possible until they have suggested at least one 'breastfeeding factor' and at least one 'psychological factor'.*

- Ask participants to turn to page 113 of their Manuals and find the box REASONS WHY A BABY MAY NOT GET ENOUGH BREAST MILK.
- Make the following points:
 - The reasons are arranged in four columns:
 - Breastfeeding factors
 - Mother: psychological factors
 - Mother: physical condition
 - Baby's condition
- Ask one participant to read out the reasons in the first column (Breastfeeding factors), a second participant the second column, a third participant the third column, a fourth participant the fourth column.

REASONS WHY A BABY MAY NOT GET ENOUGH BREAST MILK			
BREASTFEEDING FACTORS	MOTHER: PSYCHOLOGICAL FACTORS	MOTHER: PHYSICAL CONDITION	BABY'S CONDITION
Delayed start	Lack of confidence	Contraceptive pill, diuretics	Illness
Feeding at fixed times	Worry, stress	Pregnancy	Abnormality
Infrequent feeds	Dislike of breastfeeding	Severe malnutrition	
No night feeds	Rejection of baby	Alcohol	
Short feeds	Tiredness	Smoking	
Poor attachment		Retained piece of placenta (rare)	
Bottles, pacifiers		Poor breast development (very rare)	
Other foods			
Other fluids (water, teas)			
These are COMMON		These are NOT COMMON	

Make these points:

- The reasons in the first two columns ('Breastfeeding factors' and 'Mother: psychological factors') are common.
- Psychological factors are often behind the breastfeeding factors, for example, lack of confidence causes a mother to give bottle feeds.
- Look for these common reasons first.
- The reasons in the second two columns ('Mother: physical condition' and 'Baby's condition') are not common.
- So it is not common for a mother to have a physical difficulty in producing enough breast milk.
- Think about these uncommon reasons only if you cannot find one of the common reasons.

Discuss how to help mothers with 'not enough milk' Make these points:

- We have already found out whether the baby is really getting enough breast milk or not.
- If the baby is not getting enough breast milk you need to find out why so that you can help the mother.
- If the baby is getting enough breast milk, but the mother thinks that he isn't, you need to find out why she doubts her milk supply so that you can build her confidence.

Babies who are not getting enough milk:

- Use your counselling skills to take a good feeding history.
- Assess a breastfeed to check positioning and attachment; to look for bonding or rejection.
- Use your observation skills to look for illness or physical abnormality in the mother or baby.
- What you suggest to the mother as solutions will depend upon the cause of the insufficient milk.
- Always remember to arrange to see the mother again soon. If possible see the mother and baby daily until the baby is growing appropriately and the mother feels more confident. It may take 3-7 days for the baby to gain weight.

Babies who are getting enough milk but the mother thinks they are not:

- Use your counselling skills to take a good feeding history.
 - Try to learn what may be causing the mother to doubt her milk supply.
 - Explore the mother's ideas and feelings about her milk and pressures she may be experiencing from other people regarding breastfeeding.
 - Assess a breast feed to check positioning and attachment; to look for bonding or rejection.
 - Praise the mother about good points about her breastfeeding technique and good points about her baby's development.
 - Correct mistaken ideas without sounding critical.
 - Always remember to arrange to see the mother again soon. These mothers are at risk of introducing other foods and fluids and need a lot of support until their confidence is built up again.
- Discuss the following scenario as a group. Ask participants to turn to page 115 of their Manuals to find the story about Mrs Singh. Below the story are questions and spaces for participants to fill in answers. First read out the story. Then ask the participants to fill in the answers to the questions. They may refer to page 113 of their Manual to remind them of the reasons why a baby may not get enough breast milk. After a few minutes go through the questions with the group and ask the participants to write in the answers so they have them to refer to later.

Mrs Singh says she does not have enough milk. Her baby is three months old and crying 'all the time'. Her baby gained 200g last month. Mrs Singh manages the family farm by herself, so she is very busy. She breastfeeds her baby about 2-3 times at night, and about twice during the day when she has the time. She does not give her baby any other food or drink.

Ask: *What could you say to empathize with Mrs Singh?*

Wait for a few replies. A possible response is given below but praise participants if they have an alternative response which empathizes with the mother.

- "You are very busy. It must be difficult to find time to feed your baby."

Ask: Mrs Singh says she does not have enough breast milk – do you think her baby is getting enough milk?

Wait for a few replies.

- Mrs Singh's baby only gained 200g last month, so he is not getting enough breast milk.

Ask: *What do you think is the cause of Mrs Singh's baby not getting enough milk?*

Wait for a few replies – *encourage participants to refer to the list of causes on page 113 of their Manual.*

- Mrs Singh is not breastfeeding him often enough.

Ask: Can you suggest how Mrs Singh could give her baby more breast milk?

Wait for a few replies.

- Could she take her baby to the farm with her so she could breastfeed him more often?
- Could someone bring her baby to her where she is working?
- Could she express her breast milk to leave for her baby?

III. The crying baby

20 minutes

- Make these points:

- We will now look at another common reason for a mother to stop breastfeeding – the crying baby.
- Many mothers start unnecessary foods or fluids because of their baby's crying. These additional foods and drinks often do not make a baby cry less. Sometimes a baby cries more.
- A baby who cries a lot can upset the relationship between him and his mother, and can cause tension among other members of the family.
- An important way to help a breastfeeding mother is to counsel her about her baby's crying.

Discuss the reasons why babies cry

- Develop a list of reasons why babies may cry a lot:

Ask: What reasons can you think of why babies may cry a lot?

Write the replies up on a flipchart.

- Ask participants to turn to page 116 of their Manual and find the box Reasons why Babies cry. Ask them to look briefly at the list. There is no need to read it aloud.

REASONS WHY BABIES CRY

Discomfort	(dirty, hot, cold)
Tiredness	(too many visitors)
Illness or pain	(changed pattern of crying)
Hunger	(not getting enough milk, growth spurt)
Mother's food	(any food, sometimes cow's milk)
Drugs mother takes	(caffeine, cigarettes, other drugs)
Colic	
'High needs' babies	

Make the following points:

- Some of these causes may be new to you, so we will discuss them briefly.
- Hunger due to growth spurt:
 - . In this situation a baby seems very hungry for a few days, possibly because he is growing faster than before.
 - . He demands to be fed very often.
 - . This is commonest at the ages of about two weeks, six weeks and three months, but can occur at other times.
 - . If he suckles often for a few days, the breast milk supply increases, and he breastfeeds less often again.
- Mother's food:
 - . Sometimes a mother notices that her baby is upset when she eats a particular food.
 - . This is because substances from the food pass into her milk.
 - . It can happen with any food, and there are no special foods to advise mothers to avoid, unless she notices a problem.
- Colic:
 - . Some babies cry a lot without one of the above causes.
 - . Sometimes the crying has a clear pattern.
 - . The baby cries continuously at certain times of day, often in the evening.
 - . He may pull up his legs as if he has abdominal pain.
 - . He may appear to want to suckle, but it is very difficult to comfort him.
 - . Babies who cry in this way may have a very active gut, or wind, but the cause is not clear.
 - . This is called 'colic'.

Colicky babies usually grow well, and the crying usually becomes less after the baby is three months old.

- 'High needs' babies:
 - . Some babies cry more than others, and they need to be held and carried more.
 - . In communities where mothers carry their babies with them, crying is less common than in communities where mothers like to put their babies down to leave them, or where they put them to sleep in separate cots.

Discuss how to help mothers whose babies cry a lot

Make these points:

- As with 'not enough' milk, you have to try to find the cause of the crying so that you can help the mother. Use your counselling skills to take a good history.
- Help the mother to talk about how she feels and empathize with her. She may be tired, frustrated and angry. Accept her ideas about the cause of the problem and how she feels about the baby.
- Try to learn about pressures from other people and what they think the cause of the crying is.
- Assess a breastfeed to check baby's position and attachment, and the length of a feed.
- Make sure the baby is not ill or in pain. Check the growth and refer if necessary.
- Where relevant, praise her that her baby is growing well and is not ill or bad or naughty.
- Demonstrate ways to carry and comfort a crying baby – holding him close, with gentle movement and pressure on his abdomen.
- Give relevant information where appropriate:

Ask: *What relevant information could you give to a mother whose baby is six weeks old with colic?*

Wait for a few replies and then continue.
- Explain that the baby has a real need for comfort when he is crying, but that the crying will become less when the baby is 3-4 months old. Artificial feeds or medicines do not solve the problem.

Ask: *What relevant information could you give to a mother whose baby is at the age when he might be going through a growth spurt?*

Wait for a few replies and then continue.
- Encourage the mother to feed more frequently for a few days to increase her milk supply.

Ask: *What practical help could you offer to a mother whose family thinks her well-grown three-month-old baby is crying too much and needs to start cereals.*

Wait for a few replies and then continue.
- Offer to talk to the family. It is important to help reduce tensions so that she does not feel under pressure to give unnecessary foods in addition to breast milk.

Demonstrate how to hold and carry a colicky baby

- ❑ Make this introductory point:
 - Babies are most often comforted with closeness, gentle movement, and gentle pressure on the abdomen. There are several ways to provide this.

- ❑ Give the demonstration:
 - Hold a doll along your forearm, pressing on its back with your other hand.
 - Move gently backwards and forwards (Fig.19.2a).
 - Sit down and hold the doll lying face down across your lap. Gently rub the doll's back.
 - Sit down and hold the doll sitting on your lap, with its back to your chest.
 - Hold it round the abdomen, gently pressing on the abdomen (Fig.19.2b).
 - Ask a man to help with this demonstration if possible (Fig.19.2c).
 - Ask him to hold the doll upright against his chest, with the doll's head against his throat. He should hum gently, so that a baby would hear his deep voice.

Fig. 19.2 Some different ways to hold a colicky baby

a. Holding the baby along your forearm



b. Holding the baby round his abdomen, on your lap



c. Father holding the baby against his chest



- Discuss the following scenario as a group. Ask participants to turn to page 118 of their Manuals to find the story about Mrs Biyela. Below the story are questions and spaces for participants to fill in answers. First read out the story. Then ask the participants to fill in the answers to the questions. They may refer to page 116 of their Manuals to remind them of the reasons why a baby may cry. After a few minutes go through the questions with the group and ask the participants to write in the correct answers so they have them to refer to later.

Mrs Biyela's baby is three months old. She says that for the last few days he has suddenly started crying to be fed very often. She thinks that her milk supply has suddenly decreased. Her baby has breastfed exclusively until now and has gained weight well

Ask: What can you say to empathize with Mrs Biyela?

Wait for a few replies. A possible response is given below but praise participants if they have an alternative response which empathizes with the mother.

- "You are worried that he is crying more than before."

Ask: What can you praise to build Mrs Biyela's confidence?

Wait for a few replies. A possible response is given below but participants may offer other suitable replies.

- "He has grown so well on your breast milk."

Ask: What relevant information can you give to Mrs Biyela?

Wait for a few replies. Encourage participants to give the information in a positive way.

- "At this age many babies have a growth spurt and become very hungry. If you feed him more often for a few days, your milk supply will increase, and he will settle down again."

IV. Refusal to Breastfeed**15 minutes**

- ❑ Make these points:
 - Finally we will look at babies who refuse to breastfeed or are unwilling to suckle.
 - In some communities refusal is a common reason for stopping breastfeeding. However, it need not lead to complete cessation of breastfeeding, and can often be overcome.
 - Refusal can cause great distress to the baby's mother. She may feel rejected and frustrated by the experience.
 - There are different kinds of refusal.
 - . Sometimes a baby attaches to the breast, but then does not suckle or swallow, or suckles very weakly.
 - . Sometimes a baby cries and fights at the breast, when his mother tries to breastfeed him.
 - . Sometimes a baby suckles for a minute and then comes off the breast choking or crying. He may do this several times during a single feed.
 - . Sometimes a baby takes one breast, but refuses the other.
 - You need to know why a baby is refusing to breastfeed, before you can help the mother and baby to enjoy breastfeeding again.

- ❑ Discuss causes of refusal to breastfeed

Ask: *What reasons can you think of why babies may refuse to breastfeed?*

Write the replies up on a flipchart.

- Show **Slide 19/5 - Reasons why babies refuse to breastfeed** and make the points that follow:

19/5

Reasons why babies refuse to breastfeed

- Baby ill, sedated or in pain
- Difficulty with breastfeeding technique
- Change which upsets the baby
- Apparent, not real, refusal

- Most reasons why babies refuse to breastfeed fall into one of these categories:
 - . Baby ill, in pain or sedated
 - . Difficulty with breastfeeding technique
 - . Change which upsets baby
 - . Apparent, not real, refusal.
- Ask participants to turn to page 120 of their Manual and find the box CAUSES OF BREAST REFUSAL. Ask participants to look at this briefly. Explain any cause they do not understand but do not read out the whole list as this will take too much time.

CAUSES OF BREAST REFUSAL	
Illness, pain or sedation	<ul style="list-style-type: none"> Infection Brain damage Pain from bruise (vacuum, forceps) Blocked nose Sore mouth (thrush, teething)
Difficulty with breastfeeding technique	<ul style="list-style-type: none"> Use of bottles and pacifiers whilst breastfeeding Not getting much milk (e.g. poor attachment) Pressure on back of head when positioning Mother shaking breast Restricting length of feeds Difficulty co-ordinating suckle
Change which upsets baby (especially aged 3-12 months)	<ul style="list-style-type: none"> Separation from mother (e.g. if mother returns to work) New carer or too many carers Change in the family routine Mother ill Mother has breast problem e.g. mastitis Mother menstruating Change in smell of mother
Apparent refusal	<ul style="list-style-type: none"> Newborn - rooting Age 4-8 months - distraction Above one year - self-weaning

Discuss how to help mothers whose babies breast refuse.

- Ask participants to turn to page 121 of their Manual and find the box HELPING A MOTHER AND BABY TO BREASTFEED AGAIN. Ask participants to take it in turns to read out the points.

HELPING A MOTHER AND BABY TO BREASTFEED AGAIN

Help the mother to do these things:

- Keep her baby close - no other carers
 - Give plenty of skin-to-skin contact at all times, not just at feeding times
 - Sleep with her baby
 - Ask other people to help in other ways.
- Offer her breast whenever her baby is willing to suckle
 - When her baby is sleepy, or after a cup-feed
 - When she feels her ejection reflex working.
- Help her baby to take the breast
 - Express breast milk into his mouth
 - Position him so that he can attach easily to the breast – try different positions
 - Avoid pressing the back of his head or shaking her breast.
- Feed her baby by cup
 - Give her own expressed breast milk if possible; if necessary give artificial feeds
 - Avoid using bottles, teats, pacifiers.

- Discuss the following scenario as a group. Ask participants to turn to page 122 of their Manual to find the story about Mrs Barlow. Below the story are questions and spaces for participants to fill in answers. First read out the story. Then ask the participants to fill in the answers to the questions. They may refer to page 120 of their Manuals to remind them of the reasons why a baby may refuse to breastfeed. After a few minutes go through the questions with the group and ask the participants to write in the correct answers so they have them to refer to later.

Mrs Barlow delivered a baby boy by vacuum extraction two days ago. He has a bruise on his head. When Mrs Barlow tries to feed him, he screams and refuses. She is very upset and feels that breastfeeding will be too difficult for her. You watch her trying to feed her baby, and you notice that her hand is pressing on the bruise.

Ask: What could you say to empathize with Mrs Barlow?

Wait for a few replies. A possible response is given below but praise participants if they have an alternative response which empathizes with the mother.

- “You are really upset, aren’t you?”

Ask: What praise and relevant information can you give to build Mrs Barlow’s confidence?

Wait for a few replies.

- Praise: “It is lovely that you want to breastfeed your baby.”

Relevant information: “At the moment the bruise is making breastfeeding painful for your baby. That is why he is crying and refusing to feed.”

Ask: What practical help can you give to Mrs Barlow?

Wait for a few replies.

- Offer to help to find a way for Mrs Barlow to hold her baby that is not painful for him.

V. Summarize the session

2 minutes

- Ask participants if they have any questions, and try to answer them.
- Make the following points to summarize the session:
 - Notice how all the skills you have learnt so far can be used to help mothers in different situations: listening and learning skills; confidence and support skills; assessing a breastfeed; helping a mother to position and attach her baby; taking a detailed feeding history.
 - In many situations there may be no treatment, so giving the mother relevant information and suggestions is very important.
- Explain that a summary of this session can be found on pages 111-124 of the *Participant’s Manual*.

Further Information

Insufficient Milk

The problem of 'not enough milk' may arise before breastfeeding has been established, in the first few days after delivery. Then the mother needs help to establish breastfeeding.

The problem may arise after breastfeeding has been established, after the baby is about a month of age. Then the mother needs help to maintain breast milk production.

Some mothers worry that they do not have milk at a certain time of day, usually in the evening.

The causes of the problem and the needs of mothers in these different situations are sometimes different. It is important to be aware of this. However the same principles of management apply to all situations.

Stool frequency

The stool frequency of infants is very variable. A baby may not pass a stool for several days, and this is quite normal. However, when the baby does pass a stool, it is usually large and semi-liquid. Small dry stools may be a sign that a baby is not getting enough milk.

It is also normal for a baby to pass eight or more semi-liquid stools in a day. If the baby has diarrhoea, the stools are watery.

Disposable nappies

These absorb urine and make it difficult to decide if a baby has passed enough urine. If a mother is worried about her milk supply, it is better to use towelling nappies.

Unreliable signs of 'not enough milk'

Participants may have suggested some of the following signs that make a mother think that she does not have enough milk. They are all unreliable and do not indicate that her baby is not getting enough:

- Baby sucks fingers
- Baby sleeps longer after bottle feed
- Baby's abdomen not rounded after feeds
- Breasts not full immediately after delivery
- Breasts softer than before
- Breast milk not dripping out
- Not feeling her oxytocin reflex
- Family members ask if enough milk
- Health worker said not enough milk
- Told too young or too old to breastfeed
- Told baby too small or too big
- Poor previous experience of breastfeeding
- Breast milk looks thin

Guidelines, not rules

The signs of weight gain and urine output as reliable signs that a baby is not getting enough breast milk are guidelines, not rules. They can help you to diagnose and correct a clinical breastfeeding problem. However, do not apply them rigidly to all mothers - especially if there is no problem. Experience will guide you.

Weight changes in newborn babies

A newborn baby may lose a little weight in the first few days of life. He should regain his birth weight by the age of two weeks. If babies demand feed from the first day, they start gaining weight more quickly than babies who delay. A baby who weighs less than his birth weight at two weeks of age is not gaining enough weight.

These notes may help you to explain the reasons why a baby may not get enough milk.

Breastfeeding factors

Delayed start:

If a baby does not start to breastfeed on the first day, his mother's breast milk may take longer to come in, and he may take longer to start gaining weight.

Infrequent feeds:

Breastfeeding less than 8 times a day in the first 4 weeks, or less than 5-6 times a day at an older age, is a common reason why a baby does not get enough milk. Sometimes a mother does not respond to her baby when he cries, or she may miss feeds, because she is too busy or at work. Some babies are content and do not show that they are hungry often enough. In this case, a mother should not wait for her baby to 'demand', but should wake him to breastfeed every 3-4 hours.

No night feeds:

If a mother stops night breastfeeds before her baby is ready, her milk supply may decrease.

Short feeds:

Breastfeeds may be too short or hurried, so that the baby does not get enough fat-rich hindmilk.

Sometimes a mother takes her baby off her breast after only a minute or two. This may be because the baby pauses, and his mother decides that he has finished. Or she may be in a hurry, or she may believe that her baby should stop in order to suckle from the other breast.

Sometimes a baby stops suckling too quickly, for example if he is too hot, because he is wrapped in too many clothes.

Poor attachment:

If a baby suckles ineffectively, he may not get enough milk.

Bottles and pacifiers:

A baby who feeds from a bottle or who sucks on a pacifier may suckle less at the breast, so the breast milk supply decreases.

Complementary feeds:

A baby who has complementary feeds (artificial milks, solids, or drinks including plain water), before 4-6 months suckles less at the breast, so the breast milk supply decreases.

Mother: psychological factors

Lack of confidence:

Mothers who are very young, or who lack support from family and friends, often lack confidence. Mothers may lose confidence because their baby's behaviour worries them. Lack of confidence may lead a mother to give unnecessary supplements.

Worry, stress:

If a mother is worried or stressed or in pain, her oxytocin reflex may temporarily not work well.

Dislike of breastfeeding, rejection of the baby, and tiredness:

In these situations, a mother may have difficulty in responding to her baby. She may not hold him close enough to attach well; she may breastfeed infrequently, or for a short time. She may give her baby a pacifier when he cries instead of breastfeeding him.

Mother: physical condition

Contraceptive pill:

Contraceptive pills, which contain estrogens, may reduce the secretion of breast milk. Progestagen-only pills and depo-provera should not reduce the breast milk supply. Diuretics may reduce the breast milk supply.

Pregnancy:

If a mother becomes pregnant again, she may notice a decrease in her breast milk supply.

Severe malnutrition

Severely malnourished women may produce less milk. However, a woman who is mildly or moderately undernourished continues to produce milk at the expense of her own tissues, provided her baby suckles often enough.

Alcohol and smoking:

Alcohol and cigarettes can reduce the amount of breast milk that a baby takes.

Retained piece of placenta:

This is RARE. A small piece of placenta remains in the uterus, and makes hormones, which prevent milk production. The woman bleeds more than usual after delivery, her uterus does not decrease in size, and her milk does not 'come in'.

Poor breast development:

This is VERY RARE. Occasionally a woman's breasts do not develop and increase in size during pregnancy, and she does not produce much milk. If the mother noticed an increase in the size of her breasts during pregnancy, then poor breast development is not her problem. It is not necessary to ask about this routinely. Ask only if there is a problem.

Baby's condition

Illness:

A baby who is ill and unable to suckle strongly does not get enough breast milk. If this continues, his mother's milk supply will decrease.

Abnormality:

A baby who has a congenital problem, such as a heart abnormality, may fail to gain weight. This is partly because he takes less breast milk, and partly because of other effects of the condition.

Babies with a deformity such as a cleft palate, or with a neurological problem, or mental handicap, often have difficulty in suckling effectively, especially in the first few weeks.

Occasionally you may not be able to find the cause of a poor milk supply; or the milk supply does not improve (the baby does not gain weight) even though you have done everything you can to help the mother. Then you may need to look for one of the less common causes, and help or refer the mother accordingly.

Occasionally you may need to help a mother to find a suitable complement for her baby. Encourage her to:

- continue breastfeeding as much as possible
- give only the amount of complement that her baby needs for adequate growth
- give the complement by cup
- give the complement only once or twice a day, so that her baby suckles often at the breast.

Remember that the need for complements before six months of age should be RARE.

Crying

A baby who is 'crying too much' may really be crying more than other babies, or his family may be less tolerant of the crying, or less skilled at comforting the baby.

Families' response to crying is different in different societies. So also is the way in which parents handle children.

For example, in societies where babies are carried around more, they cry less.

If babies sleep with their mothers they are less likely to cry at night.

Yet babies themselves vary a lot in how much they cry.

So it is impossible to say that some patterns are 'normal', and some are not.

Allergies

Babies can become allergic to the protein in some foods in their mother's diet. Cow's milk, soy, egg, and peanuts can all cause this problem. Babies may become allergic to cow's milk protein after only one or two prelacteal feeds of formula.

Drugs mother takes:

Caffeine in coffee, tea, and colas, can pass into breast milk and upset a baby. If a mother smokes cigarettes, or takes other drugs, her baby is more likely to cry than other babies. If someone else in the family smokes, that also can affect the baby

Breast Refusal

These notes will help you to explain the reasons why babies may refuse the breast.

Is the baby ill, in pain or sedated?

Illness:

The baby may attach to the breast, but suckles less than before.

Pain:

Pressure on a bruise from forceps or vacuum extraction.

The baby cries and fights as his mother tries to breastfeed him.

Blocked nose:

Sore mouth (Candida infection (thrush)), an older baby teething.

The baby suckles a few times, and then stops and cries.

Sedation:

A baby may be sleepy because of:

- drugs that his mother was given during labour;
- drugs that she is taking for psychiatric treatment.

Is there a difficulty with the breastfeeding technique?

Sometimes breastfeeding has become unpleasant or frustrating for a baby. *Possible causes:*

- Feeding from a bottle, or sucking on a pacifier (dummy).
- Not getting much milk, because of poor attachment or engorgement.
- Pressure on the back of the baby's head, by his mother or a helper positioning him roughly, with poor technique. The pressure makes him want to 'fight'.
- His mother holding or shaking the breast, which interferes with attachment.
- Restriction of breastfeeds; for example, breastfeeding only at certain times.
- Early difficulty co-ordinating suckling. (Some babies take longer than others to learn to suckle effectively).

Refusal of one breast only:

Sometimes a baby refuses one breast, but not the other. This is because the problem affects one side more than the other.

Has a change upset the baby?

Babies have strong feelings, and if they are upset they may refuse to breastfeed. They may not cry, but simply refuse to suckle.

This is commonest when a baby is aged 3-12 months. He suddenly refuses several breastfeeds. This behaviour is sometimes called a 'nursing strike'.

Possible causes:

- Separation from his mother, for example when she starts a job.
- A new carer, or too many carers.
- A change in the family routine - for example, moving house, visiting relatives.
- Illness of his mother, or a breast infection.
- His mother menstruating.
- A change in his mother's smell, for example, different soap, or different food.

Is it 'apparent' and not 'real' refusal?

Sometimes a baby behaves in a way which makes his mother think that he is refusing to breastfeed. However, he is not really refusing.

- When a newborn baby 'roots' for the breast, he moves his head from side to side as if he is saying 'no'. However, this is normal behaviour.
- Between 4 and 8 months of age, babies are easily distracted, for example when they hear a noise. They may suddenly stop suckling. It is a sign that they are alert.

After the age of 1 year, a baby may wean himself. This is usually gradual.

Management of breast refusal:

If a baby is refusing to breastfeed:

1. Treat or remove the cause if possible.
2. Help the mother and baby to enjoy breastfeeding again.

1. Treat or remove the cause if possible*Illness:*

Treat infections with appropriate antimicrobials and other therapy.

Refer if necessary.

If a baby is unable to suckle, he may need special care in hospital.

Help his mother to express her breast milk to feed to him by cup or by tube, until he is able to breastfeed again.

Pain:

For a bruise: help the mother to find a way to hold the baby without pressing on a painful place.

For thrush: treat with nystatin.

For teething: encourage her to be patient and to keep offering him her breast.

For a blocked nose: explain how she can clear it. Suggest short feeds, more often than usual for a few days.

Sedation:

If the mother is on regular medication, try to find an alternative.

Breastfeeding technique:

Discuss the reason for the difficulty with the mother. When her baby is willing to breastfeed again, you can help her more with her technique.

Changes which upset a baby:

- Discuss the need to reduce separation and changes if possible.
- Suggest that she stops using the new soap, perfume, or food.

Apparent refusal:

If it is *rooting*:

Explain that this is normal. She can hold her baby at her breast to explore her nipple. Help her to hold him closer, so that it is easier for him to attach.

If it is *distraction*:

Suggest that she try to feed him somewhere more quiet for a while. The problem usually passes.

If it is *self-weaning*:

Suggest that she:

- makes sure that the child eats enough family food
- gives him plenty of extra attention in other ways
- continues to sleep with him because night feeds may continue.

2. Help the mother and baby to enjoy breastfeeding again

This is difficult and can be hard work. You cannot force a baby to breastfeed.

The mother needs help to feel happy with her baby and to enjoy breastfeeding. They have to learn to enjoy close contact again. She needs you to build her confidence, and to give her support.

Help the mother to do these things:

Keep her baby close to her all the time.

- She should care for her baby herself as much of the time as possible.
- Ask grandmothers and other helpers to help in other ways, such as doing the housework, and caring for older children.
- She should hold her baby often, and give plenty of skin-to-skin contact at times other than feeding times
- She should sleep with him.
- If the mother is employed, she should take leave from her employment - sick leave if necessary.
- It may help if you discuss the situation with the baby's father, grandparents, and other helpful people.

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Session 20

Expressing Breast Milk and Cup Feeding

Objectives

After completing this session participants will be able to:

- list the situations when expressing breast milk is useful
- explain how to stimulate the oxytocin reflex
- demonstrate how to select and prepare a container for expressed breast milk
- describe how to store breast milk
- explain to a mother the steps of expressing breast milk by hand
- list the advantages of cup-feeding
- demonstrate how to cup-feed safely

Session outline

40 minutes

Participants are all together for a demonstration by one trainer.

I.	Introduce the session	5 minutes
II.	Demonstrate how to stimulate the oxytocin reflex	8 minutes
III.	Demonstrate how to express breast milk by hand	12 minutes
IV.	Describe the advantages of cup feeding	3 minutes
V.	Demonstrate how to cup feed	10 minutes
V.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for general guidance on how to give a demonstration.
- Study the notes for the session so that you are clear what to do.
- Make sure that Slide 20/1 is ready. Alternatively, as there is only one slide in this session, you might prefer to read aloud the objectives on Slide 20/1 without projecting them onto the screen.
- Obtain some examples of suitable containers to collect expressed breast milk, which would be available to ordinary mothers (for example, cups, jam jars).
- For the demonstration you will need a small cup, which holds approximately 60 mls of water, a cloth and a doll.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

5 minutes

- Show **Slide 20/1 - Session 20 Objectives** and read out the objectives:

20/1

Expressing breast milk and cup feeding

After completing this session participants will be able to:

- list the situations when expressing breast milk is useful
- explain how to stimulate the oxytocin reflex
- demonstrate how to select and prepare a container for expressed breast milk
- describe how to store breast milk
- explain to a mother the steps of expressing breast milk by hand
- list the advantages of cup-feeding
- demonstrate how to cup-feed safely

- Make the following points:
 - In this session you will learn how to express breast milk effectively. Expressing breast milk is helpful in a number of situations. Difficulties can arise, but they are often due to poor technique.
 - Many mothers are able to express plenty of breast milk using rather strange techniques. If a mother's technique works for her, let her continue to do it that way. But if a mother is having difficulty expressing enough milk, teach her a more effective technique.

- Discuss when it is useful to express breast milk.

Ask: *In which situations is it useful for a mother to express her breast milk?*

Write participants' ideas on a board. *Try to develop a list with most of the ideas below.*

- ☐ After a few minutes, if participants cannot think of any more, complete the list for them.
 - **Expressing milk is useful to:**
 - leave breast milk for a baby when his mother goes out or goes to work
 - feed a low-birth-weight baby who cannot breastfeed
 - feed a sick baby, who cannot suckle enough
 - keep up the supply of breast milk when a mother or baby is ill
 - prevent leaking when a mother is away from her baby
 - help a baby to attach to a full breast
 - help with breast health conditions, e.g. engorgement (see Session 21)
 - So there are many situations in which expressing breast milk is useful and important to enable a mother to initiate or to continue breastfeeding.
 - All mothers should learn how to express their milk, so that they know what to do if the need arises. Certainly all those who care for breastfeeding mothers should be able to teach mothers how to express their milk.
 - Breast milk can be stored for about eight hours at room temperature or up to 24 hours in a refrigerator.

II. Demonstrate how to stimulate the oxytocin reflex 8 minutes

- ☐ Discuss why stimulating the oxytocin reflex is helpful:

Ask: Why is it helpful to stimulate a mother's oxytocin reflex before she expresses milk?

Wait for a few replies and then continue.

Encourage participants to recall what they learnt about how breastfeeding works. Give them a minute to think and make a few suggestions, then continue.

 - It is important that the oxytocin reflex works to make the milk flow from her breasts.
 - The oxytocin reflex may not work as well when a mother expresses as it does when a baby suckles. A mother needs to know how to help her oxytocin reflex, or she may find it difficult to express her milk.

Ask: What ways can you think of to stimulate the oxytocin reflex?

Wait for a few replies and then continue.
- ☐ Ask participants to turn to page 126 of their Manual and find the box HOW TO STIMULATE THE OXYTOCIN REFLEX.
- ☐ Ask participants to read through the box on their own, explaining anything that is not clear.

HOW TO STIMULATE THE OXYTOCIN REFLEX

- Help the mother psychologically:
 - Build her confidence
 - Try to reduce any sources of pain or anxiety
 - Help her to have good thoughts and feelings about the baby.

- Help the mother practically. Help or advise her to:
 - Sit quietly and privately or with a supportive friend.
 - Some mothers can express easily in a group of other mothers who are also expressing for their babies.

 - Hold her baby with skin-to-skin contact if possible.
 - She can hold her baby on her lap while she expresses. If this is not possible, she can look at the baby. If this is not possible, sometimes even looking at a photograph of her baby helps.

 - Warm her breasts.
 - For example, she can apply a warm compress, or warm water, or have a warm shower. Warn her that she should test the temperature to avoid burning herself.

 - Stimulate her nipples.
 - She can gently pull or roll her nipples with her fingers.

 - Massage or stroke her breasts lightly.
 - Some women find that it helps if they stroke the breast gently with finger tips or with a comb.
 - Some women find that it helps to gently roll their closed fist over the breast towards the nipple.

 - Ask a helper to rub her back.

III. Demonstrate how to express breast milk by hand 12 minutes

- Make these points:
 - Hand expression is the most useful way to express milk. It needs no appliance, so a woman can do it anywhere, at any time.
 - A woman should express her own breast milk. The breasts are easily hurt if another person tries.
 - If you are showing a woman how to express, show her on your own body as much as possible, while she copies you. If you need to touch her to show her exactly where to press her breast, be very gentle.

- Explain how to prepare a container for the expressed breast milk (EBM).
(Do this demonstration quickly. Do not let it take a long time.)

- Show participants some of the containers to hold the expressed breast milk that you have collected. Go through the following points.

HOW TO PREPARE A CONTAINER FOR EXPRESSED BREAST MILK (EBM)

- Choose a cup, glass, jug or jar with a wide mouth.
- Wash the cup in soap and water (She can do this the day before).
- Pour boiling water into the cup, and leave it for a few minutes. Boiling water will kill most of the germs.
- When ready to express milk, pour the water out of the cup.

- Give the demonstration of how to express breast milk by hand.
- Demonstrate as much as possible on your own body. If you prefer not to use your own body, use a model breast, or practise on the soft part of your arm or cheek. You can draw a nipple and areola on your arm.

Follow the steps in the box HOW TO EXPRESS BREAST MILK BY HAND, explaining what you do.

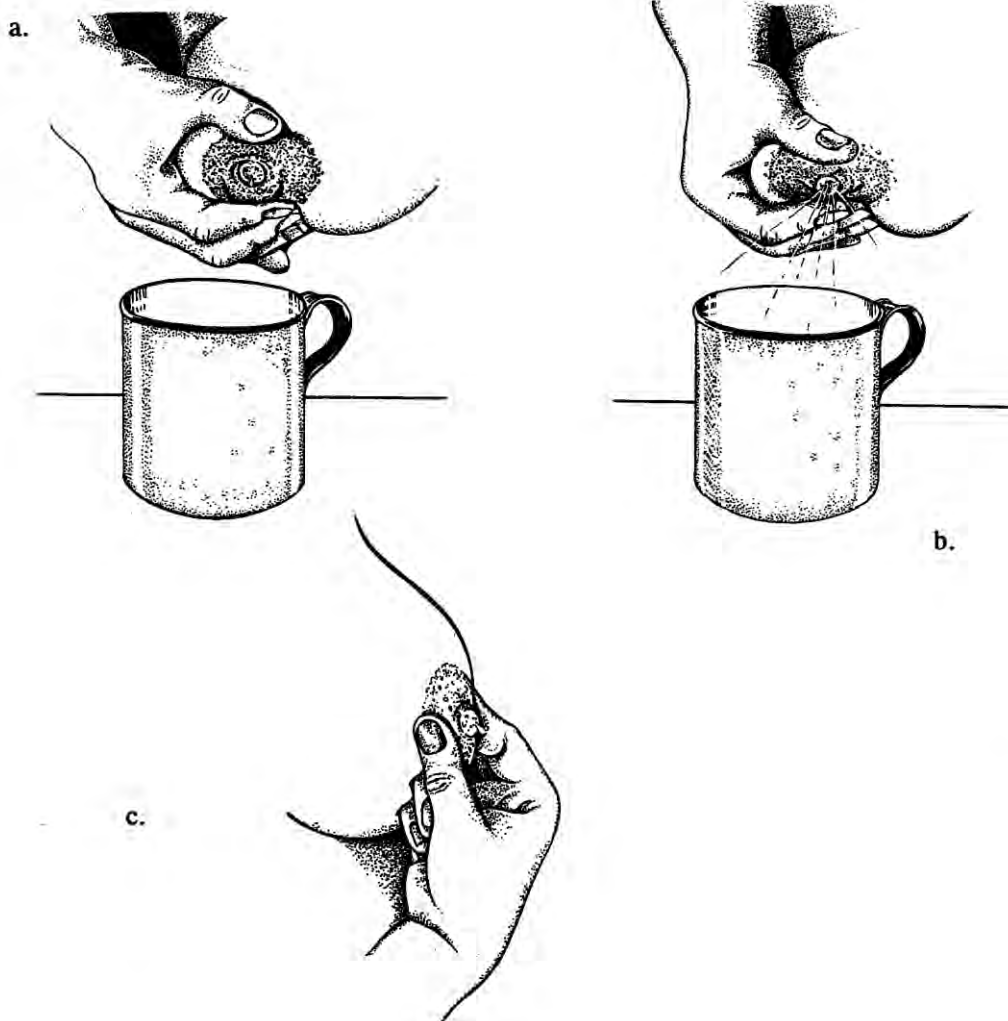
HOW TO EXPRESS BREAST MILK BY HAND

- Teach a mother to do this herself. Do not express her milk for her. Touch her only to show her what to do, and be gentle. Teach her to:
 - Wash her hands thoroughly.
 - Sit or stand comfortably, and hold the container near her breast.
 - Put her thumb on her breast Above the nipple and areola, and her first finger on the breast Below the nipple and areola, opposite the thumb. She supports the breast with her other fingers (see Fig.20.1).
 - Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far or she may block the milk ducts.
 - Press her breast behind the nipple and areola between her finger and thumb. She should press on the larger ducts beneath the areola. Sometimes in a lactating breast it is possible to feel the ducts. They are like pods, or peanuts. If she can feel them, she can press on them.
 - Press and release, press and release. This should not hurt - if it hurts, the technique is wrong. At first no milk may come, but after pressing a few times, milk starts to drip out. It may flow in streams if the oxytocin reflex is active.
 - Press the areola in the same way from the Sides, to make sure that milk is expressed from all segments of the breast.
- Avoid rubbing or sliding her fingers along the skin. The movement of the fingers should be more like rolling.

- Avoid squeezing the nipple itself. Pressing or pulling the nipple cannot express the milk. It is the same as the baby sucking only the nipple.
- Express one breast for at least 3-5 minutes until the flow slows; then express the other side; and then repeat both sides. She can use either hand for either breast, and change when they tire.
- Explain that to express breast milk adequately takes 20-30 minutes, especially in the first few days when only a little milk may be produced. It is important not to try to express in a shorter time.

Fig. 20.1 How to express breast milk.

- a. Place finger and thumb each side of the areola and press inwards towards the chest wall.
- b. Press behind the nipple and areola between your finger and thumb.
- c. Press from the sides to empty all segments.



- ☐ Tell participants that they can find the box HOW TO EXPRESS BREAST MILK BY HAND on page 128 of their Manual, and the figures on page 129.

Discuss how often to express milk:

Ask: *How often should a mother express her breast milk?*

Wait for a few replies and then continue.

- It depends on the reason for expressing the milk, but usually as often as the baby would breastfeed.
- **To establish lactation, to feed a low-birth-weight (LBW) or sick newborn** she should start to express milk on the first day, as soon as possible after delivery. She may only express a few drops of colostrum at first, but it helps breast milk production to begin, in the same way that a baby suckling soon after delivery helps breast milk production to begin.
- She should express as much as she can as often as her baby would breastfeed. This should be at least every three hours, including during the night. If she expresses only a few times, or if there are long intervals between expressions, she may not be able to produce enough milk.
- **To keep up her milk supply to feed a sick baby:** She should express at least every three hours.
- **To build up her milk supply, if it seems to be decreasing after a few weeks:** Express very often for a few days (every 2 hours or even every hour), and at least every three hours during the night.
- **To leave milk for a baby while she is out at work:** Express as much as possible before she goes to work, to leave for her baby. It is also very important to express while at work to help keep up her supply.
- **To relieve symptoms, such as engorgement, or leaking at work:** Express only as much as is necessary.

Ask participants to practise the technique. Ask them to practise the rolling action of the fingers on a model breast or on their arms. Ask them to make sure that they avoid pinching. Ask them to practise on their own bodies privately later.

IV. Discuss the advantages of cup-feeding

3 minutes

Discuss why cup-feeding is safer than bottle feeding:

Ask: *Why are cups safer and better than bottles for feeding a baby?*

Wait for a few replies and then continue. *Make the points which have not been mentioned.*

- Cups are easy to clean with soap and water, if boiling is not possible.
- Cups are less likely than bottles to be carried around for a long time giving bacteria time to breed.
- Cup-feeding is associated with less risk of diarrhoea, ear infections and tooth decay.
- A cup cannot be left beside a baby, for the baby to feed himself. The person who feeds a baby by cup has to hold the baby and look at him, and give him some of the contact that he needs.
- A cup does not interfere with suckling at the breast.

- A cup enables a baby to control his own intake.

III. Demonstrate how to feed a baby by cup

10 minutes

- Give the demonstration of cup-feeding:
- Follow these steps while explaining what you do:

- Put some water into one of the small cups. Use approximately 60 ml of water, to demonstrate the typical volume of milk used for one feed for a young baby.
- Hold a doll on your lap, closely, with it sitting upright or semi-upright. Explain that a baby should not lie down too much.
- Hold the small cup or glass to the doll's lips. Tip it so that the water just reaches the lips. Point out that the edges of the cup touch the outer part of the baby's upper lip, and the cup rests lightly on his lower lip. This is normal when a person drinks.
- Explain that at this point, a real baby becomes quite alert, and opens his mouth and eyes. He makes movements with his mouth and face, and he starts to take the milk into his mouth with his tongue. Babies older than about 36 weeks gestation try to suck.
- Some milk may spill from the baby's mouth. You may want to put a cloth on the baby's front to protect his clothes. Spilling is commoner with babies of more than about 36 weeks gestation, and less common with smaller babies.
- You should not pour the milk into a baby's mouth – just hold the cup to his lips.
- Explain that when a baby has had enough, he closes his mouth and will not take any more this feed. If he has not taken the calculated amount, he may take more next time, or he may need feeds more often. Measure his intake over 24 hours, not just at each feed.
- Demonstrate with a doll what happens when you try to feed a baby with a spoon. You need to hold the cup and the spoon, or you need to put the cup down and take milk from it. The procedure is more awkward.

- Explain to participants that the technique is described in the box HOW TO FEED A BABY BY CUP on page 131 of their Manual. There is no need to read this box out again to the participants.

HOW TO FEED A BABY BY CUP

- Wash your hands.
- Hold the baby sitting upright or semi-upright on your lap.
- Place the estimated amount of milk for one feed into the cup.
- Hold the small cup of milk to the baby's lips.
Tip the cup so that the milk just reaches the baby's lips.
The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.
- The baby becomes alert, and opens his mouth and eyes.
A low-birth-weight (LBW) baby starts to take the milk into his mouth with his tongue.
A full term or older baby sucks the milk, spilling some of it.
- Do NOT POUR the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself.
- When the baby has had enough, he closes his mouth and will not take any more. If he has not taken the calculated amount, he may take more next time, or you may need to feed him more often.
- Measure his intake over 24 hours - not just at each feed.



Fig. 20.2 Feeding a baby by cup

V. Summarize the session**2 minutes**

- Ask participants if they have any questions, and try to answer them.
- Make these points:
 - Hand expression is the most useful way to express breast milk. It is less likely to carry infection than a pump, and is available to every woman at any time.
 - It is important for women to learn to express their milk by hand, and not to think that a pump is necessary.
 - To express milk effectively, it is helpful to stimulate the oxytocin reflex and to use a good technique.
 - Cup-feeding may not be familiar to a mother. You will need to help her with the technique and give her support so she is confident to feed her baby at home.
 - Try and practise this technique when you have the opportunity. If you are able to cup-feed a baby yourself then you will have more confidence when you teach a mother.
- Explain that a summary of this session can be found on pages 125-132 of the *Participant's Manual*.

Session 21

Breast Conditions

Objectives

After completing this session participants will be able to recognize and manage these common breast conditions:

- flat and inverted nipples
- engorgement
- blocked duct and mastitis
- sore nipples and nipple fissure.

Session outline

45 minutes

Participants are all together for a lecture presentation by one trainer.

- | | | |
|------|---------------------------|------------|
| I. | Introduce the session | 3 minutes |
| II. | Present Slides 21/1-21/12 | 40 minutes |
| III. | Summarize the session | 2 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 21/1-21/12 are in the correct order. Study the slides and the text that goes with them so that you are able to present them. Be careful when you present the slides that you do not read out the title of the slide, as the participants are asked questions about what condition the slide shows.
- There is a lot of information in the 'Further Information' section. Make sure that you have read this as it may help you to answer participants' questions.
- For DEMONSTRATION 21.A: Syringe method for treatment of inverted nipples, prepare a 20 ml disposable syringe as shown in Fig.21.1.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**3 minutes**

- Show **Slide 21/1 - Breast conditions** and read out the objectives:

21/1

Breast conditions

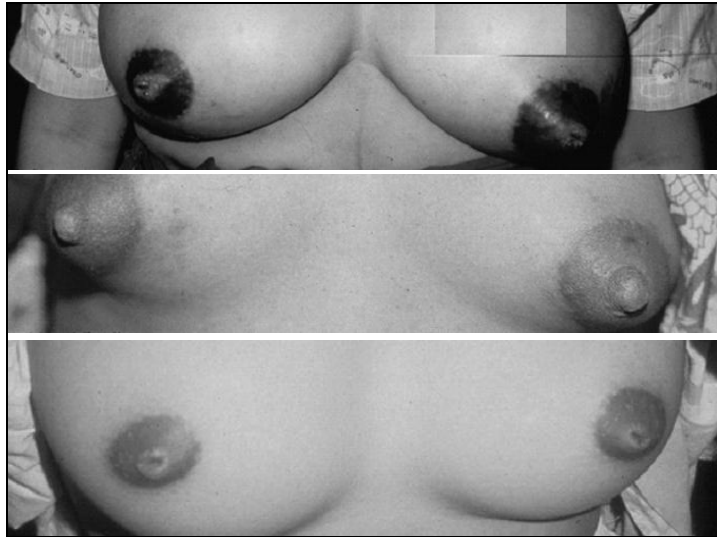
After completing this session participants will be able to recognize and manage these common breast conditions:

- flat and inverted nipples
- engorgement
- blocked duct and mastitis
- sore nipples and nipple fissure

- Diagnosis and management of these breast conditions are important both to relieve the mother, and to enable breastfeeding to continue.

II. Present Slides 21/2 to 21/12**40 minutes**

Show **Slide 21/2 - Different breast shapes** and make the points that follow:



- Here are some breasts of different shapes and sizes. These breasts are all normal, and they can all produce plenty of milk for a baby – or two or even three babies.
- Many mothers worry about the size of their breasts. Women with small breasts often worry that they cannot produce enough milk.

Ask: *Think back to Session 3 when we looked at the anatomy of the breast. What is it that makes some breasts large and others small?*

Wait for a few replies and then continue.

- Differences in the sizes of breasts are mostly due to the amount of fat, and not the amount of tissue that produces milk. It is important to reassure women that they can produce enough milk, whatever the size of their breasts.
- The nipples and areolas are different shapes and sizes too.

Ask: *Does the size or shape of the nipple affect breastfeeding?*

Wait for a few replies and then continue.

- Sometimes the shape makes it difficult for a baby to get well attached to the breast. The mother may need extra help at first to make sure that her baby can suckle effectively.
- However, babies can breastfeed quite well from breasts of any size, with almost any shape of nipple.

Show **Slide 21/3 - Flat nipple and protractility** and make the points that follow:



Ask: *What do you think of the nipple in picture 1?*

Wait for a few replies and then continue.

- The nipple looks flat.
- A doctor told this mother that her baby would not be able to suckle from it. She lost confidence that she could breastfeed successfully.
- However, remember from Session 3 that a baby does not suck from the nipple. He takes the nipple and the breast tissue underlying the areola into his mouth to form a 'teat'.
- In picture 2, the mother is testing her breast for protractility. She is finding out how easy it is to stretch out the tissues underlying the nipple. This nipple is quite protractile, and it should be easy for her baby to stretch it to form a 'teat' in his mouth. He should be able to suckle from this breast with no difficulty.
- Nipple protractility is more important than the shape of a nipple.
- Protractility improves during pregnancy, and in the first week or so after a baby is born. So even if a woman's nipples look flat in early pregnancy, her baby may be able to suckle from the breast without difficulty.

Show **Slide 21/4 - Inverted nipples** and make the points that follow:



Ask: *What do you think of this nipple?*

Wait for a few replies and then continue.

- The nipple is inverted
- If this woman tests her breast for protractility, her nipple will go in instead of coming out.

Ask: *What else do you notice about the breast?*

Wait for a few replies and then continue.

- You can see a scar on her breast. This mother had a breast abscess. This was probably because her baby did not attach well to the breast and remove the milk effectively. With skilled help, she probably could have breastfed successfully.
- Fortunately, nipples as difficult as this are rare.

- Show **Slide 21/5 - Management of flat nipples** and make the points that follow:

21/5

Management of flat and inverted nipples

- Antenatal treatment is not helpful
- Build the mother's confidence
- Help the mother to position her baby
- If a baby cannot suckle effectively in the first week or two help his mother to feed with expressed milk

- Antenatal treatment is probably not helpful, for example stretching nipples. Most nipples improve around the time of delivery without any treatment. Help is most important soon after delivery when the baby starts breastfeeding.
 - It is important to build the mother's confidence. Explain that with patience and persistence she can succeed. Explain that her breasts will become softer in the week or two after delivery, and that the baby suckles from the breast and not from the nipple. Encourage her to give plenty of skin-to-skin contact.
 - If a baby does not attach well by himself, help his mother to position him so that he can attach better. Give her this help early, in the first day, before her breast milk 'comes in' and her breasts are full. Sometimes putting a baby to the breast in a different position makes it easier for him to attach, for example the underarm position.
 - If a baby cannot suckle effectively in the first week or two, help his mother to try to express her milk and feed it to her baby by cup. Expressing milk also helps to keep the breasts soft, so that it is easier for the baby to attach. Expressing milk also helps to keep up the supply of milk. She should not use a bottle because that makes it more difficult for her baby to take her breast.
- Ask participants to turn to page 135 of their Manuals and find the box MANAGEMENT OF FLAT AND INVERTED NIPPLES. There is no need to read these points now. However, ask participants to look at this in their own time.

MANAGEMENT OF FLAT AND INVERTED NIPPLES

■ **Antenatal treatment**

Antenatal treatment is probably not helpful.

For example, stretching nipples, or wearing nipple shells does not help.

Most nipples improve around the time of delivery without any treatment.

Help is most important soon after delivery, when the baby starts breastfeeding.

■ **Build the mother's confidence**

Explain that it may be difficult at the beginning, but with patience and persistence she can succeed.

Explain that her breasts will improve and become softer in the week or two after delivery.

Explain that a baby suckles from the breast - not from the nipple. Her baby needs to take a large mouthful of breast.

Explain also that as her baby breastfeeds, he will stretch her nipple out.

Encourage her to give plenty of skin-to-skin contact, and to let her baby explore her breasts.

Let him try to attach to the breast on his own, whenever he is interested.

Some babies learn best by themselves.

■ **Help the mother to position her baby**

If a baby does not attach well by himself, help his mother to position him so that he can attach better.

Give her this help early, in the first day, before her breast milk 'comes in' and her breasts are full.

Sometimes putting a baby to the breast in a different position makes it easier for him to attach.

For example, some mothers find that the underarm position is helpful.

Sometimes making the nipple stand out before a feed helps a baby to attach.

Stimulating her nipple may be all that a mother needs to do.

There is another method called the syringe method which we will discuss in this session.

Sometimes shaping the breast makes it easier for a baby to attach. To shape her breast, a mother supports it from underneath with her fingers, and presses the top of the breast gently with her thumb.

■ **If a baby cannot suckle effectively in the first week or two, help his mother to try the following:**

- express her milk and feed it to her baby with a cup.
- expressing milk helps to keep breasts soft, so that it is easier for the baby to attach to the breast; and it helps to keep up the supply of breast milk.

She should not use a bottle, because that makes it more difficult for her baby to take her breast.

Alternatively she could express a little milk directly into her baby's mouth.

Some mothers find that this is helpful. The baby gets some milk straight away, so he is less frustrated. He may be more willing to try to suckle.

She should continue to give him skin-to-skin contact, and let him try to attach to her breast on his own.

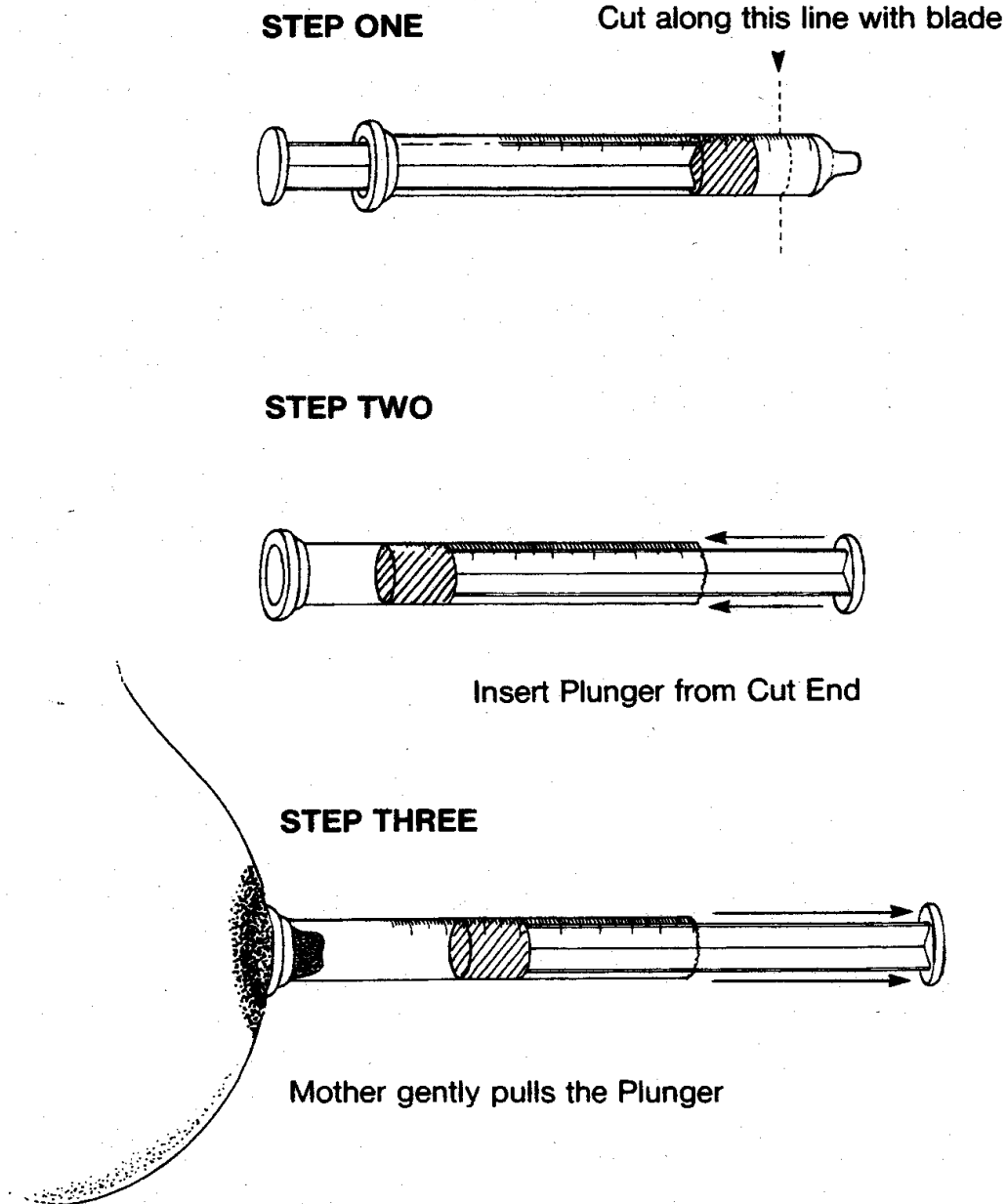
- ❑ Demonstrate the syringe method for treating inverted nipples.

DEMONSTRATION 21.A SYRINGE METHOD FOR TREATMENT OF INVERTED NIPPLES

See Fig. 21.1 (Note: this is figure 21.2 in the Participant's Manual)

- Explain that this method is for treating inverted nipples postnatally, and to help a baby to attach to the breast. It is not certain whether it is helpful antenatally.
- Show participants the 20 ml syringe that you have prepared, and explain how you cut off the adaptor end of the barrel.
- Put the plunger into the cut end of the barrel (that is, the reverse of its usual position).
- Use a model breast, and put the smooth end of the barrel over the nipple. Pull out the plunger to create suction on the nipple.
- Explain that with a real breast, there is an airtight seal, and the nipple is drawn out into the syringe.
- Explain that the mother must use the syringe herself.
- Explain that you would teach her to:
 - . put the smooth end of the syringe over her nipple, as you demonstrated
 - . gently pull the plunger to maintain steady but gentle pressure
 - . do this for 30 seconds to 1 minute, several times a day
 - . push the plunger back to decrease the suction, if she feels pain. This prevents damaging the skin of the nipple and areola.
- Push the plunger back, to reduce suction, when she removes the syringe from her breast.
- Use the syringe to make her nipple stand out just before she puts her baby to the breast.

Fig. 21.1. Preparing and using a syringe for treatment of inverted nipples.



Show **Slide 21/6 - Full and engorged breasts** and make the points that follow:



Ask: *What conditions are shown in picture 1 and picture 2?*

Wait for a few replies and then continue.

- The woman in picture 1 has full breasts.
- This is a few days after delivery, and her milk has 'come in'. Her breasts feel hot and heavy and hard.
- However, her milk is flowing well. You can see that milk is dripping from her breasts.
- This is normal fullness. Sometimes full breasts feel quite lumpy.
- The only treatment that she needs is for her baby to breastfeed frequently, to remove the milk.
- The heaviness, hardness, or lumpiness decreases after a feed, and the breasts feel softer and more comfortable.
- In a few days, her breasts will adjust to the baby's needs, and they will feel less full.
- The woman in picture 2 has engorged breasts.
- Engorgement means that the breasts are overfull, partly with milk, and partly with increased tissue fluid and blood, which interferes with the flow of milk.
- The breast in this picture looks shiny, because it is oedematous. Her breasts feel painful, and her milk does not flow well.

Ask: *What do you notice about the nipple?*

Wait for a few replies and then continue.

- It is flat, because the skin is stretched tight.

- When a nipple is stretched tight and flat like this, it is difficult for a baby to attach to it, and to remove the milk.
 - Sometimes when breasts are engorged, the skin looks red, and the woman has a fever. This may make you think that she has mastitis. However, the fever usually settles in 24 hours.
 - It is important to be clear about the difference between full and engorged breasts. Engorgement is not so easy to treat.
- Ask participants to turn to page 137 of their Manuals and find the box SUMMARY OF DIFFERENCES BETWEEN FULL AND ENGORGED BREASTS. Ask one participant to read out the points in the column entitled 'Full breasts' and another participant to read out the points in the column entitled 'Engorged breasts'.

SUMMARY OF DIFFERENCES BETWEEN FULL AND ENGORGED BREASTS	
Full Breasts	Engorged Breasts
Hot	Painful
Heavy	Oedematous
Hard	Tight, especially nipple
	Shiny
	May look red
Milk flowing	Milk NOT flowing
No fever	May be fever for 24 hours

Ask: Can you think of any reasons why breasts may become engorged?

Wait for a few replies and then continue.

- Make the following points if they have not been mentioned by the participants:
- delay in starting breastfeeding after birth
 - poor attachment to the breast so breast milk is not removed effectively
 - infrequent removal of milk – for example, if breastfeeding is not on demand
 - restricting the length of breast feeds
 - engorgement can be prevented by letting babies feed as soon as possible after delivery; making sure that the baby is well positioned and attached to the breast; and encouraging unrestricted breastfeeding
 - milk does not then build up in the breast.

- Ask participants to turn to page 138 of their Manuals and find the box TREATMENT OF BREAST ENGORGEMENT. Ask participants to take turns to read out the points.

TREATMENT OF BREAST ENGORGEMENT

- Do not 'rest' the breast. To treat engorgement it is essential to remove milk. If milk is not removed, mastitis may develop, an abscess may form and breast milk production decreases.
- If baby is able to suckle he should feed frequently. This is the best way to remove milk. Help the mother to position her baby, so that he attaches well. Then he suckles effectively, and does not damage the nipple.
- If baby is not able to suckle help his mother to express her milk. Sometimes it is only necessary to express a little milk to make the breast soft enough for the baby to suckle.
- Before feeding or expressing, stimulate the mother's oxytocin reflex. Some things that you can do to help her, or she can do are:
 - put a warm compress on her breasts
 - massage her back and neck
 - massage her breast lightly
 - stimulate her breast and nipple skin
 - help her to relax
 - sometimes a warm shower or bath makes milk flow from the breasts so that they become soft enough for the baby to suckle.
- After a feed, put a cold compress on her breasts. This will help to reduce oedema.
- Build the mother's confidence. Explain that she will soon be able to breastfeed comfortably again.

Show **Slide 21/7 - Mastitis** and make the points that follow:



Ask: *What do you notice about this breast?*

Wait for a few replies and then continue.

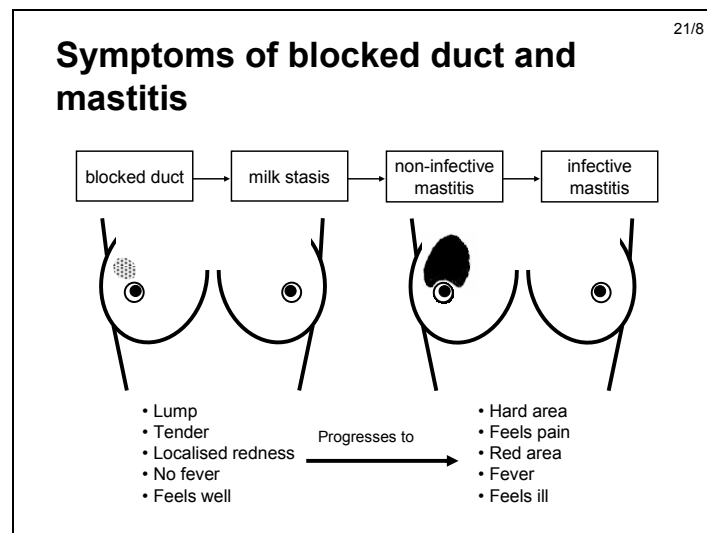
- Part of the breast looks red and swollen. There is a fissure on the tip of the nipple.

Ask: *What condition is this?*

Wait for a few replies and then continue.

- This is mastitis.
- The woman has severe pain, and a fever, and she feels ill. Part of the breast is swollen and hard, with redness of the overlying skin.
- Mastitis is sometimes confused with engorgement.
- However, engorgement affects the whole breast, and often both breasts. Mastitis affects part of the breast, and usually only one breast.
- Mastitis may develop in an engorged breast, or it may follow a condition called blocked duct.

☐ Show **Slide 21/8 - Blocked duct** and make the points that follow:



- This slide shows how mastitis develops from a blocked duct.
- A blocked duct occurs when the milk is not removed from part of a breast. Sometimes this is because the duct to that part of the breast is blocked by thickened milk.
- The symptoms are a lump that is tender, and often redness of the skin over the lump. The woman has no fever and feels well.
- When milk stays in part of a breast, because of a blocked duct, or because of engorgement, it is called milk stasis. If the milk is not removed, it can cause inflammation of the breast tissue, which is called non-infective mastitis.
- Sometimes a breast becomes infected with bacteria, and this is called infective mastitis.
- It is not possible to tell from the symptoms alone if mastitis is non-infective or infective. If the symptoms are all severe, however, the woman is more likely to need treatment with antibiotics.

- Show **Slide 21/9 - Causes of blocked duct and mastitis** and make the points that follow:

21/9

Causes of blocked duct and mastitis

Poor drainage of whole breast:

- infrequent feeds
- ineffective suckling

Poor drainage of part of breast:

- ineffective suckling
- pressure from clothes
- pressure from fingers during feeds

- The main cause of a blocked duct is poor drainage of all or part of a breast
- Poor drainage of the whole breast may be due to infrequent breastfeeds or ineffective suckling.
- Infrequent breastfeeds may occur when a mother is very busy, when a baby starts feeding less often, for example when he starts to sleep through the night, or because of a changed feeding pattern for another reason, for example the mother returning to work.
- Ineffective suckling usually occurs when the baby is poorly attached to the breast.
- Poor drainage of part of the breast may be due to ineffective suckling, pressure from tight clothes, especially a bra worn at night, or pressure of the mother's fingers which can block milk flow during a breastfeed.
- Remember that if a baby is poorly attached and positioned and is suckling at the breast, this may cause a nipple fissure which provides a way for bacteria to enter the breast tissue and may lead to mastitis.

- Show **Slide 21/10 - Treatment of blocked duct and mastitis** and make the points that follow:

21/10

Treatment of blocked duct and mastitis

- Most important – improve drainage of milk
- Look for cause and correct
- Suggest:
 - frequent feeds
 - gentle massage towards nipple
 - warm compresses
 - start feed on unaffected side; vary position
- Antibiotics, analgesics, rest

- The most important part of treatment is to improve the drainage of milk from the affected part of the breast.
- Look for a cause of poor drainage and correct it. Look for poor attachment, pressure from clothes (particularly a tight bra) and notice what the mother does with her fingers as she breastfeeds. Does she hold the areola and possibly block milk flow?
- Whether or not you find a cause, there are several suggestions to offer to the mother.
- Breastfeed frequently. The best way is to rest with her baby, so that she can respond to him and feed him whenever he is willing.
- Gently massage the breast while her baby is suckling. Show her how to massage over the blocked area right down to the nipple. This helps to remove the block from the duct. She may notice that a plug of thick material comes out with her milk. This is safe for the baby to swallow.
- Apply warm compresses to her breast between feeds.
- Sometimes it is helpful to start the feed on the unaffected breast. This may help if pain seems to be preventing the oxytocin reflex. Change to the affected breast after the reflex starts working. Try feeding the baby in different positions.
- Sometimes a mother is unwilling to feed her baby from the affected breast, especially if it is very painful. In these situations it is necessary to express the milk. If the milk stays in the breast, an abscess is more likely to develop.
- Usually blocked duct or mastitis improves within a day when drainage to that part of the breast improves.
- However, a mother needs additional treatment if there are any of the following: severe symptoms when you first see her, or a fissure through which bacteria may enter, or no improvement after 24 hours of improved drainage.

- ❑ Ask participants to turn to page 141 of their Manuals and look at the box ANTIBIOTIC TREATMENT FOR INFECTIVE MASTITIS. There is no need to read this out, but point out to participants that these are the recommended antibiotics and doses.

ANTIBIOTIC TREATMENT FOR INFECTIVE MASTITIS		
The commonest bacterium found in breast abscess is <i>Staphylococcus aureus</i> . Therefore it is necessary to treat breast infections with a penicillinase-resistant antibiotic such as either flucloxacillin or erythromycin.		
Drug	Dose	Instructions
Flucloxacillin	250 mg orally 6 hourly for 7-10 days.	Take dose at least 30 minutes before food.
Erythromycin	250-500 mg orally 6 hourly for 7-10 days	Take dose 2 hours after food

- ❑ Show Slide 21/11 - Nipple fissure and make the points that follow:



- Picture 1 shows a mother's breast, and picture 2 shows the same mother feeding her baby on the breast.

Ask: *What do you notice about her breast?*

Wait for a few replies and then continue.

- There is a fissure, or crack, around the base of the nipple. You may be able to see that the breast is also engorged.

Ask: *What do you notice about the baby's position and attachment?*

- **Wait for a few responses and then continue.** Encourage participants to think systematically through the 4 key points of positioning and attachment.

- Ask participants to turn to page 22 of their Manuals and find the BREASTFEED OBSERVATION JOB AID.
- The baby is poorly positioned.
- His body is twisted away from his mother so his head and body are not in line.
- His body is not held close to his mother's.
- His body is unsupported.
- He is poorly attached.
- There is more areola seen above baby's top lip.
- His mouth is closed, and his lips are pointing forwards.
- His lower lip is pointing forward.
- His chin is not touching the breast.
- This poor attachment may have caused both the breast engorgement and the fissure.
- The most common cause of sore nipples is poor attachment.
- If a baby is poorly attached, he pulls the nipple in and out as he sucks, and rubs the skin of the breast against his mouth. This is very painful for his mother.
- At first there is no fissure. The nipple may look normal; or it may look squashed with a line across the tip when the baby releases the breast. If the baby continues to suckle in this way, it damages the nipple skin, and causes a fissure.
- If a woman has sore nipples:
 - Suggest to the mother not to wash her breasts more than once a day, and not to use soap or rub hard with a towel. Washing removes natural oils from the skin and makes soreness more likely.
 - Suggest to the mother not to use medicated lotions and ointments, because these can irritate the skin, and there is no evidence that they are helpful.
 - Suggest that after breastfeeding she rubs a little expressed breast milk over the nipple and areola with her finger. This promotes healing.

Show **Slide 21/12 - Candida infection** and make the points that follow:



- This mother has very sore, itchy nipples.
Ask: What do you see that might explain the soreness?
Wait for a few replies and then continue.
- There is a shiny red area of skin on the nipple and areola.
- This is a Candida infection, or thrush, which can make the skin sore and itchy. Candida infections often follow the use of antibiotics to treat mastitis, or other infections.
- Some mothers describe burning or stinging which continues after a feed. Sometimes the pain shoots deep into the breast. A mother may say that it feels as though needles are being driven into her breast.
- The skin may look red, shiny and flaky. The nipple and areola may lose some of their pigmentation. Sometimes the nipple looks normal.
- Suspect Candida if sore nipples persist, even when the baby's attachment is good. Check the baby for thrush. He may have white patches inside his cheeks or on his tongue, or he may have a rash on his bottom.
- Treat both mother and baby with nystatin.
- Advise the mother to stop using pacifiers (dummies). Help her to stop using teats, and nipple shields. If these are used, they should be boiled for 20 minutes daily and replaced weekly.

- Ask participants to turn to page 142 of their Manuals and find the box TREATMENT OF CANDIDA OF THE BREAST. There is no need to read this out, but point out to participants that this is the recommended treatment.

TREATMENT OF CANDIDA OF THE BREAST
<ul style="list-style-type: none"> ▪ Nystatin cream 100,000 IU/g: Apply to nipples 4 times daily after breastfeeds. Continue to apply for 7 days after lesions have healed. ▪ Nystatin suspension 100,000 IU/ml: Apply 1 ml by dropper to child's mouth 4 times daily after breastfeeds for 7 days, or as long as mother is being treated. ▪ Stop using pacifiers, teats, and nipple shields.

III. Summarize the session

2 minutes

- Ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on pages 133-142 of the *Participant's Manual*.

Further information

Breast shape:

Breast shape and size is partly inherited. Breasts may be long in girls who have had no children, and small or flat in women who have breastfed several children.

Occasionally a woman's breasts may fail to develop normally, so that they are unable to produce enough milk, but this is very rare.

Management of inverted nipples:

Participants may have heard of different ways to treat inverted nipples, and they may wish to discuss the topic further - especially if they have known of a case that they found difficult to help. These notes may help you to answer questions. However, it is not necessary to give participants this information if they have not heard of these techniques.

Nipple shell

This is a glass or plastic hemisphere, with a hole in the base, to put over a nipple, under the clothes. The nipple is pressed through the hole, to make it stand out more. There is no evidence that these shells help, and they may cause oedema. However, if a mother is worried about inverted nipples, and she has heard of nipple shells and wants to try to use one, let her continue. It may make her feel that she is doing something, and it may help her to feel confident.

Hoffman's exercises

Some women have heard of exercises to stretch nipples. These exercises have not been shown to really help. They are unlikely to make much difference to severely inverted nipples. Nipple exercises can sometimes traumatise the breast, so do not recommend them. However, if a woman has heard about exercises and wishes to do them, let her continue.

Nipple shields

These are teats with a broad plastic or glass base to put over a nipple for a baby to suck through. Mothers sometimes use them if they have conditions such as inverted nipples, or sore nipples. Nipple shields are no longer recommended because they can cause problems and they do not remove the cause of the condition. Nipple shields can reduce the

flow of milk; they can cause breast infections, including *Candida*; they can cause 'nipple confusion', and may make it more difficult for a baby to learn to suckle directly from the breast. Some mothers find it difficult to stop using them. Nipple shields are not useful except in rare cases for a short time and with careful supervision.

Engorgement:

When breasts are engorged, the milk does not flow well, partly because of the pressure of fluid in the breast, and partly because the oxytocin reflex does not work well.

Non-infective mastitis:

- The cause of non-infective mastitis is probably milk under pressure leaking back into the surrounding tissues.
- The tissues treat the milk as a 'foreign' substance.
- Also, milk contains substances that can cause inflammation.
- The result is pain, swelling, and fever, even when there is no bacterial infection.
- Trauma that damages breast tissue can also cause mastitis. This may also be because milk leaks back into the damaged tissues.

Breast abscess:

Participants may wish to discuss breast abscess in more detail.

An abscess is when a collection of pus forms in part of the breast. The breast develops a painful swelling, which feels full of fluid. An abscess needs surgical incision and drainage. If possible, let the baby continue to feed from the breast. There is no danger to the baby. However, if it is too painful, or if the mother is unwilling, show her how to express her milk, and let her baby start to feed from it again as soon as the pain is less - usually in 2-3 days. Meanwhile, continue to feed from the other breast. Good management of mastitis should prevent the formation of an abscess.

Alternative antibiotics for treatment of infective mastitis

The following antibiotics can be used if necessary

- Cloxacillin 250-500 mg 6 hourly for 7-10 days
- Cephalexin 250-500 mg 6 hourly for 7-10 days.

Treatment of nipples fissures:

Ointments for nipple fissure

Sometimes a plain cream such as lanolin may help a fissured nipple to heal after the suckling position has been corrected. However, plain creams are often not available, and they are not usually necessary.

Clothes

In warm weather, a cotton bra may be better for fissured nipples than a nylon bra. However, cotton is not essential, and you should not recommend it to a mother who cannot afford it. If necessary, suggest that she leaves her bra off for a day or two.

Nipple shields

These are no longer recommended for the treatment of fissured nipples.

Session 22

Importance of Complementary Feeding

Objectives

After completing this session participants will be able to:

- explain the importance of continuing breastfeeding
- define complementary feeding
- explain why there is an optimal age for children to start complementary feeding
- list the Key Messages from this session
- list their current complementary feeding activities.

Session outline

45 minutes

Participants are all together for a lecture presentation by one trainer, followed by group work with all trainers.

I.	Introduce the session	1 minutes
II.	Discuss sustaining breastfeeding	5 minutes
III.	Define complementary feeding	2 minutes
IV.	Discuss the optimal age to start complementary feeding	20 minutes
V.	Examine the role of the health worker and the health facility (group work)	15 minutes
VI.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 22/1-22/8 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- Write up the two Key Messages from this session:

Key Message 1: Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.

Key Message 2: Starting other foods in addition to breast milk at six completed months helps a child to grow well.

- Arrange the words so that the first message can be uncovered with the second message still covered. (One way to do this is to have a sheet of blank flip chart paper with tape on each side at the top. Move this cover down as needed).
- You need tape or other means of fixing the page to the wall or board.
- You need scrap paper for participants to write their recommendations on. These will be used again in Session 34.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**1 minute**

- Make these points:
 - The period from six months of age until two years is of critical importance in the child's growth and development. You, as health workers, have an important role in helping families during this time.
 - During the next few sessions we will develop a list of 10 Key Messages to discuss with caregivers about complementary feeds.

Ask: Write down the most frequent recommendations or information that you give to caregivers about feeding children aged 6-24 months.

After participants have written on any piece of scrap paper, collect these and give them to the trainer who is conducting Session 34.

- We will come back to these recommendations in Session 34.

Show **Slide 22/1 - Session 22 Objectives** and read out the objectives:

22/1

Importance of complementary feeding

After completing this session participants will be able to:

- explain the importance of continuing breastfeeding
- define complementary feeding
- explain why there is an optimal age for children to start complementary feeding
- list the Key Messages from this session
- list their current complementary feeding activities

II. Discuss sustaining breastfeeding**5 minutes**

Ask: Why is it important to continue breastfeeding after six months?

Wait for a few responses and then continue.

- Make these points:
 - In Session 2 we discussed the importance of continued breastfeeding. From 6-12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12-24 months, at least one-third of their nutritional needs.
 - As well as nutrition, breastfeeding continues to provide protection to the child against many illnesses and provides closeness and contact that helps psychological development.
 - So, remember to include this key point when talking about the baby over six months old.

- Show **Slide 22/2 - Key Message 1: Breastfeeding** and ask a participant to read out the Key Message:

22/2

Key Message 1

Breastfeeding for two years or longer helps a child to develop and grow strong and healthy

- Feeding counsellors can do a lot to support and encourage women who want to breastfeed their babies. You can help to protect good practices in a community. If you do not actively support breastfeeding, you may hinder it by mistake.
- Every time you see a mother, try to build her confidence. Praise her for what she and her baby are doing right. Give relevant information, and suggest something appropriate.
- Children who are not receiving breast milk should receive another source of milk and need special attention. There are special recommendations for feeding the non-breastfed child from 6-24 months. We will be looking at these recommendations in the following sessions.

III. Define complementary feeding**2 minutes**

- Make these points:
 - An age is reached when breast milk alone is insufficient to meet the child's nutritional needs, and at this point complementary foods must be added. Let us examine what complementary feeding means.

- Show **Slide 22/3 - Definition of complementary feeding** and read out the definition:

22/3

Definition of complementary feeding

- Complementary feeding means giving other foods in addition to breast milk
- These other foods are called complementary foods

- These additional foods and liquids are called complementary foods, as they are additional or complementary to breastfeeding, rather than adequate on their own as the diet. Complementary foods must be nutritious foods and in adequate amounts so the child can continue to grow.
- The term 'complementary feeding' is used to emphasize that this feeding complements breast milk rather than replacing it. Effective complementary feeding activities include support to continue breastfeeding.
- During the period of complementary feeding, the young child gradually becomes accustomed to eating family foods. Feeding includes more than just the foods provided. *How* the child is fed can be as important as *what* the child is fed.

IV. Discuss the optimal age to start complementary feeding 20 minutes Make these points:

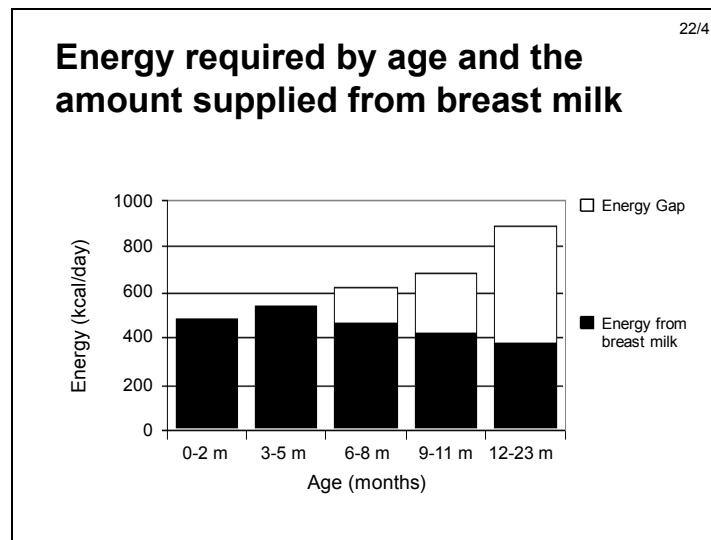
- Families may decide a young child is ready for complementary foods because they notice certain developmental signs such as reaching for food when others are eating or starting to get teeth.
- Families may decide the baby needs additional foods because the baby is showing what they believe to be signs of hunger. Signs such as the baby putting his hands to the mouth may be normal developmental signs, not signs of hunger.
- Sometimes a family may decide to start complementary feeding because they believe that the baby will breastfeed less and the mother will be able to be away from the baby more.
- Complementary foods may be started because a baby under six months of age is not gaining weight adequately.
- A family may be influenced by what other people say to them about starting complementary foods. They may listen to a neighbour, their mother, a health worker or even advertisements for baby food products.
- Knowing why families start complementary foods helps you to decide how to assist them.
- For example, a mother may give foods to a very young baby because she thinks she does not have enough breast milk. Once you understand her reason, you can give her appropriate information.
- Complementary feeding should be started when the baby can no longer get enough energy and nutrients from breast milk alone. For most babies this is six completed months of age.¹³

 Explain energy needs.

- Our body uses food for energy to keep alive, to grow, to fight infection, to move around and be active. Food is like the wood for the fire – if we do not have enough good wood, the fire does not provide good heat or energy. In the same way, if young children do not have enough good food, they will not have the energy to grow and be active.

¹³ Six completed months – 180 days, not the start of the sixth month.

- Show Slide 22/4 - Energy required by age and the amount supplied from breast milk and make the points that follow:




- On this graph, each column represents the total energy needed at that age. The columns become taller to indicate that more energy is needed as the child becomes older, bigger and more active. The dark part shows how much of this energy is supplied by breast milk (*Point to the dark area on the graph*).
- You can see that from about six months onwards there is a gap between the total energy needs and the energy provided by breast milk. The gap increases as the child gets bigger (*Point to the white area on the graph*).
- This graph is an 'average' child and the nutrients supplied by breast milk from an 'average' mother. A few children may have higher needs and the energy gap would be larger. A few children may have smaller needs and thus a smaller gap.
- Therefore, for most babies, six months of age is a good time to start complementary foods. Complementary feeding from six completed months helps a child to grow well and be active and content.

- Show **Slide 22/5 - Key Message 2: When to start complementary feeding** and ask a participant to read out the Key Message:

22/5

Key Message 2

Starting other foods in addition to breast milk at 6 completed months helps a child to grow well

A black and white line drawing of a woman sitting on the floor, feeding a baby. The woman is wearing a headscarf and a short-sleeved shirt. She is holding a small bowl and a spoon, feeding the baby who is sitting up. The baby is looking towards the woman. The woman's hand is on the baby's back, providing support.

- After six months, babies need to learn to eat thick porridge, puree and mashed foods. These foods fill the energy gap more than liquids.
- At six completed months of age it becomes easier to feed thick porridge and mashed food because babies:
 - show interest in other people eating and reach for food
 - like to put things in their mouth
 - can control their tongue better to move food around their mouth
 - start to make up and down 'munching' movements with their jaws.
- In addition, at this age, babies' digestive systems are mature enough to begin to digest a range of foods.

Ask: *What might happen if complementary foods are started too soon (before six months)?*

Write participants' replies on the flip chart. Refer to the points they made as you make the following points.

Show Slide 22/6 - Adding foods too soon and make the points that follow:

22/6

Starting other foods too soon

Adding foods too soon may:

- take the place of breast milk
- result in a low nutrient diet
- increase risk of illness
 - less protective factors
 - other foods not as clean
 - difficult to digest foods
- increase mother's risk of pregnancy

- Adding complementary foods too soon may:
 - take the place of breast milk, making it difficult to meet the child's nutritional needs
 - result in a diet that is low in nutrients if thin, watery soups and porridges are used
 - increase the risk of illness because less of the protective factors in breast milk are consumed
 - increase the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breast milk
 - increase the risk of wheezing and other allergic conditions because the baby cannot yet digest and absorb non-human proteins well
 - increase the mother's risk of another pregnancy if breastfeeding is less frequent.

Ask: *What might happen to the child if complementary foods are started too late (older than six months)?*

Write participants' replies on the flip chart. *Refer to the points they made as you make the following points.*

- Show **Slide 22/7 - Adding foods too late** and make the points that follow:

22/7

Starting other foods too late

Adding foods too late may

- result in child not receiving required nutrients
- slow child's growth and development
- risk causing deficiencies and malnutrition

- Starting complementary foods too late is also a risk because the child:
 - does not receive the extra food required to meet his/her growing needs
 - grows and develops more slowly
 - might not receive the nutrients to avoid malnutrition and deficiencies such as anaemia from lack of iron.

V. Examine the role of the health worker and the health facility 15 minutes

- Make these points:
- Parents of young children may receive information about feeding their child from many sources such as families, health facility personnel, and community members.
 - Here is Maria and her mother. Maria is ten months old and has come to the health facility regularly for immunizations and health checks.

- Show Slide 22/8 - Maria and mother and introduce **EXERCISE 22.A: ASSESS YOUR PRACTICES** with the points that follow:



- Now, let us make a list of feeding or nutrition related activities that Maria or her mother could have found on their visit to you or your health facility.
 - Turn to page 147 of your Manual (Page 314 of Trainer's Guide). Think about the health facility where you work. When a young child comes to your facility - both well and sick children - what activities occur related to nutrition?
 - Fill in the table with the activities that occur. You may add comments to help clarify your marks in the table. For example, if all children who attend the well-baby clinic are weighed and measured but those who attend sick baby clinic are just weighed you can note this. For another example, if all children who see a nutritionist receive some nutrition counselling or discussion but children who do not see the nutritionist do not, you can note this.
- Trainers go around their group as they are writing to ensure that participants understand the exercise. Encourage participants to think of their own situations. Allow about 10 minutes for this exercise.
- Return to the larger group. Briefly summarize the findings of the exercise by asking the following questions.
- Ask:** *What are the practices that occur most frequently at your place of work? What are the practices that occur least frequently?*

☐ Make these points:

- The nutritional status of a child affects overall health. Health is not only growth and development but also the ability to fight off illness, and recover from illness. This means the nutritional status of children is important to all health staff, and that all health staff should promote good feeding practices.
- Creating a health facility environment that gives importance to children's nutrition will go a long way in promoting healthy children.

EXERCISE 22.A ASSESS YOUR PRACTICES				
Does this practice occur?	With all children	With some children	Does not occur	Comments
Weigh child				
Measure child's length				
Look at child's growth chart				
Discuss how the child is feeding				
Note on child's chart that feeding was discussed				
Carry out demonstrations of young children's food preparations and feeding techniques				
Make home visits to assess foods and feeding practices				
Other Activities				

Most frequent nutrition-related activities occurring in your health facility

Least frequent nutrition-related activities occurring in your health facility

Session 23 - Homework

Building Confidence and Giving Support Exercises – Part 2

Objectives

After completing this session participants will be able to:

- demonstrate appropriate use of the confidence and support skills
- provide examples of each skill in relation to feeding of children 6-24 months.

Session outline

Participants work in groups or alone

- | | |
|----------------------------------|-----------|
| I. Introduce the session | 2 minutes |
| II. Written exercises (Homework) | |
| III. Review results | |

Preparation

- Make sure that Answer Sheets for Exercises 23.a-23.f are available to give to participants once exercises are completed.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

2 minutes

- Ask participants to turn to page 149 of their Manuals to find Exercises 23.a-23.f.
- Explain what they will do:
 - In Session 13 we practised the six Confidence and Support Skills with examples of breastfeeding mothers. We will now use these skills with mothers whose children are over six months of age and receiving complementary feeds.
 - Exercises 23.a-23.f are individual written exercises.
 - For each exercise, read the instructions How to do the exercise and the Example of what to do.
 - Then write your answers to the questions in the section which says To answer.
 - If possible use pencil, so that it is easier to correct the answers.
 - When you are ready, discuss your answers with the trainer. Trainers will give feedback individually as you do the exercises,
 - Trainers will give you Answer Sheets once you have completed all exercises.

II. Written exercises (Homework)

Exercise 23.a Accepting what a mother THINKS

How to do the exercise:

Examples 1-2 are mistaken ideas which mothers might hold.

Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.

Beside each response write whether the response agrees, disagrees or accepts.

Example:

Mother of a healthy 19-month-old baby whose weight is on the median:

“You are worried about giving him milk?”

Accepts

“I am worried that my child will become a fat adult so I will stop giving him milk”.

“It is important that children have some milk in their diet until they are at least two years of age”.

Disagrees

“Yes, fat babies tend to turn into fat adults.”

Agrees

To answer

1. Mother of a seven-month-old baby:

“My child is not eating any food that I offer so I will have to stop breastfeeding so often. Then he will be hungry and will eat the food.”

“Oh, no, you must not give him less breast milk. That is a bad idea.”

Disagrees

“I see...”

Accepts

“Yes, sometimes babies do get full up on breast milk?”

Agrees

2. Mother of a 12-month-old child:

“My baby has diarrhoea so I must stop giving him any solids.”

“Yes, often foods can make the diarrhoea worse.”

Agrees

“You are worried about giving foods at the moment?”

Accepts

“But solids help a baby to grow and gain weight again – you must not stop them now.”

Disagrees

How to do the exercise:

Examples 3-4 are some more mistaken ideas which mothers might hold.

Make up a response that accepts what the mother says, without disagreeing or agreeing.

To answer:**Possible responses to accept what the mother thinks are:**

3. “My neighbour’s child eats more than my child and he is growing much bigger. I must not be giving my child enough food.”

“You feel unsure if your child is getting enough to eat?”

4. “I am worried about giving my one year old child family foods in case he chokes.”

“Mmm. You are concerned that he might choke.”

Exercise 23.b Accepting what a mother FEELS**How to do the exercise:**

After the Stories A, and B below, there are three responses.

Mark with a ✓ the response which shows acceptance of how the mother feels.

Example:

Edith's baby boy has not gained much weight over the past two months. As Edith tells you about it, she bursts into tears.

Mark with a ✓ the response which shows that you accept how Edith feels.

- a. Don't worry – I am sure he will gain weight soon.
- b. Shall we talk about what foods to give your baby?
- ✓ c. You're really upset about this aren't you?

To answer:**Story A.**

Agnes is in tears. Her baby is refusing to eat vegetables and she is worried.

- a. Don't cry – many children do not eat vegetables.
- ✓ b. You are really worried about this?
- c. It is important that your baby eats vegetables for the vitamins he needs.

Story B.

Susan is crying. Since starting complementary feeds her baby has developed a rash on his buttocks. The rash looks like a nappy rash.

- a. Don't cry - it is not serious.
- b. Lots of babies have this rash – we can soon make it better.
- ✓ c. You are really upset about this rash, aren't you?

Exercise 23.c Praising what a mother and baby are doing right

How to do the exercise:

For Stories C and D below, make up a response which praises something the mother and baby are doing right.

Example:

A mother is giving her nine-month-old baby fizzy drinks. She is worried that he is not eating his meals well. He is growing well at the moment. She offers him three meals and one snack per day.

Suggestions (In your answer, you only need to give ONE answer)

"It is good that you are offering him three meals and one snack per day."

"Your child is growing well on the food you are giving him."

To answer:

Story C.

A 15-month-old child is breastfeeding and having thin porridge and sometimes tea and bread. He has not gained weight for six months, and is thin and miserable.

"It is good that you are continuing to breastfeed him at this age."

Story D.

A nine-month-old baby and his mother have come to see you. Here is the growth chart on weight for age of the baby.

"Your baby gained weight last month on the food that you are offering him."



Exercise 23.d Giving a little, relevant information

How to do the exercise:

Below is a list of four mothers with babies of different ages.

Beside them are four pieces of information (a, b, c and d) that those mothers may need; but the information is not opposite the mother who needs it most.

Match the piece of information with the mother and baby in the same set for whom it is MOST RELEVANT AT THAT TIME.

After the description of each mother there are four letters.

Put a circle round the letter which corresponds to the information which is most relevant for her.

To answer:

Mothers 1-4

1. Mother with a seven-month-old baby

a (b) c d

2. Mother with a 15-month-old baby who is getting two meals per day

a b (c) d

3. Mother with a 12-month-old baby who thinks that the baby is too old to breastfeed any longer

a b c (d)

4. Mother of a non-breastfed child who is 11 months old

(a) b c d

Information

a. Children need extra water at this age – about 4-5 cups in a hot climate

b. Children who start complementary feeding at six completed months of age grow well

c. Growing children of this age need three to four meals per day, plus one to two snacks if hungry, in addition to milk.

d. Breastfeeding to at least two years of age help a child to grow strong and healthy

Exercise 23.e Using simple language

How to do the exercise:

Below are two pieces of information that you might want to give to mothers.

The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

Example:

Information:

Dark-green leaves and yellow-coloured fruit and vegetables are rich in vitamin A.

Using simple language:

“Dark-green leaves and yellow-coloured vegetables help the child to have healthy eyes and fewer infections.”

To answer:

Information:

Using simple language:

- | | |
|---|---|
| 1. Breastfeeding beyond six months of age is good as breast milk contains absorbable iron, calories and zinc. | <i>“Breastfeeding to at least two years of age helps a child to grow strong and healthy.”</i> |
| 2. Non-breastfed children aged 14 months should receive protein, zinc and iron in appropriate quantities | <i>“For children who are not breastfeeding it is helpful to give an animal-source food each day.”</i> |

Exercise 23.f Making one or two suggestions, not commands

How to do the exercise:

Below are some commands which you might want to give to a mother.

Rewrite the commands as suggestions.

Example:

Command:

“You must start complementary foods when your baby is six completed months old.”

Suggestions:

“Children who start complementary foods at six completed months grow well and are active and content.”

“Could you start some foods in addition to milk now that your baby is six completed months old?”

To answer:

Command:

“You must use thick foods.”

Suggestions:

(In your answer, you only need to give ONE answer):

“Family foods with a thick consistency nourish and fill the child.”

“Would you be able to use thicker foods?”

“Your child should be eating a full bowl of food by one year of age.”

“Increasing amounts of food helps a child grow.”

“Could you give your child a full bowl of food at mealtimes?”

Session 24

Foods to Fill the Energy Gap

Objectives

After completing this session participants will be able to:

- list the local foods that can help fill the energy gap
- explain the reasons for recommending using foods of a thick consistency
- describe ways to enrich foods
- list the Key Message from this session.

Session outline

30 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	2 minutes
II.	Outline foods that can fill the energy gap	10 minutes
III.	Demonstrate using a thick consistency of food	10 minutes
IV.	Discuss ways to enrich foods	5 minutes
V.	Summarize the session	3 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 24/1-24/5 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- Write up the Key Message from this session:
Key Message 3: Foods that are thick enough to stay in the spoon give more energy to the child.
- You need tape or other means of fixing the page to the wall or board.
- You need a bowl or plate that would be used when feeding a young child.
- Find out if germinated flours or fermented porridge is used in the area. If so, include the relevant section.
- Adapt lists of foods to reflect those available locally.
- You need food demonstration equipment as described in box on page 326. Practise the demonstration beforehand.
- Check if an IMCI food box for the variety of available foods has been developed for the country.

CONSISTENCY DEMONSTRATION EQUIPMENT

- Extra table or tray in case porridge spills.
- Two empty see-through containers that will each hold 200 ml when filled to the top for the 'stomach' This could be a drinking glass, or a plastic container such as a soft drink bottle, cut to the right size. Sharp scissors or knife to cut the soft drink bottles, if needed.
- Measuring jug or other means to measure 200 ml.
- 400 ml made-up porridge/gruel from a suitable local staple. Make up to a thick consistency so that it stays easily in the spoon when the spoon is tilted.
- Divide the cooked porridge into 2 even portions:
 - **One portion put in a bowl or container that holds at least 500 ml. Later you will stir water into this portion.**
 - **The other portion you will use undiluted. The container size does not matter.**
- Extra water (about 200 ml) to dilute porridge.
- A large eating spoon.
- Cleaning materials to tidy-up afterwards, including hand washing facilities.
- This session can be conducted with a second trainer carrying out the demonstration while the first trainer speaks.
- Practise this demonstration to ensure the quantities of porridge are right for the 'stomach'. The first portion should be about twice as much (after diluted) as the stomach size. The second portion should all fit in with none left over and the stomach full.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

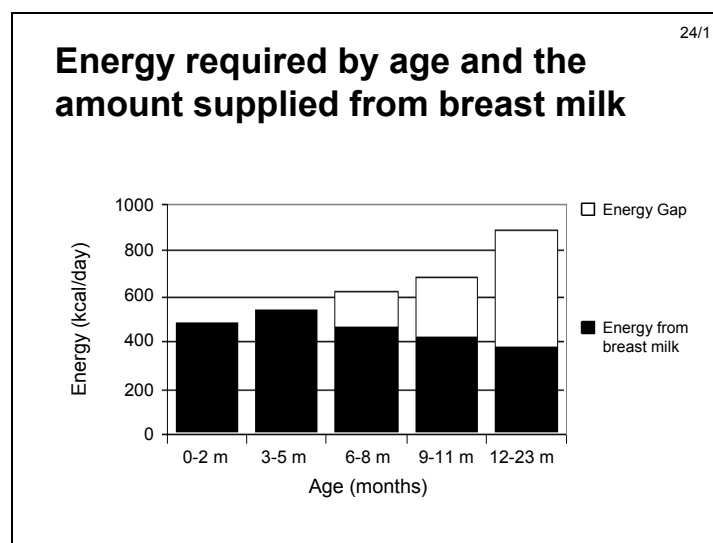
Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**2 minutes**

Make these points:

- We talked earlier that as a baby grows and becomes more active, an age is reached when breast milk alone is not sufficient to meet the child's needs. This is when complementary foods are needed.
- In the previous session, we saw this graph of the energy needed by the growing child and how much is provided by effective breastfeeding.

Show **Slide 24/1 - Energy gap** again and ask the question:



Ask: Why do you think the gap becomes bigger as the child grows older (Point to white space)?

Wait for a few replies and then continue.

- As the young child gets older, breast milk continues to provide energy, however the child's energy needs have increased as the child grows.
- If these gaps are not filled, the child will stop growing or grow only at a slow rate. The child who is not growing well may also be more likely to become ill or to recover less quickly from an illness.
- As health workers, you have an important role to help families use appropriate complementary foods and feeding techniques to fill the gaps.

Show Slide 24/2 - Foods to fill the energy gap and read out the objectives:

24/2

Foods to fill the energy gap

After completing this session participants will be able to:

- list the local foods that can help fill this energy gap
- explain the reasons for using foods of a thick consistency
- describe ways to enrich foods
- explain the risks of imbalanced diet
- list the Key Message from this session

II. Outline foods that can fill the energy gap 10 minutes

Make these points:

- Think of the child's bowl or plate (Hold up the child's bowl).
- The first food we may think of to put in the bowl is the family staple. Every community has at least one staple or main food. The staple may be:
 - cereals, such as rice, wheat, maize/corn, oats or millet
 - starchy roots such as cassava, yam, or potato
 - starchy fruits such as plantain and breadfruit.

Ask: *What are the main staples eaten in your community?*

Wait for a few replies and then continue.

Write participants' replies on the flip chart.

- All foods provide some energy. However, people generally eat large amounts of these staples and they provide much of the energy needed. Staples also provide some protein and other nutrients, but they cannot provide all the nutrients needed on their own. The staple must be eaten with other foods for a child to get enough nutrients.
- Staples generally need preparation before eating. They may just need to be cleaned and boiled or they may be milled into flour or grated and then cooked to make bread or porridge.
- Sometimes staple foods are specially prepared for young children, for example, wheat may be the staple and bread dipped in soup is the way it is used for young children. It is important that you know what are the main staples that families eat in your area. Then you can help them to use these foods for feeding their young children.
- Let's look again at the list of staples that we made on the flip chart.

Ask: *Which of these staples are given to young children?*

Wait for a few replies and then continue.

Mark which staples are given to children

Make these points:

- In rural areas, families often spend much of their time growing, harvesting, storing and processing the staple food. In urban areas, the staple is often bought, and the choice depends on cost and availability.

Ask: *Does the staple used in this community depend on where you live or on the time of the year?*

Wait for a few replies and then continue.

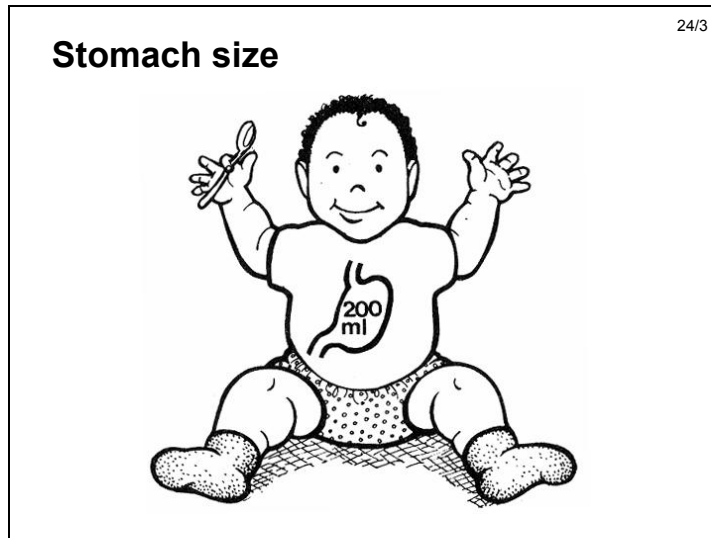
- Preparing the staple may take a lot of the caregiver's time. Sometimes a family will use a more expensive staple that requires less preparation or less fuel for cooking rather than use a cheaper staple.

III. Demonstrate using a thick consistency of food **10 minutes**

Introduce the next section with these points:

- We have the staple in the child's bowl. Let us say this child will have (give local example, potato, rice ...) The food may be thin and runny or it may be thick and stay on the spoon.
- Often families are afraid that thick foods will be difficult to swallow, be stuck in the baby's throat, or give the baby constipation. Therefore, they add extra liquid to the foods to make it easier for the young child to eat. Sometimes extra liquid is added so that it will take less time to feed the baby.
- It is important for you to help families understand the importance of using a thick consistency in foods for young children.

Show Slide 24/3 - Stomach size and make the points that follow:



- This is (boy's name). He is eight months old. At this age, (name's) stomach can hold about 200 ml at one time. This is the amount that fits into this container.
- Show the empty see-through container that holds 200 ml.
- (Name's) mother makes his porridge from maize flour. His mother is afraid (name) will not be able to swallow the porridge, so she adds extra water.
- Use one portion of the made-up porridge and dilute this portion of porridge to at least twice the volume and show to participants.
- Now the porridge looks like this (thin and watery).
Spoon or pour the porridge into the see-through container 'stomach' as you ask the following question:
Ask: Can all this thin porridge fit in his stomach?
Wait for a few replies and then continue.
 - No, it cannot all fit in his stomach, there is still porridge left in the bowl. (Name's) stomach would be full before he had finished the bowlful. So (name) would not get all the energy he needs to grow.
 - (Name's) mother has talked with you, the health worker, and you have suggested that she give thick porridge. The mother makes the porridge using the same amount of maize but does not add extra water. The porridge looks like this (thick).

- Use the other portion of the made-up porridge but do not dilute it. Show the participants how thick it is. Spoon all the porridge into the see-through container 'stomach' as you ask the question.

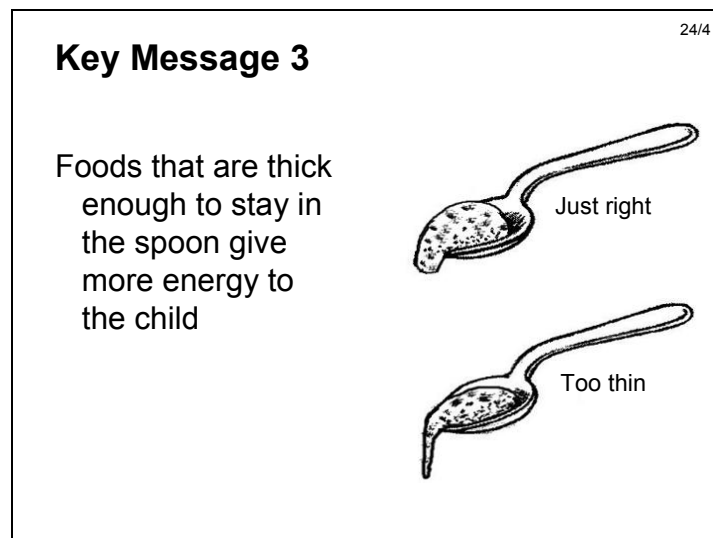
Ask: Can all this thick porridge fit in (name's) stomach?

Wait for a few replies and then continue.

Yes. (name) can eat a bowlful, which will help meet his energy needs.

- Now, use a spoon to demonstrate the consistency of the porridge.
 - Look at the consistency of the porridge on the spoon. This is a good way to show families how thick the food preparation should be. The food should be thick enough to stay easily on the spoon without running off when the spoon is tilted.
 - If families use a blender to prepare the baby's foods this may need extra fluid to work. It may be better to mash the baby's food instead so that less fluid is added.
 - Porridge or food mixtures that are so thin that they can be fed from a feeding bottle, or poured from the hand or that the child can drink from a cup, do not provide enough energy or nutrients.
 - The consistency or thickness of foods makes a big difference to how well that food meets the young child's energy needs. Foods of a thick consistency help to fill the energy gap.
 - So when you are talking with families, give this Key Message:

- Show **Slide 24/4 - Key Message 3: Thick foods** and ask a participant to read out the Key Message:



IV. Discuss ways to enrich foods**5 minutes**

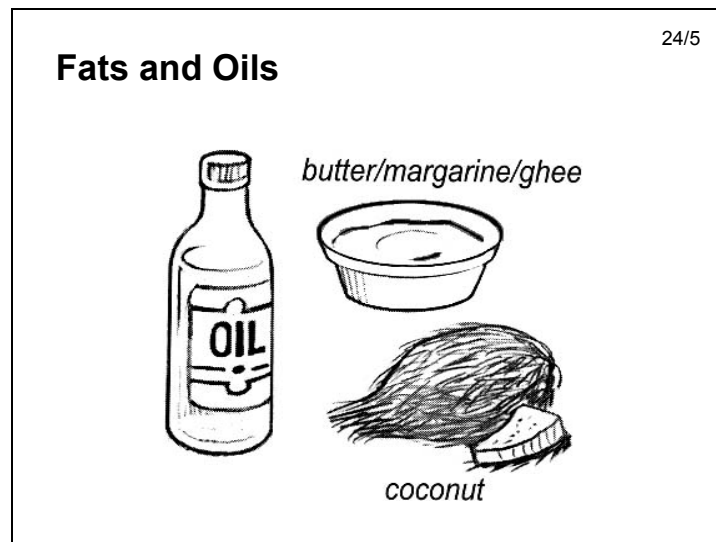
- Continue with these points:
 - Similar to the porridge, when soups or stews are given to young children they may be thin and dilute and fill the child's stomach. There may be good foods in the soup pot, but little of the food ingredients are given to the child. It is mostly the watery part of the soup that is given.

Ask: How could families make the young child's food more energy rich?

Wait for a few replies and then continue.
- Ask participants to turn to page 158 of their Manuals find the box WAYS TO ENRICH A CHILD'S FOOD. Ask participants to take it in turns to read out the points.

WAYS TO ENRICH A CHILD'S FOODS
<p>Foods can be made more energy and nutrient rich in a number of ways:</p> <ul style="list-style-type: none"> ▪ For a porridge or other staple <ul style="list-style-type: none"> . Prepare with less water and make a thicker porridge as we just saw. Do not make the food thin and runny. . Toast cereal grains before grinding them into flour. Toasted flour does not thicken so much, so less water is needed to make porridge. ▪ For a soup or stew <ul style="list-style-type: none"> . Take out a mixture of the solid pieces in the soup or stew such as beans, vegetables, meat and the staple. Mash this to a thick puree and feed to the child instead of the liquid part of the soup. ▪ Add energy or nutrient rich food to the porridge, soup or stew to enrich it. This enriching is particularly important if the soup is mostly liquid with few beans, vegetables or other foods in it <ul style="list-style-type: none"> . Replace some (or all) of the cooking water with fresh or soured milk, coconut milk, or cream. . Add a spoonful of milk powder after cooking. . Mix legume, pulse or bean flour with the staple flour before cooking. . Stir in a paste made from nuts or seeds such as groundnut paste (peanut butter) or sesame seed paste (tahini/sim sim). . Add a spoonful of margarine, ghee or oil.

- Show **Slide 24/5 - Fats and oils** and make the points that follow:



- Ask participants to turn to page 159 of their Manuals and find the box FATS AND OILS. Ask participants to take it in turns to read out the points.

FATS AND OILS

- Oils and fats are concentrated sources of energy. A little oil or fat, such as one-half teaspoon, added to the child's bowl of food, gives extra energy in a small volume. The addition of fatty/oily foods also makes thicker porridge or other staple softer and easier to eat.
- Fats and oils can also be used for frying foods, or spread on foods such as bread. The fat or oil should be fresh as it can go bad with storage.
- If a large amount of oil is added, the child may become full before they have eaten all the food. This means they may get the energy from the oil but less of the other nutrients because they eat less food overall.
- If a child is growing well, extra oil is usually not needed. The child who takes too much oil or fried foods can become overweight.
- Sugar, jaggery and honey are also energy-rich and can be added to foods in small quantities to increase the energy concentration. However, these foods do not contain any other nutrients.
- Caregivers need to watch that sugary foods do not replace other foods in the diet. For example, sweets, sweet biscuits and sugary drinks used instead of a meal for a young child.
- Essential fatty acids are needed for a child's growing brain and eyes, and for healthy blood vessels. These essential fatty acids are present in breast milk (see Session 2).
- For children over six months old, who are not breastfed, good sources of essential fatty acids are fish, avocado, nut pastes and vegetable oil. Animal-source foods also provide essential fatty acids.

- Ask participants if overweight/obesity is a problem among children in the area. If yes, ask them if they can indicate what they think are some important causes of the problem. Tell them that you will have a more in-depth discussion on this subject in Session 30.
- OPTIONAL:** If fermented porridge or germination of grain for flour is used in your area ask participants to turn to page 160 of their Manuals and find the box FERMENTED PORRIDGE OR GERMINATION OF GRAIN FOR FLOUR. Ask participants to take it in turns to read out the points.

FERMENTED PORRIDGE OR GERMINATION OF GRAIN FOR FLOUR.

Fermented porridge

- Fermented porridge can be made in two ways - the grain can be mixed with water and set to ferment overnight or longer before cooking, or the grain and water is cooked into porridge and then fermented. Sometimes some of a previous batch of the fermented porridge (starter) is added to speed up the process of fermentation. Porridge made from germinated grain can also be fermented.
- The advantages of using fermented porridge are:
 - It is less thick than plain porridge so more grain/flour can be used for the same amount of water. This means each cupful of porridge contains more energy and nutrients than plain (unfermented) porridge.
 - Children may prefer the taste of 'sour' porridge and so eat more.
 - The absorption of iron and some other minerals is better from the soured porridge.
 - It is more difficult for harmful bacteria to grow in soured porridge, so it can be kept for a day or two.
- Grain is also fermented to make alcohol. However, the short fermentation talked about here to make fermented porridge will not make alcohol or make the child drunk!

Germinated or sprouted flour

- Cereal or legume seeds are soaked in water and then left to sprout. The grains are then dried (sometimes toasted) and ground into flour. A family can do this at home but it is more common to buy flour already germinated.
- Mixed flours that include germinated (or malted) flour in addition to the main flour may be available in the store.
- If families in your area use germinated grain, the following ways can be used to make a thicker and more nutritious porridge:
 - Use this germinated flour to make porridge. This type of flour does not thicken much during cooking so less water can be used.
 - Add a pinch of the germinated flour to cooked thick porridge that has cooled a little bit. The porridge should be boiled again for a few minutes after adding the germinated flour. This addition will make the porridge softer and easier for the child to eat.
- Germination also helps more iron to be absorbed.

Session 25

Foods to Fill the Iron and Vitamin A Gaps

Objectives

After completing this session participants will be able to:

- list the local foods that can fill the nutrient gaps for iron and vitamin A
- explain the importance of animal-source foods
- explain the importance of legumes
- explain the use of processed complementary foods
- explain the fluid needs of the young child
- list the Key Messages from this session.

Session outline

50 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	2 minutes
II.	Outline foods that can fill these gaps – Iron	5 minutes
III.	Discuss the importance of animal-source foods	5 minutes
IV.	Discuss the importance of legumes	5 minutes
V.	Discuss iron absorption	5 minutes
VI.	Outline foods than can fill these gaps – Vitamin A	5 minutes
VII.	Discuss the use of fortified complementary foods	10 minutes
VIII.	Discuss the fluid needs of the young child	5 minutes
IX.	Conduct EXERCISE 25.A: WHAT IS IN THE BOWL?	15 minutes
X.	Summarize the session	3 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 25/1-25/6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- Write up the 3 Key Messages from this session:
 - Key Message 4: Animal-source foods are especially good for children, to help them grow strong and lively.*
 - Key Message 5: Peas, beans, lentils, nuts and seeds are good for children.*
 - Key Message 6: Dark-green leaves and yellow-coloured fruit and vegetables help a child to have healthy eyes and fewer infections.*
- You need tape or other means of fixing the page to the wall or board.
- You need a bowl or plate that would be used when feeding a young child.
- You need examples of locally available processed complementary foods (empty

packets are suitable).

- Adapt lists of foods to reflect those available locally. Review the section on the use of animal-source foods and adapt it if necessary for the local situation.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session

2 minutes

- Make these points:
 - So now, our child has an energy rich, thick staple in their bowl to help fill the energy gap (*Hold up the child's bowl*).
 - In a similar way, there are also gaps for iron and vitamin A.

- Show **Slide 25/1 - Session 25 Objectives** and read out the objectives:

Foods to fill the iron and vitamin A gaps 25/1

After completing this session participants will be able to:

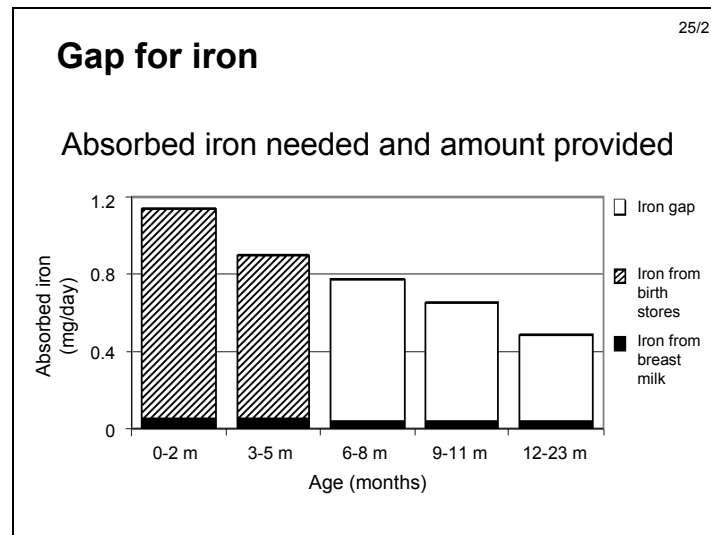
- list the local foods that can fill the nutrient gaps for iron and vitamin A
- explain the importance of animal-source foods
- explain the importance of legumes
- explain the use of processed complementary foods
- explain the fluid needs of the young child
- list the Key Messages from this session

II. Outline foods that can fill these gaps - Iron**5 minutes**

Make these points:

- The young child needs iron to make new blood, to assist in growth and development and to help the body to fight infections.

Show **Slide 25/2 - Gap for iron** and make these points:



- In this graph, the top of each column represents the amount of absorbed iron that is needed per day by the child. A full-term baby is born with good stores of iron to cover his needs for the first six months (Point to the striped/shaded area).
- The black area along the bottom of the columns shows us that there is some iron provided by breast milk all the time breastfeeding continues (Point to black area).
- The young child grows faster in the first year than in the second year. This is why the need for iron is higher when the child is younger.
- However, the iron stores are gradually used up over the first six months. So, after that time we see a gap between the child's iron needs and what they receive from breast milk. This gap needs to be filled by complementary foods (Point to white area – this is the gap).

Ask: What happens if the child does not have enough intake of iron to fill this gap?

Wait for a few replies and then continue.

- If the child does not have enough iron, the child will become anaemic, will be more likely to get infections and to recover slowly from infections. The child will also grow and develop slowly.
- Zinc is another nutrient that helps children to grow and stay healthy. It is usually found in the same foods as iron, so we assume that if they are eating foods rich in iron they are also receiving zinc.
- Your goals, as health workers, are:
 - . to identify local foods and food preparations that are rich sources of iron
 - . to assist families to use these iron rich foods to feed their young children.

III. Discuss the importance of animal-source foods 5 minutes

- Make this point:
 - We will now look at the importance of animal-source foods in the child's diet.
- Read the following section only if meat is eaten in your area.

Omit this section if meat is not eaten in the area

- Make these points:
 - Foods from animals, the flesh (meat) and organs/offal such as liver and heart, as well as milk, yoghurt, cheese and eggs are rich sources of many nutrients.
Ask: Which of these foods are commonly given to children in your area?
Wait for a few replies and then continue.
List the replies on the flip chart.
 - The flesh and organs of animals, birds and fish (including shell fish and tinned fish), are the best sources of iron and zinc.
 - Liver is not only a good source of iron but also of vitamin A.
 - Animal-source foods should be eaten daily or as often as possible. This is especially important for the non-breastfed child.
 - Some families do not give meat to their young children because they think it is too hard for the children to eat. Or they may be afraid there will be bones in fish that would make the child choke.
Ask: What are some ways of making these foods easier for the young child to eat?
Wait for a few replies and then continue.
 - Some ways of making these foods easier to eat for young children are to:
 - . cook chicken liver or other meat with rice or other staple or vegetables, and then mash them together
 - . scrape meat with a knife to make soft small pieces

- . pound dried fish so bones are crushed to powder and then sieve before mixing with other foods.
- Animal-source foods may be expensive for families. However, to add even small amounts of an animal-source food to the meal adds nutrients. Organ meats such as liver or heart are often less expensive and have more iron than other meats.

End of meat section

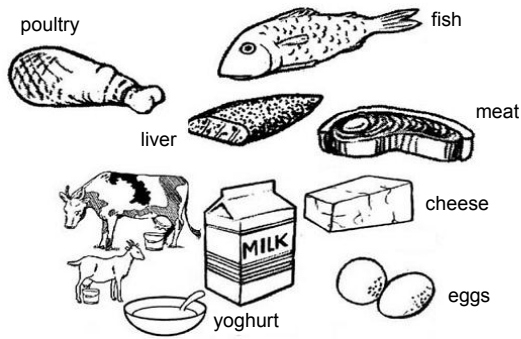
- ☐ Read the following section for all areas, whether meat is eaten or not. Make the following points:
 - Foods from animals such as milk and eggs are good for children because they are high in protein and other nutrients. However, milk and milk products, such as cheese and yoghurt, are not good sources of iron.
 - Milk fat (cream) contains vitamin A. Therefore, foods made from whole milk are good sources of vitamin A.
 - Foods made from milk (whole milk or skimmed or powdered) and any food containing bones, such as pounded dried fish, are good sources of calcium to help bones to grow strong.
 - Egg yolk is another source of nutrients and rich in vitamin A.
 - It can be hard for children to meet their iron needs without a variety of animal-source foods in their diet. Fortified or enriched foods such as fortified flours, pasta, cereals, or instant foods made for children, help to meet these nutrient needs.
 - Some children may need supplements if they do not eat enough iron-containing foods or if they have particularly high needs for iron.
 - When talking with families, give this Key Message:

- Show **Slide 25/3 (A or B) - Key Message 4: Animal-source foods** and ask a participant to read out the Key Message:

25/3

Key Message 4

Animal-source foods are especially good for children, to help them grow strong and lively



The illustration shows a variety of animal-source foods: a whole poultry leg, a fish, a piece of liver, a slice of meat, a block of cheese, two eggs, a carton of milk, and a bowl of yoghurt. A cow and a goat are also depicted near the milk and yoghurt.

IV. Discuss the importance of legumes

5 minutes

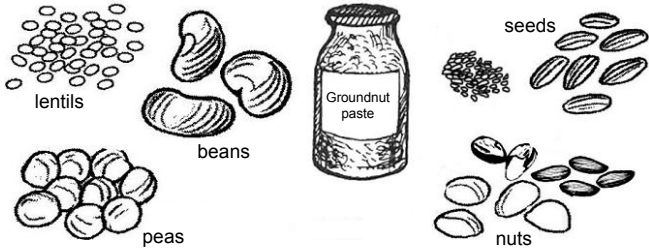
- Legumes or pulses such as beans, peas, and lentils as well as nuts and seeds, are good sources of protein. Legumes are a source of iron as well.

- Show **Slide 25/4 - Key Message 5: Legumes** and read out the Key Message:

25/4

Key Message 5

Peas, beans, lentils, nuts and seeds are also good for children



The illustration shows various legumes and nuts: a pile of lentils, several beans, a pile of peas, a jar of groundnut paste, a pile of seeds, and a pile of nuts.

Ask: *What types of legumes are used in the area?*

Wait for a few replies and then continue.

List the replies on the flip chart.

Ask: *What are ways that legumes, nuts and seeds could be prepared that would be easier for the child to eat and digest?*

Wait for a few replies and then continue.

Refer to participants' replies as you make these points.

- Some ways these foods could be prepared in a way that would be easier for the child to eat and digest are:
 - . Soak beans before cooking and throw away the soaking water.
 - . Remove skins by soaking raw seeds and then rubbing the skins off before cooking.
 - . Boil beans then sieve to remove coarse skins.
 - . Toast or roast nuts and seeds and pound to a paste.
 - . Add beans/lentils to soups or stews.
 - . Mash cooked beans well.
- Eating a variety of foods at the same meal can improve the way the body uses the nutrients. For example, combining a cereal with a pulse (for example: rice and beans), or adding a milk product to a cereal or grain (maize meal with milk).

V. Discuss iron absorption

5 minutes

- Make these points:
 - Pulses and dark-green leaves are sources of iron.
 - However, it is not enough that a food has iron in it, the iron must also be in a form that the child can absorb and use.
- Ask participants to turn to page 164 of their Manuals and find the box IRON ABSORPTION. Ask participants to take turns to read out the points.

IRON ABSORPTION

The amount of iron that a child absorbs from food depends on:

- the amount of iron in the food
- the type of iron (iron from meat and fish is better absorbed than iron from plants and eggs)
- the types of other foods present in the same meal (some *increase* iron absorption and others *reduce* absorption)
- whether the child has anaemia (more iron is absorbed if anaemic).

Eating these foods at the same meal increases the amount of iron absorbed from eggs and plant foods such as cereals, pulses, seeds, and vegetables:

- foods rich in vitamin C such as tomato, broccoli, guava, mango, pineapple, papaya, orange, lemon and other citrus fruits
- small amounts of the flesh or organs/offal of animals, birds, fish and other
- sea foods.

Iron absorption is decreased by:

- drinking teas and coffee
- foods high in fibre such as bran
- foods rich in calcium¹⁴

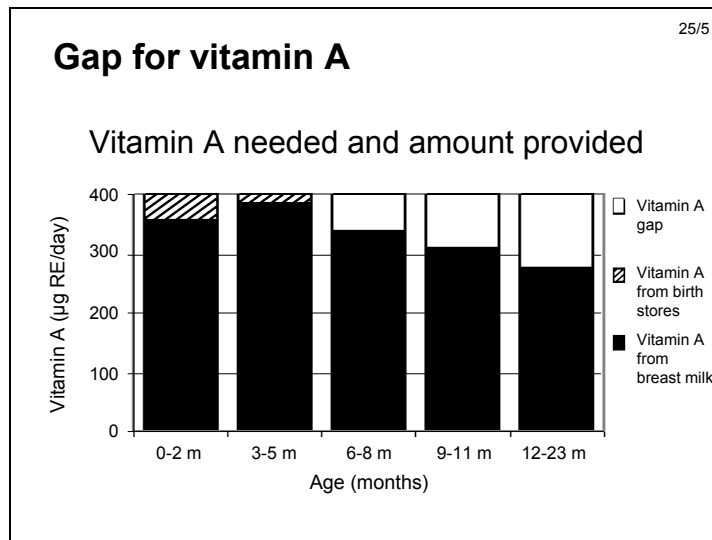
- Display the flip chart page with the Key Messages from this section and read them out. Keep these Messages displayed throughout the course.
 - We have two more Key Messages:
 - Key Message 4: Animal-source foods are especially good for children, to help them grow strong and lively.
 - Key Message 5: Peas, beans, lentils, nuts and seeds are also good for children.
- If a programme for iron supplementation exists in your area mention it here.

VI. Outline foods that can fill these gaps – Vitamin A 5 minutes

- Make these points:
 - (*Show bowl*) We now have a staple in our child's bowl to fill the energy gap and foods that will help to fill the iron gap.
 - Another important nutrient is vitamin A, which is needed for healthy eyes and skin and to help the body fight infections.

¹⁴ Foods rich in calcium such as milk and cheese inhibit iron absorption, but are needed for calcium intake

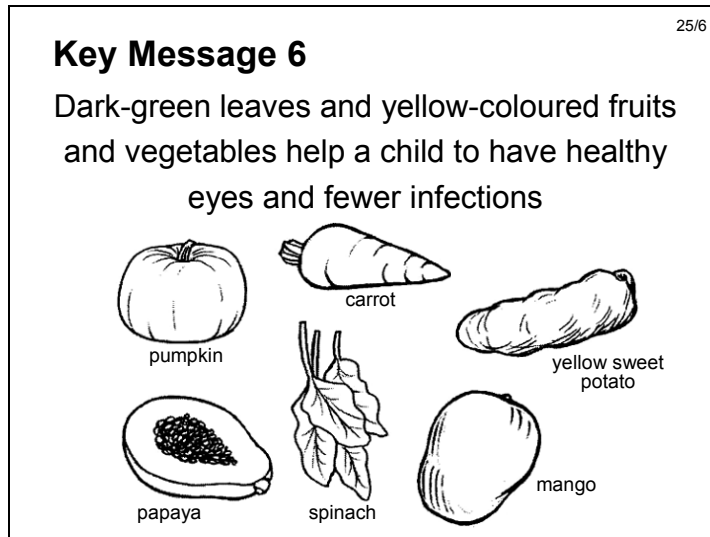
Show **Slide 25/5 - Vitamin A gap** and make the points that follow:



- Again, on this graph the top of each column represents the amount of vitamin A that the child needs each day. Breast milk supplies a large part of the vitamin needed provided the child continues to receive breast milk and the mother's diet is not deficient in vitamin A. As the young child grows, there is a gap for vitamin A that needs to be filled by complementary foods (*Point to the white area – this is the gap to be filled*).
 - Good foods to fill this gap are dark-green leaves and yellow-coloured vegetables and fruits.
 - Other sources of vitamin A that we mentioned already were:
 - organ foods/offal (liver) from animals
 - milk and foods made from milk such as butter, cheese and yoghurt
 - egg yolks
 - margarine, dried milk powder and other foods, fortified with vitamin A.
 - Unbleached red palm oil is also rich in vitamin A.
 - Vitamin A can be stored in a child's body for a few months. Encourage families to feed foods rich in vitamin A as often as possible when these foods are available, ideally every day. A variety of vegetables and fruits in the child's diet help to meet many nutrient needs.
 - Remember breast milk supplies much of the vitamin A required. A child that is not breastfed needs a diet rich in vitamin A.
 - In many countries vitamin A supplementation programmes are available, for example IMCI (Integrated Management of Childhood Illness).
- If a programme for vitamin A supplementation exists in your area mention it here.

- Show **Slide 25/6 - Key Message 6: Vitamin A foods** and make the following points:

- When talking with caregivers, give this Key Message: Dark-green leaves and yellow-coloured fruits and vegetables help a child to have healthy eyes and fewer infections.



- Display the flip chart page with the Key Message from this section. Keep this message displayed throughout the course.

VII. Discuss the use of fortified complementary foods 10 minutes

- Make these points:
- In some areas, there are fortified complementary foods available. For example, flour or a cereal product with added iron and zinc.
Ask: What products do you see in your area that are fortified?
Wait for a few replies, and then continue.
 - Fortified processed complementary foods may be sold in packets, cans, jars, or from food stalls. These may be produced by international companies and imported or they may be made locally. They may also be available through food programmes for young children.

- Ask participants to turn to page 166 of their Manuals and find the box FORTIFIED COMPLEMENTARY FOODS. Ask participants to take turns to read out the points.

FORTIFIED COMPLEMENTARY FOODS

When discussing fortified complementary foods with caregivers, there are some points to consider:

What are the main contents or ingredients?

The food may be a staple or cereal product or a flour. It may have some vegetables, fruit or animal-source foods in it.

Is the product fortified with micronutrients such as iron, vitamin A or other vitamins?

Added iron and vitamins can be useful, particularly if there are few other sources of iron containing foods in the diet.

Does the product contain ingredients such as sugar and/or oil to add energy?

These added ingredients can make these products a useful source of energy, if the child's diet is low in energy. Limit use of foods that are high in sugar and oil/fat but with few other nutrients.

What is the cost compared to similar home-produced foods?

If processed foods are expensive, spending money on them may result in families being short of money.

Does the label or other marketing imply that the product should be used before six months of age or as a breast-milk substitute?

Complementary foods should not be marketed or used in ways that undermine breastfeeding. To do so is a violation of the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions and should be reported to the company concerned and the appropriate government authority.

VIII. Discuss the fluid needs of the young child

5 minutes

- Make these points:

- The baby who is exclusively breastfeeding receives all the liquid he needs in the breast milk and does not require extra water. Likewise, a baby who is under six months of age and only receiving replacement milks does not need extra water.
- However, when other foods are added to the diet, the baby may need extra fluids.
- How much extra fluid to give depends on what foods are eaten, how much breast milk is taken and the child's activity and temperature. Offer fluids when the child seems thirsty.
- Extra fluid is needed if the child has a fever or diarrhoea.

Ask: *What types of drinks are given to young children between six and 24 months old?*

Wait for a few responses and then continue.

- Ask participants to turn to page 167 of their Manuals and find the box Fluid Needs of the Young Child. Ask participants to take it in turns to read out the points.

FLUID NEEDS OF THE YOUNG CHILD

- Water is good for thirst. A variety of pure fruit juices can be used also. Too much fruit juice may cause diarrhoea and may reduce the child's appetite for foods.
- Drinks that contain a lot of sugar may actually make the child thirstier as his body has to deal with the extra sugar. If packaged juice drinks are available in your area, find out which ones are pure juices and which ones have added sugar. Fizzy drinks (sodas) are not suitable for young children.
- Teas and coffee reduce the iron that is absorbed from foods. If they are given, they should not be given at the same time as food or within two hours before or after food.
- Sometimes a child is thirsty during a meal. A small drink will satisfy the thirst and they may then eat more of their meal.
- Drinks should not replace foods or breastfeeding. If a drink is given with a meal, give only small amounts and leave most until the end of the meal. Drinks can fill up the child's stomach so that they do not have room for foods.
- Remember that children who are not receiving breast milk need special attention and special recommendations. A non-breastfed child aged 6-24 months of age needs approximately 2-3 cups of water per day in a temperate climate and 4-6 cups of water per day in a hot climate. This water can be incorporated into porridges or stews, but clean water should also be offered to the child several times a day to ensure that the infant's thirst is satisfied.

IX. Conduct EXERCISE 25.A: WHAT IS IN THE BOWL?

15 minutes

- Ask the participants to sit in their groups. Ask them to turn to page 168 of their Manuals to EXERCISE 25.A – WHAT IS IN THE BOWL?
Explain the exercise:
- Now we will put these recommendations or Key Messages into foods. Each group has a picture of a mother feeding a child from a bowl. In your group, think of the foods available to families in your area that could be used to form one meal for a young child (*Assign each group a child's age – 7 months, 10 months, 12 months, 15 months.*)
 - Although we talk about types of foods such as staples, legumes, foods from animals, dark-green leaves and yellow-coloured fruits and vegetables, and so on, it is easier and more natural for caregivers to think in terms of the meals they usually prepare or foods that taste good together.

- Families may give complementary foods that are:
 - specially prepared foods
 - the usual family foods that are modified to make them easy to eat and provide enough nutrients.
 - For example, a caregiver may specially prepare a porridge for the baby while the rest of the family eat rice and bean stew. Or, the caregiver may take some suitable foods out of the family meal and mash these foods to a soft consistency that is easy for the young child to eat.
 - In this exercise, try to use foods that would be eaten in an average family meal in your area, not a rich family.
 - At this time, focus on an example of foods a family could use. We will discuss the quantity of food to give later.
 - You will describe your meal to the other groups and give the Key Messages connected with the foods you have chosen.
- Trainers sit with their group, helping as needed. Aim to get foods listed that reflect the Key Messages learnt so far (Key Messages 1-6). However, it is not necessary to use all 6 Key Messages with one meal. If unsuitable foods are listed, gently discuss why these foods might be considered and if others might be used instead. Allow seven minutes to decide on the meal and why they choose each food. Remind participants that they can find a list of the Key Messages at the back of their Manual.
- Go back to the whole group. Ask one person from each group to present their meal. Ask the whole group if the 'meal' includes foods that match the Key Messages.
- Thank participants at the end for their meal suggestions. Display the exercise sheets so the groups can see them.

EXERCISE 25.A WHAT IS IN THE BOWL?

Choose foods that are available to families in your area to form one meal for a young child, aged _____

What are Key Messages you could give for the foods that you have chosen?

X. Summarize the session**3 minutes**

- Ask participants if they have any questions or if there are points that you can make clearer.
- Make these points:
 - In the last two sessions, we talked about the recommendations about foods for young children.
 - The most difficult gaps to fill are usually for:
 - Energy
 - Iron and zinc
 - Vitamin A
 - In the previous sessions, we saw the Key Messages 1,2 and 3 (*Point to where they are displayed*):
 - **Key Message 1:** Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.
 - **Key Message 2:** Starting other foods in addition to breast milk at six months helps a child to grow well.
 - **Key Message 3:** Foods that are thick enough to stay in the spoon give more energy to the child.
 - In this session, there were three new Key Messages to use with families to discuss ways to fill the gaps for iron and vitamin A.
- Point to the flip chart page with the messages:
 - **Key Message 4:** Animal-source foods are especially good for children, to help them grow strong and lively.
 - **Key Message 5:** Peas, beans, lentils, nuts and seeds are good for children.
 - **Key Message 6:** Dark-green leaves and yellow-coloured fruit and vegetables help a child to have healthy eyes and fewer infections.
- In some areas there are supplementation programmes for other important micronutrients, for example iodine. If such programmes exist in your area mention them here.
- Explain that a summary of this session can be found on pages 161-168 of the Participant's Manual.

Session 26

Quantity, Variety and Frequency of Feeding

Objectives

After completing this session participants will be able to:

- explain the importance of using a variety of foods
- describe the frequency of feeding complementary foods
- outline the quantity of complementary food to offer
- list the recommendations for feeding a non-breastfed child
- list the Key Messages from this session

Session outline

45 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	2 minutes
II.	Discuss the importance of using a variety of foods	10 minutes
III.	Discuss the frequency of feeding complementary foods	10 minutes
IV.	Outline the quantity of complementary food to be offered	10 minutes
V.	Conduct EXERCISE 26.A: AMOUNTS TO OFFER	10 minutes
VI.	Summarize the session	3 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 26/1-26/9 are in the correct order. Study the slides and the text that goes with them so that you are able to present them. Make sure, particularly, that you understand the graphs so you can explain these clearly to the participants.
- Determine the local measures to use in the box Amounts of Food to Offer. Show approximate amounts using common local cup, bowl or other containers.
- You need a flip chart and markers, and a means of fixing the flip chart page to the wall.
- Write the Key Messages for this session on a flip chart page. Keep covered until later in the session:

Key Message 7: *A growing child needs 2-4 meals plus 1-2 snacks if hungry: give a variety of foods.*

Key Message 8: *A growing child needs increasing amounts of food.*

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

2 minutes

Make these points:

- We have discussed what types of food help to fill the gaps in children over six months of age. However, just offering suggestions for the types of food is not enough information for the caregivers.

Ask: What other questions are caregivers likely to have about feeding young children?

Wait for a few replies and then continue.

- Caregivers need to know what amount of food to give and how often to give it¹⁵.

Show **Slide 26/1 - Session 26 Objectives** and read out the objectives:

Quantity, variety and frequency of feeding 26/1

After completing this session participants will be able to:

- explain the importance of using a variety of foods
- describe the frequency of feeding complementary foods
- outline the quantity of complementary foods to offer
- list the recommendations for feeding a non-breastfed child
- list the Key Messages from this session

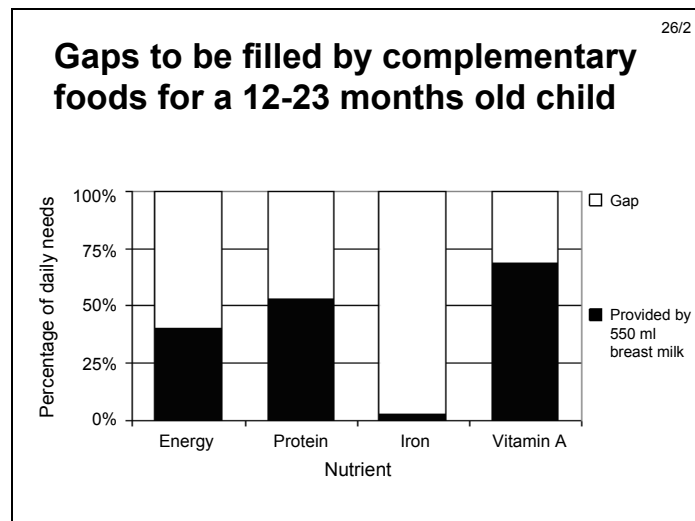
¹⁵ They may also ask about how to feed a child who does not want to eat. How to feed will be discussed in a later session

II. Discuss the importance of using a variety of foods 10 minutes

☐ Make these points:

- Most adults and older children eat a mixture or variety of foods at mealtime. In the same way, it is important for young children to eat a mix of good complementary foods. Often the food preparations of the family meals include all or most of the appropriate complementary foods that young children need.
- When you build on the usual food preparations in a household, it is easier for families to feed their young children a diet with good complementary foods.
- Earlier we looked at the difference between the young children's needs and the amount of energy, vitamin A and iron supplied by breast milk. If we put the day's needs on to one graph it looks like this:

☐ Show **Slide 26/2 - Gaps to be filled by complementary foods 12-23 month old child** and make the points that follow:

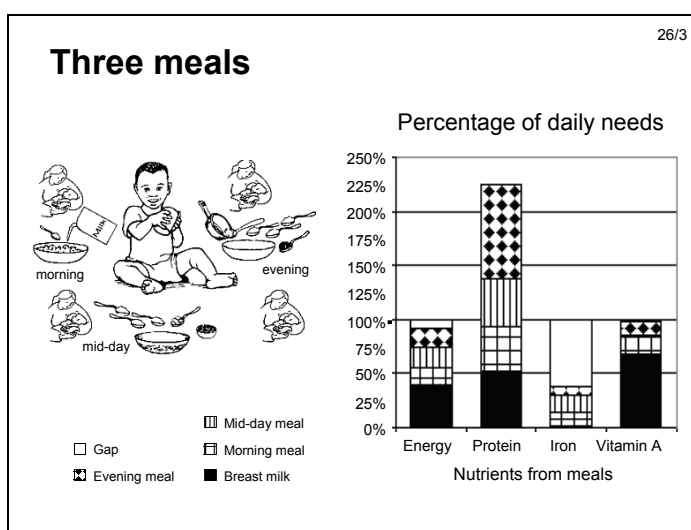


- In session 2 of this course we talked about the importance of breastfeeding and the nutrients breast milk can supply in the second year of life.
- On this graph the top line represents how much energy, protein, iron and vitamin A are needed by an 'average' child aged 12-23 months. The dark section in each column indicates how much breast milk supplies at this age if the child is breastfeeding frequently.

- Notice that:
 - . Breast milk provides important amounts of energy and nutrients even in the second year.
 - . None of the columns are full. There are gaps to be filled by complementary foods.
 - . The biggest gaps are for iron and energy.
- Now we will look at an example of a day's food for a young child.

□ Show **Slide 26/3 - Percentage of needs** Make the points that follow and show how each meal builds on the graph:

- This is (child's name) who is 15 months old. The daily needs for this age of child is shown by the line at 100%.



- (Name) continues breastfeeding¹⁶ as well as eating complementary foods. The breast milk gives energy, protein, some iron and vitamin A (Show where breast milk is on graph-dark area at bottom).
- This is what he has to eat in a day in addition to breastfeeding:
 - Morning:** A bowl of thick porridge, with milk and a small spoon of sugar (Show where this meal is on graph).
 - Midday:** A full bowl of food - Three big spoonfuls of rice, one spoon of beans, and half an orange. The vitamin C in the orange helps the iron in the beans to be absorbed (Show where this meal is on graph).
 - Evening:** A full bowl of food - 3 big spoons of rice, one spoon of fish, one spoon of green leaves (Show where this meal is on graph).

¹⁶ Approximately 550 ml of breast milk per day

- (Name's) family give him a variety of good foods and a good quantity at each meal. He has a staple plus some animal-source foods, beans, a dark-green vegetable and a citrus fruit.

Ask: What do you see from the graph? Are these foods filling the gaps?

Wait for a few replies and then continue.

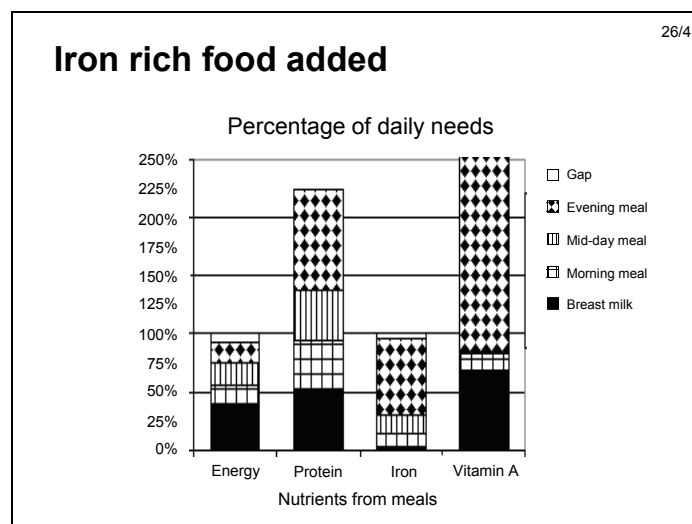
- The protein and vitamin A gaps are more than filled. However these meals do not fill this child's needs for iron or energy.

Ask: How could this child get more iron?

Wait for a few replies and then continue.

- If meat is eaten in the area (name) could get more iron if he ate an animal-source food high in iron such as liver or other organ meat. Animal-source foods are special foods for children. These foods should be eaten every day, or as often as possible.
- If meat is eaten in the area (name's) family could give him a spoonful of liver instead of the fish. This fills his iron gap as shown in the following graph.

Show **Slide 26/4 - Iron rich food added** and make the points that follow:



- However, the energy gap is still not filled. Next, we will look at ways of filling this gap.
- If foods fortified with iron are available, these should be used to help fill the iron gap¹⁷.
- If an iron rich food is not available, you as the health worker may need to recommend using a micronutrient supplement to ensure he gets sufficient iron.
- Another nutrient that is difficult to fill the gap from family foods is zinc. The best sources of zinc in the diet are meat and fish, the same foods as iron rich foods.
- Foods fortified with zinc can be used when it is not possible for a young child to eat enough meat, fish or liver.

¹⁷ Remind participant of iron fortified foods if discussed in the previous session

- However, in the graph, the energy gap is still not filled. Next, we will look at ways of filling this gap.

III. Discuss the frequency of feeding complementary foods 10 minutes

Make these points:

- (Name) is already eating a full bowl of food at each meal. There is no space in his stomach for more food at mealtimes.

Ask: What can you suggest to (name's) family to help fill the energy gap?

Wait for a few replies and then continue.

- (Name's) family can give him some food more often. They do not need to cook more meals. They can give some extra foods between meals that are easy to prepare. These extra foods are in addition to the meals – they should not replace them.
- These extra foods are often called snacks. However, they should not be confused with foods such as sweets, crisps or other processed foods¹⁸, which may include the term snack foods in their name.
- These extra foods may be easy to give, however the child still needs to be helped and supervised while eating to ensure the extra foods are eaten.

Ask: What kind of healthy snacks would be easy to feed this child?

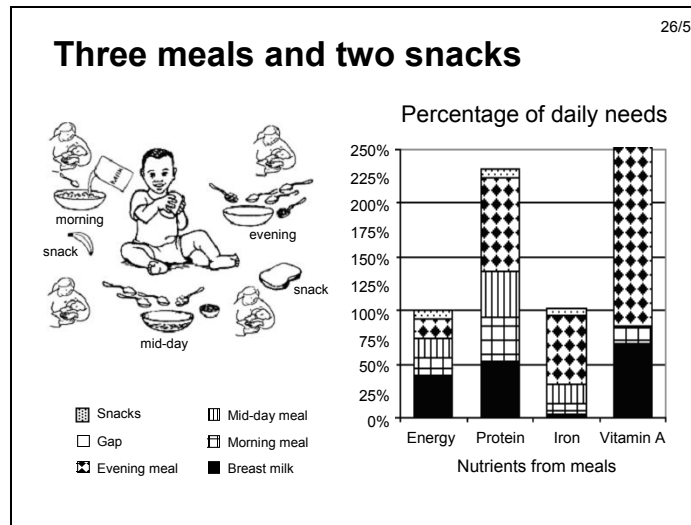
Wait for a few replies and then continue.

- Good snacks provide both energy and nutrients. Yoghurt and other milk products; bread or biscuits spread with butter, margarine, nut paste or honey; fruit; bean cakes; cooked potatoes¹⁹, are all good snacks.
- Poor value snacks are ones that are high in sugar but low in nutrients. Examples of these are fizzy drinks (sodas), sweet fruit drinks, sweets/candy, ice lollies, and sweet biscuits.
- These snacks may be easy to give, however the child still needs to be helped and supervised while eating to ensure that snacks are eaten.

¹⁸ Give examples of local processed foods that might be called snack foods

¹⁹ Cooked moist foods (such as potatoes) should not be kept more than one hour if there is no refrigeration

☐ Show **Slide 26/5 - Percentage of needs with snacks**²⁰ and make the points that follow:



- (Name) has two snacks added in the day - some banana in the mid-morning and a piece of bread in the mid-afternoon. These snacks help to fill his energy gap so he can grow well. Now all the gaps are filled.
- In the last two sessions we discussed the variety of foods needed to meet a child's needs. Suggest that families try each day to give a dark-green vegetable or yellow-coloured fruit or vegetable and an animal-source food in addition to the staple food.
- When you are talking with caregivers, give this key message:

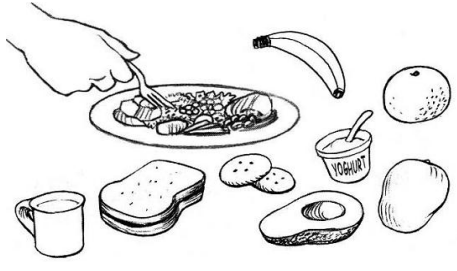
²⁰ Liver instead of fish in evening meal

- Show Slide 26/6 - Key Message 7: Frequency of feeding and read out the Key Message:

26/6

Key Message 7

A growing child needs 2-4 meals a day plus 1-2 snacks if hungry: give a variety of foods



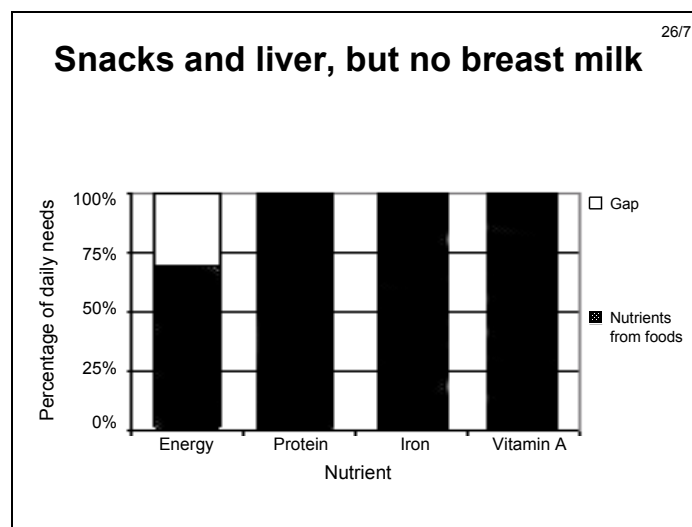
The illustration shows a hand holding a fork over a plate of food. Surrounding the plate are various food items: a banana, an orange, a cup of milk, a sandwich, a cookie, a yogurt cup labeled 'YOGURT', and a slice of avocado.

- When you are talking with a family about feeding their young child more frequently, suggest some options for them to consider. It can be difficult to feed a child frequently if the caregiver has many other duties and if additional foods are expensive or hard to obtain.
- Other family members can often help. Assist the family to find solutions that fit their situation.

☐ Make these points:

- Now we will look at feeding the non-breastfed child. We have mentioned in previous sessions that a child who does not receive breast milk needs special attention to ensure he gets sufficient food.

☐ Show **Slide 26/7 - Snacks and liver, but no breast milk** and make the points that follow:



- If the child is not taking any breast milk and is eating the foods listed earlier, including the snacks and liver, the chart would look like this.
- There is still a very large gap for energy. One way to increase the energy intake is to give this child 200 - 240 ml (two half-cups) of milk (full fat cow's milk or milk from another animal or formula milk²¹) plus other dairy products, eggs and other animal source foods.
- If no animal-source foods are included in the diet fortified complementary foods or nutrient supplements are needed for a child to meet his nutrient needs.
- A child who does not have breast milk needs special attention to ensure he receives sufficient food.
- Children over six months of age who are not receiving breast milk need 1-2 cups of milk (where one cup is equal to 250 ml) and an extra 1-2 meals per day in addition to the amounts of food recommended. We will be looking at the amounts of food to offer children of different ages later in this session.

Ask: *What other recommendations have we discussed in previous sessions for children over six months of age who are not receiving breast milk?*

Wait for a few replies and then continue by displaying the next slide.

²¹ Infant formula if affordable, acceptable and available

- Show Slide 26/8 - Recommendations for the non-breastfed child 6-24 months and make the points that follow:

26/8

Recommendations for feeding the non-breastfed child from six months

The non-breastfed child should receive:

- extra water each day (2-3 cups in temperate climate and 4-6 cups in hot climate)
- essential fatty acids (animal-source foods, fish, avocado, vegetable oil, nut pastes)
- adequate iron (animal-source foods, fortified foods or supplements)
- milk (1-2 cups per day)
- extra meals (1-2 meals per day)

- In previous sessions we said that these children:
 - Should have extra water each day, particularly in hot climates to ensure that their thirst is satisfied: 2-3 cups in a temperate climate and 4-6 in hot climates
 - Should have essential fatty acids in their diet – from animal-source foods, fish, avocado, vegetable oil, and nut pastes.
 - Should have adequate iron. If they are not receiving animal-source foods then fortified foods or iron supplements should be considered.
- In this session we said that these children should receive 1-2 cups of milk per day, and an additional 1-2 meals.

IV. Outline the quantity of complementary food to be offered 10 minutes

- Make these points:
- When a child starts to eat complementary foods, he needs time to get accustomed to the new taste and texture of the foods. A child needs to learn the skill of eating. Encourage families to start with 2-3 spoonfuls of the food twice a day.
- Gradually increase the amount and the variety of foods as the child gets older. By 12 months of age, a child can eat a small bowl or full cup of mixed foods at each meal as well as snacks between meals. Children vary in their appetite – these are guidelines.

- As the child develops and learns the skills of eating, he progresses from very soft, mashed food, to foods with some lumps that need chewing, and to family foods. Some family foods may need to be chopped for longer if the child finds them difficult to eat.

Ask: *What amounts of food do the families in the area give to their young children?*

Wait for a few replies and then continue.

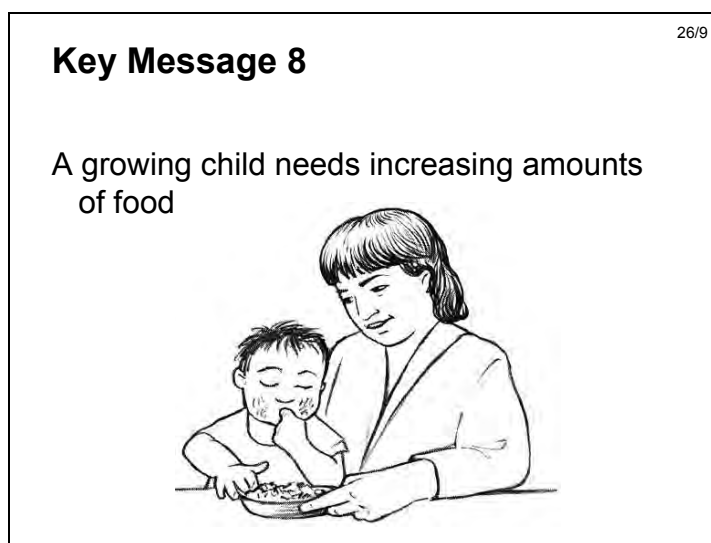
- Ask participants to turn to page 171 of their Manual and find the box Amounts of Food to Offer showing the age, texture of the food offered and the amount of food an average child will usually eat at each meal.
- Ask a participant to read out the first age group. Then ask another participant to read out the next age group until all the age groups are read out.

AMOUNTS OF FOODS TO OFFER			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal²²
6-8 months	Start with thick porridge, well mashed foods Continue with mashed family foods	2-3 meals per day plus frequent breastfeeds Depending on the child's appetite 1-2 snacks may be offered	Start with 2-3 tablespoonfuls per feed increasing gradually to ½ of a 250 ml cup
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	½ of a 250 ml cup/bowl
12-23 months	Family foods, chopped or mashed if necessary	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	¾ to one 250 ml cup/bowl
If baby is not breastfed, give in addition: 1-2 cups of milk per day, and 1-2 extra meals per day.			

²² Adapt the chart to use a suitable local cup/bowl to show the amount. The amounts assume an energy density of 0.8 to 1 Kcal/g

- Continue with these points:
 - As you can see in this chart, as the child gets older, the amount of food offered increases. Give as much as the child will eat with active encouragement²³.
 - When you are talking with families, give this key message

- Show **Slide 26/9 - Key Message 8: Amount of food** and read out the key message:



V. Conduct EXERCISE 26.A: AMOUNTS TO OFFER 10 minutes

- Make these points:
 - As you talk with caregivers, a frequent question you are asked may be how much and how often to give food. To practise these amounts, we will now do a drill. A drill is not a test. It is a way to help you learn to recall the amounts with speed and confidence.
 - I will say an age of a child. The first person I call on will say how often to feed and how much food to give at the main meal.
 - If the person cannot answer or answers incorrectly, we go to the next person. When the correct answer is given, I say a different age of child and we continue.
 - Before we start take two minutes to look again at the box on page 171 of your Manuals.

²³ Active encouragement of feeding is discussed in session 34

- Keep the pace lively and the mood cheerful. Congratulate participants as they improve in their ability to answer correctly or more quickly. If the group is very large, this drill can be conducted in the smaller groups with the trainer for each group asking the questions.

EXERCISE 26.A: AMOUNTS TO OFFER		
Age of child	Frequency	Amount at each meal
6 months 2 days	Two times per day	2 to 3 tablespoonfuls
22 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
8 months	Two to three times per day (may offer 1-2 snacks)	up to $\frac{1}{2}$ cup
12 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
7 months	Two to three times per day (may offer 1-2 snacks)	up to $\frac{1}{2}$ cup
15 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
9 months	Three to four meals (may offer 1-2 snacks)	$\frac{1}{2}$ cup
13 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
19 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
11 months	Three to four meals (may offer 1-2 snacks)	$\frac{1}{2}$ cup
21 months	Three to four meals (may offer 1-2 snacks)	$\frac{3}{4}$ to 1 cup
3 months	A trick question!	Only breastfeeding

- The drill ends when all the participants have had an opportunity to answer and when you feel they are answering with confidence. You can repeat the ages if needed to give everyone enough opportunities to practise. Thank participants for their participation.

VI. Summarize the session

3 minutes

- Ask participants if they have any questions or if there are points that you can make clearer.
- Make these points:
 - In this session, we talked about how much to feed a young child and how often to feed.
 - We also talked about the recommendations for feeding a child who is not receiving breast milk.

Session 27

Growth assessment results and feeding counselling when the child is growing well

Objectives

After completing this session participants will be able to:

- explain to a mother the results of her child's growth assessment
- explain how to deal with a child who has severe growth problems
- gather information on feeding practices using the FOOD INTAKE JOB AID, 6-23 MONTHS

Session outline

50 minutes

I.	Introduce the session (causes of undernutrition)	10 minutes
II.	Inform mother of growth assessment results	2 minutes
III.	Refer children with severe growth problems	8 minutes
IV.	Demonstrate gathering information on feeding practices	25 minutes
V.	Summarize the session	5 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- You need a typical bowl that a young child would use – one set for each group.
- Have ready pictures of different consistencies of foods – one set for each group.
- Ask two people to assist with DEMONSTRATION 27.A. Show them the text and forms. Ask them to read through it and to practise. Ask the person to play the health worker to have ready the consistency pictures, a FOOD INTAKE JOB AID, 6-23 MONTHS and a bowl.
- Make sure that Slides 27/1-27/3 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**10 minutes**

- Show **Slide 27/1 - Session 27 Objectives** and make the following points

27/1

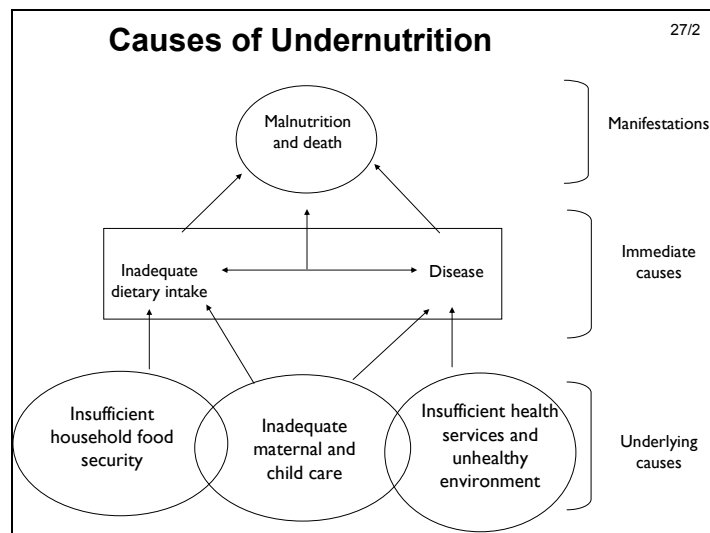
Session 27 Objectives

- After this session participants will be able to:
 - explain to a mother the results of her child's growth assessment
 - explain how to deal with a child who has severe growth problems
 - gather information on feeding practices using the Food Intake Job Aid, 6-23 Months

- Make these points:

- The mother will be very curious to know what you found when you assessed her child's growth, so the first step is to inform her in a clear and sensitive way using appropriate counselling skills.
- If the child is growing well, the next step is to provide counselling on appropriate feeding for the child's approaching age group, so that the child will continue to grow well. The FOOD INTAKE JOB AID, 6-23 MONTHS is used for this purpose.
- If there is a growth problem, or a trend towards a problem, you will interview the mother to identify possible causes of the problem. A booklet is provided with this course to assist in these interviews:
 - INVESTIGATING THE CAUSES OF UNDERNUTRITION
 - INVESTIGATING THE CAUSES OF OVERWEIGHT
- These two job-aids suggest questions to ask the mother in order to identify causes of problems, and they suggest specific advice related to each possible cause.
- Many social and environmental factors can affect a child's feeding, care, and resulting growth. That is why it is very important to determine the most important causes of a problem for a particular child **before** giving advice. For example, if a child is wasted primarily because the family lacks food, it will not be helpful simply to advise the mother to feed the child more often. In such a situation, it would be better to guide the family to a source of assistance.

- Show **Slide 27/2 - Causes of undernutrition** and make the following points



- As shown in the diagram, in order to resolve the immediate causes of undernutrition, i.e. inadequate diet and disease, it may be necessary to address causes in the home environment, such as the absence of a responsible adult to care for the child during the day, or poor sanitation or contaminated water. It is not always possible to resolve these causes, but the health care provider can help the mother to understand them and think of positive actions to take.
- Causes of overweight and obesity are also typically rooted in the environment. For example, a busy family may rely on high-energy convenience foods instead of taking time for leisurely, well-planned meals. Children may not be able to play outdoors safely and thus spend too much inactive time watching television or playing video games. Resolving problems of overweight and obesity will require addressing root environmental causes as well as immediate dietary causes.
- During the counselling session it is important to agree on actions to improve the child's growth that are feasible for the mother or caregiver. If too many actions are suggested, she may forget many of them or be discouraged. Suggest the most important and feasible actions (two or three), and encourage the mother to bring the child back for follow-up. The follow-up visit will give the mother a chance to report success and the health care provider a chance to give additional advice as needed. Change takes time and the underlying causes of poor growth are unlikely to be resolved in a single counselling session. The need to follow up and monitor the child's feeding, care, and growth is critical.

II. Inform mother of growth assessment results

2 minutes

Make these points:

- Throughout the growth assessment, the mother has seen you recording measurements in the Growth Record and plotting and connecting points on the growth charts. She is likely to be curious about the results. Explain that you have plotted the points to see if the child is growing as expected, or if there is any growth problem. Explain the points and trends on each chart to her clearly and simply.
- If a child is growing well, be sure to say so to the mother and compliment her. If there are problems, it is still very important to keep the discussion positive. Avoid any suggestion of accusing or judging the mother. You want to build the mother's trust and communicate that she can help the child.
- Use clear, non-medical language as much as possible. If you use an unfamiliar word, such as "obese," explain it to the mother. For example, you could say, "obese means very heavy for one's height." Words such as "stunted," "wasted," and "obese" are used in

the Growth Record, so be prepared to explain them in simple words.

III. Refer children with severe growth problems 8 minutes

- Show **Slide 27/3 - Refer children with severe growth problems** and make the following points

27/3

Refer children with severe growth problems

- Children with any of the following **severe undernutrition** problems should be referred **urgently for specialized care**:
 - severely wasted (below -3 z-score for weight-for-length/height)
 - clinical signs of marasmus (e.g. appears severely wasted, like “skin and bones”)
 - clinical signs of kwashiorkor (e.g. generalized oedema; thin, sparse hair; dark or cracking/peeling patches of skin)
 - oedema of both feet
- Children with any of the following severe undernutrition problems should be **referred urgently for specialized care**:
 - severely wasted (below -3 z-score for weight-for-length/height)
 - clinical signs of marasmus (e.g. appears severely wasted, like “skin and bones”)
 - clinical signs of kwashiorkor (e.g. generalized oedema; thin, sparse hair; dark or cracking/peeling patches of skin)
 - oedema of both feet
- An undernourished child may have a current illness (such as diarrhoea) or a chronic health problem that could be contributing to undernutrition. If so, treat the contributing illness or problem if you are able to, and explain how to feed a sick child (Key Message 10). If you cannot treat, refer the child for appropriate treatment. If you know or suspect that a child has a chronic health problem (such as HIV/AIDS), refer the caregiver/child for counselling or testing as appropriate.
- Refer children with obesity (above 3 z-score for weight-for-length/height) for **medical assessment and specialized management** if these services are available.
- Whenever you refer a child, explain to the mother the reasons for the referral and stress its importance. According to your usual practice, provide a referral form or note for the mother to take with her. Also write a note in the Growth Record in the Visit Notes section, and show the mother this note. Ensure that she knows when and where to take the child. Ask whether she has transportation, and help her to arrange it if necessary. Follow up later to ensure that the child was taken for the required urgent care or medical assessment.
- Every time you see a mother, try to build her confidence. Praise her for what she and her baby are doing right. Give relevant information, and suggest something appropriate.

IV. Gathering information on complementary feeding practices 25 minutes

- Make these points:
 - This section addresses how to proceed in counselling a mother whose child is growing well. The focus of that dialogue is on complementary and we will use the FOOD INTAKE JOB AID, 6-23 MONTHS.
 - If you are going to counsel a mother whose child is growing well on complementary feeding, you need to find out what her child is eating.
 - This could be quite complicated because children eat different things at different times in a day.
 - In Session 13 you looked at the FEEDING HISTORY JOB AID, 0-6 MONTHS and learnt how to take a feeding history.
 - Now we are going to look at assessing the intake of complementary foods in detail.
- Make these points:
 - Gathering information on complementary feeding gives you the opportunity to reinforce feeding practices that support healthy growth and to provide information on how to feed the child in an approaching age range so that they continue to grow well.
- Ask participants to turn to page 177 of their Manual and find the FOOD INTAKE JOB AID, 6-23 MONTHS (page 378 in Trainer's Guide). Make these points:
 - A useful way to find out what a child eats is to ask the mother what the child ate yesterday. This information can be used to praise the good feeding practices that are there already and to identify any Key Messages to help improve practices.
 - The FOOD INTAKE JOB AID, 6-23 MONTHS helps you to do this.
 - The mother is asked to recall everything the child consumed the previous day. This includes all foods, snacks, drinks, breastfeeds and any vitamin or mineral supplements.
 - As you can see, the first column has questions about feeding practices. As you listen to the mother put a tick mark ✓ in the column to mark if the practice occurred the previous day.
 - You will see that most of the questions in the first column are all closed questions. When you use this tool with a mother or caregiver to gather information you should use your counselling skills, including open questions. We will see how this is used in a demonstration later.
- Ask participants to refer to the consistency pictures on page 179 of their manuals. Point out how the pictures are different.
 - If you ask a mother about the consistency of the food – if it was thin or thick, there might be some confusion about how thick you mean. Therefore, here are pictures to show a thick and a thin consistency.
 - You show the food consistency pictures to the mother and ask which drawing is most like the food she gave to the child.
 - After you have listened to find out what the feeding practices are, you can praise some of the practices you wish to reinforce.
 - After you have taken the history and filled in the FOOD INTAKE JOB AID, 6-23 MONTHS, you then choose two or three Key Messages to give. It is important to listen to the mother first so that you gather all the information on complementary feeding before you decide which Key Messages to give to her. There is a column on the FOOD INTAKE JOB AID, 6-23

MONTHS to indicate which items you discussed in more detail and gave a Key Message about.

- Put your initials at the Key Message you gave.

Ask: *Why is it important to choose just 2-3 Key Messages to give the mother?*

Wait for a few replies and then continue.

- It is important to choose just 2-3 Key Messages at a visit so the mother is not overwhelmed.
- Discuss the Key Messages you think are most important at this time and that the mother thinks that she can do.

- Ask participants to turn to page 178 and the FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS. This can be found on page 379 of the Trainers Guide. Ask one participant to read the first feeding practice question, the recommended practice and the Key Message, then another participant to read the next practice.

- Answer questions as needed about the practices. (Make sure the participants notice the differences between the recording form and the reference form).
- Feeding techniques to assist the child to learn to eat will be discussed in Session 34. We will discuss feeding the child who is ill in Session 37.
- The other Key Messages have already been introduced.
- On page 176 in your Manual, there are instructions on how to use the FOOD INTAKE JOB AID, 6-23 MONTHS.

- Ask participants to take turns to read out the instructions.

INSTRUCTIONS TO COMPLETE FOOD INTAKE JOB AID, 6-23 MONTHS

1. Greet the mother. Inform her that her child is growing well and complement her. Explain that you want to review how she's feeding and (if applicable) speak about how to feed in the approaching age group so the child will continue to grow well.
2. Start with: "(Mother name), let us talk about what (child's name) ate yesterday."
3. Continue with: "As we go through yesterday, tell me all (name) ate or drank, meals, other foods, water or breastfeeds."
"What was the first thing you gave (name) after he woke up yesterday?"
"Did (child's name) eat or drink anything else at that time or breastfeed?"
4. If the mother mentions a preparation, such as a porridge or stew, ask her for the ingredients in the porridge or stew.
5. Then continue with:
"What was the next food or drink or breastfeed (child's name) had yesterday?"
"Did (child's name) eat/drink anything else at that time?"
6. Remember to 'walk' through yesterday's events with the mother to help her remember all the food/drinks/breastfeeds that the child had.
7. Continue to remind the mother you are interested in what the child ate and drank yesterday (mothers may talk about what the child eats/drinks in general).
8. Clarify any points or ask for further information as needed.
9. Mark on the Food Intake Job Aid, 6-23 Months the practices that are present. If appropriate, show the mother the pictures of thin and thick consistency (for porridge and mixed foods). Ask her which drawing is most like the food she gave the child. Was it thick, stayed in the spoon and held a shape on the plate, or thin, flowed off the spoon and did not hold its shape on the plate?
10. Praise practices you wish to encourage. Offer 2-3 Key Messages as needed and discuss how the mother might use this information.

- Now we will see this **FOOD INTAKE JOB AID, 6-23 MONTHS** in use. Follow the demonstration, using the completed in **FOOD INTAKE JOB AID, 6-23 MONTHS** on page 180 of your Manual and add your own comments in the second column. Later, you will use a **FOOD INTAKE JOB AID, 6-23 MONTHS** with mothers in the practical session.
 - In this demonstration listen for open questions and other listening and learning skills that we discussed in Session 7.
 - We will review the demonstration and your comments at the end
- Ask the two participants whom you prepared to assist. One person is the mother and one is the Health Worker who fills in the **FOOD INTAKE JOB AID, 6-23 MONTHS**.
 - Room setting: Seats with no desk or barrier between the Health Worker and Mother. If the Health Worker needs a desk to write on, place it to one side (right-hand side if the health worker writes with the right hand). They are already sitting. Health Worker has a Food Intake Job Aid, 6-23 Months, Food Intake Reference Tool, 6-23 Months, consistency pictures and a typical bowl. Mother has a growth chart for the child.
- Find out the mother and child's 'names', then introduce the demonstration:
 - (Name) is 11 months old. (Mother's name) has brought him to the health centre for immunization. The child was ill at the last visit but has recovered and is growing well again. So the Health Worker asks (mother's name) to talk to her about how (name) is eating.

DEMONSTRATION 27.A LEARNING WHAT A CHILD EATS	
Health worker: (show growth chart)	“Thank you for coming today. (Mother name), the growth charts show that your child is growing well again since I last saw him when he was ill.
Mother:	“I am pleased that he is recovering. I was worried that he might still be growing poorly from last time.
Health worker:	“I can see you are anxious about his growth.”
Mother:	“Yes. I was wondering if I was feeding him the right sorts of food.”
Health worker:	“Perhaps we could go through everything that (child’s name) ate or drank yesterday?”
Mother:	“Yes, I can tell you about that.”
Health Worker:	“What was the first thing you gave (child’s name) after he woke up yesterday?”
Mother:	“First thing, he breastfed. Then about one hour later the baby had a small amount of bread with butter, and several pieces of papaya.”
Health Worker:	“Breastfeeding, then bread, butter and some pieces of papaya. That is a good start to the day. What was the next food or drink or breastfeed that he had yesterday?”
Mother:	“At mid-morning, the baby had some porridge with milk and sugar.”
Health Worker: (show 2 consistency pictures)	“Which of these drawings is most like the porridge you gave to (child’s name)?”
Mother:	“Like that thick one.” (Points to the thick consistency)
Health Worker:	“A thick porridge helps (child’s name) to grow well. After the porridge mid-morning, what was the next food, drink, breastfeed (child’s name) had?”
Mother:	“Let’s see, in the middle of the day, he had soup with vegetables and beans.”
Health Worker:	“How did the baby eat the vegetables and beans?”
Mother:	“I mashed them all together and added the liquid of the soup so he could eat it.”
Health Worker: (show 2 consistency pictures)	“Which picture is most like this food that you fed (child’s name) yesterday in the middle of the day?”
Mother:	“This one – the more runny one.” (Points to the thin consistency)
Health Worker:	“Was there anything else that (child’s name) had at mid-day yesterday?”
Mother:	“Oh yes, he had a small glass of fresh orange juice.”
Health Worker:	“That is a healthy drink to give to (child’s name). After this meal at mid-day, what was the next thing he ate?”
Mother:	“Let’s see, he didn’t eat anything more until we all ate our evening meal. He breastfed a few times in the afternoon. In the evening, he ate some rice, a spoonful of mashed greens, and some fish.”
Health Worker: (show 2 consistency pictures)	“Breastfeeding will help (child’s name) to grow and to stay healthy. It is good that you are still breastfeeding. Which of these pictures looks most like the food the baby ate in the evening?”
Mother:	“This thicker one. I mashed up the foods together and it looked like that.”
Health Worker:	“Did (child’s name) eat or drink anything more for the evening meal yesterday?”
Mother:	“No, nothing else.”
Health Worker:	“After that or during the night, what other foods or drinks did (child’s name) have?”

Mother:	“(Child’s name) breastfeeds during the night but he had no more foods.”
Health Worker: (show typical bowl)	“Using this bowl, can you show me about how much food (child’s name) ate at his main meal yesterday?”
Mother:	(Points to bowl) “About half of that bowl.”
Health Worker:	“Thank you. Who helps (child’s name) to eat, or does he eat by himself?”
Mother:	“Oh, yes. (Child’s name) needs help. Usually I help him, but sometimes if my mother or sister is there, they will help also.”
Health Worker:	“Is (child’s name) taking any vitamins or minerals?”
Mother:	“No, not now.”
Health Worker:	“Thank you for telling me so much about what (child’s name) eats.”

- As you can see from the example form on page 180 in your Manual (page 381 in the *Trainer’s Guide*), the health worker has gathered information on the foods the child ate the previous day and filled in the second column.
 - **Let us go through the questions:**
Ask: Do the growth curves show appropriate growth?
Wait for a few replies and then continue.
Ask: Child receives breast milk?
Wait for a few replies and then continue.
 - Yes, frequently. A practice to praise.
Ask: How many meals of a thick consistency?
Wait for a few replies and then continue.
 - 2, the porridge and the evening meal of rice, mashed greens, and fish. However, the soup given at lunch time was thin, so this might be something to discuss with the mother.
- The variety of foods eaten is looked at next.
- Ask: Did the child eat an animal-source food yesterday?*
Wait for a few replies and then continue.
- Yes, fish in the evening.
Ask: Ate a dairy product?
Wait for a few replies and then continue.
 - Yes, there was milk on the porridge.
Ask: Ate pulses or nuts yesterday?
Wait for a few replies and then continue.
 - Yes, beans at mid-day. And the child had juice with the meal, which helps iron absorption.
Ask: Ate a dark-green or yellow-coloured fruit or vegetable yesterday?
Wait for a few replies and then continue.
 - Yes, some paw-paw in the morning, some green vegetables in the evening, maybe some green or yellow vegetables in the pot at mid-day. If you need to, you can ask for more information about the kinds of vegetables. However, do not ask many questions about

details if the answers are not important. In this example, you have learnt by listening that the child had some green vegetables and a yellow fruit so has met the recommendation. You do not need to ask more questions about types of vegetables.

- ☐ Then we check the frequency of meals and the amount of food.

Ask: Number of meals and snacks

Wait for a few replies and then continue.

- Three meals and one snack.

Ask: Is three meals and one snack adequate for this child aged 11 months?

Wait for a few replies and then continue.

- Yes, it is adequate.

Ask: Was the quantity of food eaten at the main meal adequate for the child's age?

Wait for a few replies and then continue.

- Yes, the child is 11 months old and received about half of a bowl.

Ask: Mother assists with eating?

Wait for a few replies and then continue.

- Yes.

Ask: Any vitamins or mineral supplements?

Wait for a few replies and then continue.

- Not at this time. There is no Key Message about vitamins or mineral supplements. However, if the child is not eating animal-source foods and is not likely to eat them, he may need an iron supplement.

Ask: Was the child healthy and eating?

Wait for a few replies and then continue.

- Yes.

- This summary helps you to pick out the practices to praise and specific Key Messages to give to this mother. If the mother has not mentioned that the child has received some of the food items or practices listed in the column then the health worker should ask the mother directly. If an answer is unclear, you can ask for more information.

- Now the health worker needs to choose which practices to praise and 2-3 Key Messages to discuss.

Ask: What practices of this mother could you praise and support to continue?

Wait for a few replies and then continue.

- ☐ Write the points that participants suggest on the flipchart. Refer to these responses as you make the following points.

- This mother had many good practices you could praise and support:

- continuing breastfeeding
- frequent meals and snacks
- variety of foods used including staple, some animal-source foods, fruit and vegetables
- thick consistency for some meals
- assistance with eating.

Ask: What are the main points to give relevant information on? What Key Message could you give to this mother?

Wait for a few replies and then continue.

- After you had praised the practices, you would then discuss:
 - the amount of food in each meal – suggest increasing so that by 12 months the child had a full bowl
 - to make the food a thick consistency at each meal (remember the bean and vegetable meal was thin).
 - For this particular child, the weight was only rising very slowly. Therefore, the amount of food at each meal and giving a thick consistency are particularly important suggestions to discuss.
 - Gather all the information first and then discuss practices which could be improved with the mother, giving the relevant Key Messages.
 - The health worker put her initials at the Key Messages she discussed.
 - You will have an opportunity to practise how to gather information on feeding practices with actual mothers later in the course.
- Ask if there is any point the participants would like made clearer or any questions.
- Ask if there are any questions in relation to the job aids explained and reviewed in the previous sessions, if yes, clarify point as needed.

V. Summarize the session

5 minutes

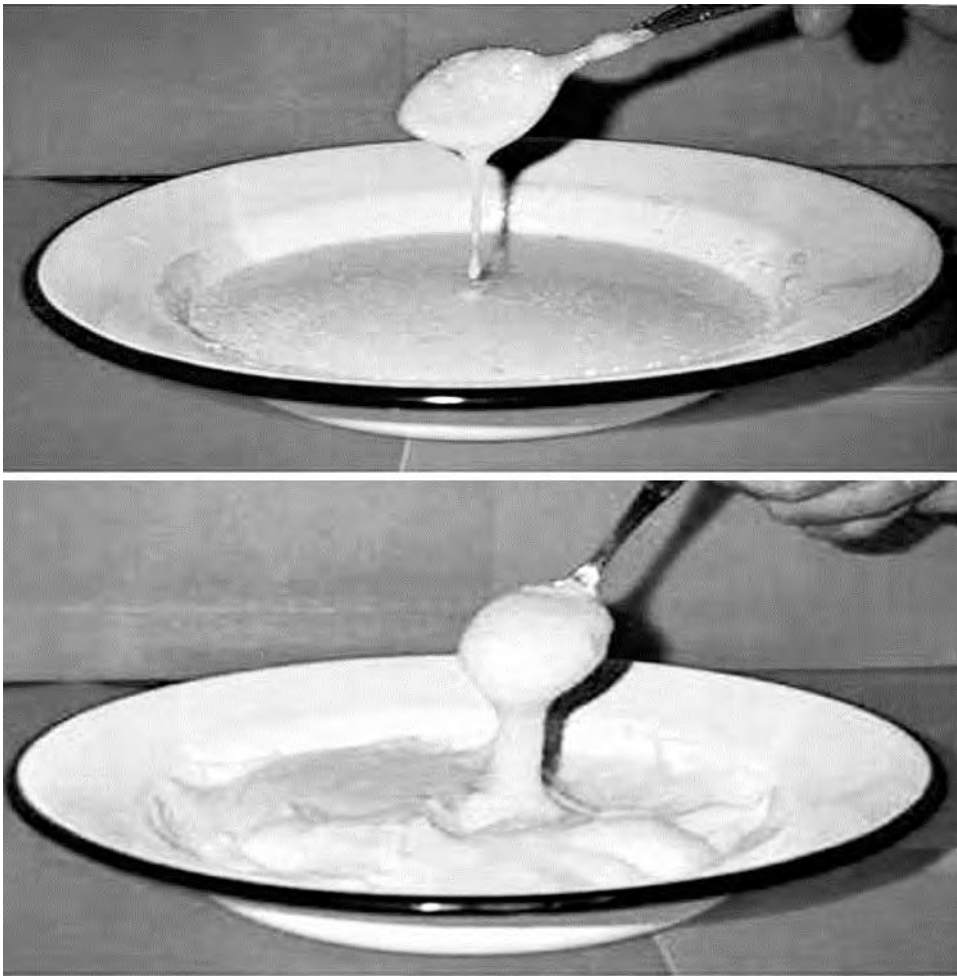
- Ask participants if they have any questions or if there are points you can make clearer.
- Make these points:
- In this session, we looked at various ways of gathering information on complementary feeding practices. This included listening, using growth charts and asking questions.
 - We also discussed the FOOD INTAKE JOB AID, 6-23 MONTHS which will be used in Practical Session 3
 - If the child is ill on that day and not eating, give the Key Message 10: Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly.

Enter ✓ in the Yes column if the practice is in place.

Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS for the message).

FOOD INTAKE JOB AID, 6-23 MONTHS		
Child's name		
Date of birth		Age of child at visit
Feeding practice/situation	Yes / number where relevant	Key Message given
Growth appropriate?		
Child received breast milk?		
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)		
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?		
Child ate a dairy product yesterday?		
Child ate pulses, nuts or seeds yesterday?		
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?		
Child ate sufficient number of meals and snacks yesterday, for his/her age?		
Quantity of food eaten at main meal yesterday appropriate for child's age?		
Mother assisted the child at meals times?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS		
Feeding Practice/situation	Ideal Feeding Practice	Key Messages to help counsel mothers
Growth appropriate?		Look at the shape of the growth curves of the child: is the child growing?
Child received breast milk?	Yes	Breastfeeding for 2 years of age or longer helps a child to develop and grow strong and healthy
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	3 meals	Foods that are thick enough to stay in the spoon give more energy to the child
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	Animal-source foods should be eaten daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate a dairy product yesterday?	Try to give dairy products daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate pulses, nuts or seeds yesterday?	If meat is not eaten pulses or nuts should be eaten daily, with an iron enhancer such as a vitamin C rich food	Peas, beans, lentils, nuts and seeds are good for children
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	A dark-green or yellow vegetable or yellow fruit should be eaten daily	Dark-green leaves and yellow- coloured fruits and vegetables help the child to have healthy eyes and fewer infections
Child ate sufficient number of meals and snacks yesterday, for his/her age?	Child 6 – 8 months: 2 – 3 meals plus 1 – 2 snacks if hungry Child 9 – 23 months: 3 – 4 meals plus 1 – 2 snacks if hungry	A growing child needs 2 – 4 meals a day plus 1 – 2 snacks if hungry: give a variety of foods
Quantity of food eaten at main meal yesterday appropriate for child's age?	Child 6 – 8 months: gradually increased to approx. ½ cup at each meal Child 9 – 11 months: approx. ½ cup at each meal Child 12 – 23 months: approx. ¾ – 1 cup at each meal	A growing child needs increasing amounts of food
Mother assisted the child at meals times?	Yes, assists with learning to eat	A young child needs to learn to eat: encourage and give help... with lots of patience
Child took any vitamin or mineral supplements?	Vitamin and mineral supplements may be needed if child's needs are not met by food intake	Explain how to use vitamin and mineral supplements if they are needed
Child ill or recovering from an illness?	Continue to eat and drink during illness and recovery	Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly



Enter ✓ in the Yes column if the practice is in place.

Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS for the message)

FOOD INTAKE JOB AID, 6-23 MONTHS		
Child's name:		
Date of birth:		Age of child at visit: 11 months
Feeding practice/situation	Yes / number where relevant	Key Message given
Growth appropriate?	Slow weight gain	
Child received breast milk?	✓	
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	2 times: at breakfast and dinner	Yes
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	✓ fish in the evening	
Child ate a dairy product yesterday?	✓ milk in the porridge	
Child ate pulses, nuts or seeds yesterday?	✓ beans at midday	
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	✓ papaya at breakfast and greens in the evening	
Child ate sufficient number of meals and snacks yesterday, for his/her age?	✓ 3 meals and 1 snack	
Quantity of food eaten at main meal yesterday appropriate for child's age?	✓	
Mother assisted the child at meals times?	✓	
Child took any vitamin or mineral supplements?	-	
Child ill or recovering from an illness?	-	

Session 28

Investigating causes of undernutrition

Objectives

After completing this session participants will be able to:

- explain when to investigate causes of undernutrition
- identify the key sections of the job-aid for investigating undernutrition causes
- explain how to use the job aid
- identify the 8 steps involved in investigating causes and counselling for undernutrition

Session outline

60 minutes

I.	Introduce the session	2 minutes
II.	Present Slides 29/2-29/6	28 minutes
III.	Script 1: Investigating causes of Nalah's undernutrition	15 minutes
IV.	Discussion: Possible causes of Nalah's undernutrition	15 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 28/1-28/6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- You need tape or other means of fixing the page to the wall or board.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**2 minutes**

- Show **Slide 28/1 - Session 28 Objectives** and make the following points

28/1

Session 28 Objectives

- Explain when to investigate causes of undernutrition
- Identify the key sections of the job-aid for investigating undernutrition causes
- Explain how to use the job aid
- Identify the 8 steps involved in investigating causes and counselling for undernutrition

II. Present slides 28/2 - 28/6**28 minutes**

- Make these points:
- When growth assessment reveals a problem of undernutrition, your focus in the counselling session will be to find out from the mother what the likely underlying causes are. Recall the conceptual framework on the causes of malnutrition as you discuss with the mother what might be the immediate or underlying causes.

- Show **Slide 28/2 - Investigate undernutrition if ...** and make the following points

28/2

Investigate undernutrition if a child is ...

- Wasted
- Underweight
- Stunted but not overweight or at risk of overweight
- Has a growth trend towards one of these problems

- Make these points:
- It is important to investigate the causes of the problem before counselling the mother.

- This Investigation should be carried out for any child who is:
- wasted (below -2 z-score for weight-for-length/height)
- underweight (below -2 z-score for weight-for-age)
- stunted (below -2 z-score for length/height-for-age)²⁴ and not overweight or at risk of overweight
- has a growth trend towards one of these problems.

Show **Slide 28/3 - Job aid: Investigating causes of undernutrition** and make the following points:

Job aid: investigating causes of undernutrition

28/3

- 2 columns – questions and feeding recommendations
- Take note of age-specific questions
- Complete investigation of causes before giving any advice
- How:
 - Ask all relevant questions for child's age
 - Listen carefully to what the mother says
 - Ask follow-up questions to obtain complete info
 - Note all likely causes
 - With mother, identify important causes

- Use the job-aid titled Investigating the Causes of Undernutrition provided with this course. The left side of this job-aid lists questions to ask the mother. The right side lists advice to be given depending on the mother's answers. Some pages of the job-aid are used only for children in a specific age group, while others apply to all children.
- To use the job-aid, first ask all of the relevant questions about causes. Give advice only after the investigation of causes is complete, so that you can tailor your advice to the most important causes.
- To investigate causes of undernutrition:
 - Ask all the relevant questions for the child's age.
 - Listen carefully to the mother's answers.
 - Ask follow-up questions as needed to get complete information to understand the causes of the child's undernutrition.
 - Note causes that are applicable for the child.
- If there are many applicable causes, try to identify the most important ones. Ask the mother for her opinion about which causes are most important. You may comment on

²⁴ In highly undernourished populations, the number of children below -2 z-score in weight-for-age and length/height-for-age will be high. It may therefore be necessary to consider lower z-score cut-offs for selecting children for counselling.

causes as they are discovered, but give advice only when the investigation of causes is complete.

- Show **Slide 28/4 - Investigating causes of undernutrition** and make the following points

28/4

Investigating causes of undernutrition

- **Illness:** speak about how to feed a child during illness
- **Trauma:** consider if interview should be done at another time
- **Scope:** BF, appetite, CF, food types, frequency, quantities, family meal habits
- What possible causes does the mother recognize?
- Take time with the mother (dedicated staff for counselling in busy facilities)

- If the child is currently ill or has a chronic disease that could be a cause of undernutrition, treat the child (or refer the child for treatment) rather than completing the entire interview about causes. Also advise the mother how to feed the child during illness using the feeding recommendations for the child's age group in the Growth Record. When the child returns for follow-up, you can investigate other possible reasons for the undernutrition.
- If the child has experienced a trauma (such as death in the family or a change in caregiver), this may be a contributing factor to a decrease in food intake. In this type of situation, assess whether it would be better to wait to conduct the interview at a later time.
- Questions in the interview are related to breastfeeding, the child's appetite, types and variety of foods given, frequency of feeding, family mealtime habits, illnesses, recent trauma, and social and environmental factors that may contribute to undernutrition. The interview also includes a question to ask the mother directly what she thinks the causes may be.
- The interview requires taking time with the mother, but taking this time is critical in order to identify the most relevant and helpful advice. **In a busy health facility, it may be necessary to assign specific health care providers to do the tasks of interviewing and counselling mothers.**

- Show **Slide 28/5 - Job aid: Steps in investigating causes of undernutrition** and make the following points

Job aid: steps in investigating causes of undernutrition 28/5

- **Step 1:** Find out if the child is currently ill
- **Step 2:** If not ill, initiate investigation of causes
- **Step 3:** Ask about any recent changes in eating and/or breastfeeding
- **Step 4:** Discuss age-specific questions about the child's feeding
- **Step 5:** Ask about recurrent illnesses
- **Step 6:** Assess possible underlying social and environmental causes
- **Step 7:** Jointly with the mother/caregiver, identify causes
- **Step 8:** Counsel

- Here is a summary of the steps to follow when investigating causes of undernutrition. We will go through the job aid page by page and step by step:
- *Top page: The questions for investigating causes are **age-specific for Steps 1-4**. The relevant page references are summarized on the top page to help you go directly to the relevant pages for the child's age, e.g., for age 1-2 years, refer to pages 6 and 7:*
 - Step 1: Find out if the child is currently ill
 - Step 2: If not ill, initiate investigation of causes
 - Step 3: Ask about any recent changes in eating and/or breastfeeding)
 - Step 4: Discuss age-specific questions about the child's feeding
- *Steps 5-8 apply to children of all ages and are presented on pages 10 and 11:*
 - Step 5: Ask about recurrent illnesses
 - Step 6: Assess possible underlying social and environmental causes
 - Step 7: Jointly with the mother/caregiver, identify causes
 - Step 8: Counsel (page 11 and refer back to appropriate age group pages)
- Take time now to study the job-aid titled INVESTIGATING CAUSES OF UNDERNUTRITION. Focus on the questions listed on the left side. Remember that you will ask all of the relevant questions for the child's age, listen to the mother's or caregiver's replies, and determine the most important causes of undernutrition before giving advice.

- Show **Slide 28/6 - Possible causes of undernutrition** and make the following points

28/6

Possible causes of undernutrition

- Make note of possible causes as mother speaks with you
- Poor sanitation, >2 children under-five, mother/father absent (separation/death) or in poor health, family does not have enough to eat
- Note what you think are most important likely causes **but** find out what causes mother recognizes
- Example: interview with Nalah's mother

- While interviewing the mother, you may note several possible causes of undernutrition, for example, feeding practices that differ from the recommendations for the child's age. You may also note sanitation problems that could cause illnesses leading to undernutrition. In addition, you may note social and environmental factors that could affect the child's feeding and care. Following are some examples:
- If three or more children under 5 years of age live in the household, the child is at risk of undernutrition and neglect. The risk is decreased if there are two or more people who share responsibilities for child feeding and care.
- If there is no mother or no father present in the household (e.g. due to family separation or death), or if one parent is not involved in the child's care, the child's risk of undernutrition and neglect is increased.
- If the mother or father is not in good health, the child's risk is increased.
- If the mother states that there is not usually enough food to feed the family, she is facing serious obstacles and needs food assistance as well as advice.
- When there are several possible causes of undernutrition, it is helpful to focus on the main causes that can be changed. After asking the questions in the interview, ask the mother's opinion of the causes, so that you know which causes she recognizes. Then summarize what you see as the main causes. The next exercise includes an example of an interview with the mother of an undernourished child.

III. Script 1: Investigating causes of Nalah's undernutrition 15 minutes

- For this exercise, ask two participants to act out a script of an interview with Nalah's mother.
- Explain that the scripted interview follows the job-aid titled Investigating the Causes of Undernutrition. The steps are labelled in the script. Preview the script as follows:
 - Step 1 is covered in the background information and at the beginning of the interview, when the nurse explains the nutritional problem to Mrs Parab.

- (The nurse locates the pages in the job aid for a baby age 6 months to 1 year.)
 - In Step 2, the nurse asks permission to interview the mother about causes of the problem.
 - Since Nalah is not ill, the nurse will do Step 3 of the job-aid (asking about breastfeeding).
 - Then the nurse will go to Step 4 and ask questions about feeding from that page.
 - The nurse will then ask the questions intended for children of all ages (Steps 5–6).
 - This script will end with Step 7, identifying likely causes of undernutrition. The next exercise will deal with counselling to address these causes.
- Ask participants to follow along in the script (pages 183 to 186 in their manuals) and mentally compare the mother's answers about feeding to the recommended practices for Nalah's age group to identify possible causes of her undernutrition.
- Give to the group the following background information:
- Nalah is now 6 months old and has visited the health centre 5 times since her birth. Nalah is the only child at home living with her mother and father. Both parents are in good health; neither is known to be HIV positive. Her growth has been charted in the Girl's Growth Record. Because Nalah is below the -2 z-score line in both length-for-age and weight-for-age, the nurse will counsel the mother, Mrs Parab, about growth and feeding. Before giving any advice, the nurse will interview Mrs Parab about Nalah's feeding and the home situation in order to find out possible causes of her undernutrition.
 - **Step 1:** Nalah is not currently ill and has no known chronic disease.

Script – Dialogue with Nalah's mother about the causes of undernutrition

Nurse: Thank you for bringing Nalah back again, Mrs Parab. Now that we have measured and weighed her, let's take a minute to talk, shall we?

Mrs Parab: Of course.

Nurse: (Showing the growth charts) As you can see from her length chart, Nalah was an average length at birth and she could have grown along this green line if all was going well. But we can see that she is a lot shorter than an average girl of 6 months. Her weight also is a lot lower than the average. Since her growth in both weight and length have slowed down together, she does not look too thin. But we want her to grow longer and to gain weight.

Mrs Parab: What should we do?

Step 2 (The nurse begins at Page 4 of the job aid since Nalah is 6 months old)

Nurse: Well, since Nalah has not been ill, I think we should focus on her feeding. Do you mind if I ask you some questions so that we can better understand the reasons why her growth has slowed down?

Mrs Parab: That would be fine.

Step 3

Nurse: Alright then, has Nalah been breastfeeding less or eating less than usual?

Mrs Parab: Maybe less, because it's hard to breastfeed when I have to go to work. Sometimes I have to leave her with my neighbour.

Step 4:

Nurse: So you are still breastfeeding?

Mrs Parab: Yes, when I can.

Nurse: That's good. How many times is that during a day and a night?

Mrs Parab: When I have Nalah with me at work, I breastfeed about 4 or 5 times from morning until night. If she stays with my neighbour, I can only breastfeed twice, once in the morning and once at night.

Nurse: Do you have any difficulty with breastfeeding itself? Is Nalah attaching well to the breast and emptying the breasts whenever she breastfeeds?

Mrs Parab: Well, I have never thought about that. I was told that I should feed her from both breasts so sometimes I switch to the other breast before the first is empty.

Nurse: That is something we can look at together in a moment. Do you give Nalah any other fluids besides breast milk?

Mrs Parab: I sometimes have given her water, and I leave her some milk when she stays with my neighbour.

Nurse: What kind of milk?

Mrs Parab: I buy it at the shop. It's cow's milk from a tin.

Nurse: Do you add any water to it?

Mrs Parab: No, because it already looks thin to me.

Nurse: How many times does the neighbour give her the milk?

Mrs Parab: Twice, I think.

Nurse: And how does she feed Nalah the milk?

Mrs Parab: In a cup.

Nurse: That is good. Do you or the neighbour give Nalah any semi-solid or solid foods?

Mrs Parab: My neighbour gives her some porridge if she seems hungry after the milk.

Nurse: How often is that?

Mrs Parab: Not more than once a day.

Nurse: How does the neighbour feed Nalah the porridge?

Mrs Parab: With a spoon.

Nurse: Have you offered Nalah any porridge at home?

Mrs Parab: Not yet.

Step 5

Nurse: Let me just ask you a few more questions about Nalah's health and your home. Is Nalah often tired, or sick with diarrhoea, cough, or fever?

Mrs Parab: Nalah does not seem strong to me. She sometimes has a runny nose, and she likes to be held. She does not move around a lot but lies still.

Step 6

Nurse: Tell me about where you live. Do you have a latrine or toilet?

Mrs Parab: No, we live in a poor area. There is a common latrine for many houses.

Nurse: Where do you get water?

Mrs Parab: We get water from a tap in the yard, and once a week I buy water in large cans.

Nurse: Do you boil or treat your water?

Mrs Parab: I boil the drinking water, but not the water for washing dishes.

Nurse: It is very good that you boil the water for drinking. How is water stored in your home?

Mrs Parab: I just keep it in the same cans that we buy it in.

Nurse: How many people are living at home now?

Mrs Parab: Just me, my husband, and Nalah.

Nurse: And how is your health?

Mrs Parab: We are fine, although I am very tired, I must admit.

Nurse: Does Mr. Parab help with Nalah?

Mrs Parab: He is out looking for construction work most days, but he helps a bit.

Nurse: Do you have enough food to feed the family?

Mrs Parab: We have enough to manage.

Step 7

Nurse: What do you think is the most important reason for Nalah's small size and tiredness?

Mrs Parab: Well, I thought she looked small but I did not know why. Maybe she needs more food. I wish that I could stay home and breastfeed more...

Nurse: Yes, that would be good if you can do it. From what you have said, it seems to me that Nalah may be growing slowly for a number of reasons, but most probably because she is not getting enough food. Please put her to the breast for a feed so we can see if she attaches well and let's speak more about the emptying of the breasts.

IV. Discussion: possible causes of Nalah's undernutrition 15 minutes

- Lead the discussion on possible causes of Nalah's undernutrition
- List these causes on the flipchart or blackboard. Focus on causes rather than possible solutions or advice to give the mother. Solutions and advice will be the focus of the next exercise.
- Recall the Listening and Learning Skills and ask participants to mention which ones the nurse used in her dialogue with Mrs Parab (helpful non-verbal communication, open questions, responses and gestures that show interest, reflecting back what the mother says, empathizing, and avoiding judging words).
- There might be other questions that participants feel should have been asked (e.g. when was porridge started and why?). However, in a health facility where many other mothers

Session 29

Counsel mother whose child has a problem of undernutrition

Objectives

After completing this session participants will be able to:

- involve the mother in identifying possible causes of undernutrition
- find age-appropriate advice for the problem identified
- set goals for improving growth of an undernourished child
- provide examples of checking questions to use when counselling

Session outline

40 minutes

Participants are all together for a lecture presentation by one trainer, followed by group work with all trainers.

- | | | |
|------|--------------------------------------|------------|
| I. | Introduce the session | 2 minutes |
| II. | Present Slides 29/2 - 29/3 | 14 minutes |
| III. | Script 2: Counselling Nalah's mother | 10 minutes |
| IV. | Discussion and conclusion | 14 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 29/1-29/3 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- You need tape or other means of fixing the page to the wall or board.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session**2 minutes**

- Show **Slide 29/1 - Session 29 Objectives** and make the following points

29/1

Session 29 Objectives

After completing this session participants will be able to:

- involve the mother in identifying possible causes of undernutrition
- find age-appropriate advice for the problem identified
- set goals for improving growth of an undernourished child
- provide examples of checking questions to use when counselling

II. Present Slides 29/2 - 29/3**14 minutes**

- Make the following remarks
- In the previous session we identified possible causes of Nalah's undernutrition as health workers, but what does the mother think? .It is important to find out if she recognizes the problem in the same way and then to find out what she can do to improve her child's growth. The goal set for improving the child's growth is jointly set by the mother and the health worker.

- Show **Slide 29/2 - Provide counselling related to the causes of undernutrition** and make the following points

29/2

Provide counselling related to causes of undernutrition

- What does the mother think she can do to help her child?
- Discuss what is feasible, encourage mother to take action, praise her efforts,
- Find feeding advice appropriate for the child's age in the right column of the job aid
- Stunted child: improve linear growth without excessive weight gain (increase amount and bioavailability of micronutrients, -- consumption of animal source foods, fortified foods, sprinkles or supplements)

- During the first part of the interview with the mother or other caregiver, you summarized the possible causes of the child's undernutrition and determined which causes seemed

most applicable and important. Next, focusing on the main causes that the mother or caregiver recognizes as important, ask her:

- “What do you think that you can do to help the child, given these causes?”
- Then discuss what is feasible to do and who can provide help and support. Acknowledge any difficulties in the mother’s situation. Encourage her to take action.
- Specific advice related to feeding is given on the right-hand side of the job-aid, next to the related questions. If you noted that a feeding practice differs from what is recommended, explain the recommended practice. Also commend the mother if she is following some of the recommendations.
- If there are many causes of undernutrition, there may be much applicable advice, but the mother will only be able to remember a limited number of actions to take. Limit your advice to two or three actions that are most important and feasible.
- **A stunted child** whose weight-for-length/height is within normal range needs a diet that will improve growth in length/height without excessive weight gain that could result in overweight or obesity. Rather than increasing their energy intake, a strategy for such children is to improve the amount and bioavailability of micronutrients in their diet by increasing consumption of animal-source foods. Animal-source foods are high in micronutrients, and many minerals are better absorbed from meat than they are from plant-derived foods.²⁵ Among vegetarian populations or where access to a micronutrient-adequate diet is limited, strategies to improve micronutrient intake include using fortified foods and sprinkles or providing micronutrient supplements.

Show **Slide 29/3 - Set goal for improving growth** and make the following points

29/3

Set a goal for improving growth of an undernourished child

- Propose doable actions (2 or 3 , no more) for mother to try, write them down in Growth Record
- Possible goals:
 - Return to normal growth following illness
 - Stop trend towards undernutrition and reverse it
 - No specific weight gain targets esp. if stunted
- Express goals in terms of improving growth so that length and weight increase proportionally
- Set appointment for follow-up visit

- Since improvement in the child’s growth may take some time, and the rate of improvement cannot be predicted, set goals for a few (2 or 3) actions that the caregiver can take towards improving the child’s growth. Suggest actions that can be taken within a few weeks. You can praise and encourage the caregiver when they are accomplished. Make notes (e.g. in the Growth Record) of the underlying causes of undernutrition for discussion at follow-up visits, when goals may be set for additional actions to take.
- If the cause of the child’s undernutrition is a recent illness, the goal is to return the child to his previous, normal growth line in a reasonable amount of time, such as 3 months.

²⁵ Allen LH, Gillespie SR. 2001. What works? A review of the efficacy and effectiveness of nutrition interventions. United Nations Administrative Committee on Coordination, Sub-Committee on Nutrition, Geneva in collaboration with the Asian Development Bank, Manila.

- If there are other causes of the child's undernutrition, the first goal is to stop the trend towards undernutrition and eventually reverse the trend. Stress that the mother can help to achieve these goals by following the recommendations discussed.
- Avoid setting any specific target for weight gain, especially for a stunted child. If the stunted child gains weight without increasing in length, he or she may become overweight. Express goals in terms of improving growth so that length and weight increase appropriately in relation to one another.
- At the end of the discussion with the mother or other caregiver, it is important to set a reasonable time for the child's next visit and to set a general goal for improved growth. The next visit may be at the time that an immunization is required or at another convenient time.

III. Script 2: Counselling Nalah's mother

10 minutes

- Now we will continue listening to the conversation between Nalah's mother and the nurse.
- Follow the conversation in page 188 of your manuals

Script 2 – Conclusion of counselling session with Nalah's mother

Nurse: Nalah's breast attachment is very good. Well done. Now whenever you breastfeed, leave her to empty each breast so that she gets the hind-milk which has more fat than the fore-milk. Let's talk now about how frequently you can feed her. You said that you would like to stay home and breastfeed more. Is there any way that you could do that?

Mrs Parab: If my husband could get more work, I could stay home and breastfeed more.

Nurse: That would be helpful to Nalah if you can do it. Let's talk about some more ways to help Nalah. Let's look in the Growth Record for the feeding recommendations for her age.

(The nurse opens the Growth Record to pages 16-17 to show the recommendations to Mrs Parab.)

① Since Nalah is now 6 months old, we need to follow the recommendations for infants 6 months to 1 year of age. You see that the first recommendation is to breastfeed as often as Nalah wants. Even if you cannot breastfeed more during the day, you could do it at night.

Nalah also needs a good soft staple food now that she is 6 months old. What kind of porridge is she eating at your neighbour's home?

Mrs Parab: The porridge is made of maize meal.

Nurse: That is a fine staple food. You need to feed Nalah thick porridge 2–3 times each day, about 2–3 tablespoons. (Shows amount with her hands or a spoon) If she is already taking more than this, do not reduce the amount.

Mrs Parab: Should I give her any other foods?

Nurse: Yes, but start just one new food at a time to be sure that she can tolerate it. For example, you can start giving some mashed fruit, such as banana. Let's look at the list of some appropriate foods on page 15 of Nalah's Growth Record.

③ The porridge will give Nalah energy, but she needs a variety of other foods for their nutrients to help her grow. Just remember to introduce them one at a time.

Mrs Parab: But I don't have all of these foods. Foods like chicken and butter are too expensive.

Nurse: You don't have to give those. Let's talk about what you do have. What animal source foods can you give her?

Mrs Parab: I can get eggs, and sometimes fish or a bit of meat.

Nurse: That will do very well. Can you get leafy green and yellow-coloured vegetables and fruit?

Mrs Parab: Yes. For vegetables I can get pumpkin and chard. And banana and papaya for fruit.

Nurse: And do you have oil or fat that you could add a little to her food?

Mrs Parab: I have oil, but I think it causes constipation in babies.

Nurse: Oil should not cause constipation, but what it will do is to increase the energy in Nalah's food.

Mrs Parab: That all seems like too much food.

Nurse: Well, you will not give all of these foods every day. Remember, at first you will only give a small amount 2 or 3 times each day. And you will only introduce one new food every 3–4 days. Please tell me why you should introduce new foods one at a time.

Checking question

Mrs Parab: To be sure that the new food does not make her sick.

Nurse: That's right.

Mrs Parab: What about breastfeeding? How long should I breastfeed?

Nurse: Keep breastfeeding as often as Nalah wants to, day and night for two years or more.

Mrs Parab: I hope that I can do that.

Nurse: I think that if you feed Nalah the way that we have discussed, she will be better nourished and more lively. The food will help her grow and develop more. Now, to review, please tell me how you will feed Nalah for the next month.

Mrs Parab: I will try to breastfeed more often.

Nurse: Good. What else?

Mrs Parab: I will give her porridge.

Nurse: OK. That's good. How much porridge and how often?

Mrs Parab: About this much (shows with hands) two or three times a day.

Nurse: Very good. And what other foods will you start giving, one at a time?

Mrs Parab: Mashed banana, papaya, pumpkin.

Nurse: What food will you give that comes from an animal?

Mrs Parab: Eggs, most likely.

Nurse: All of these foods will help Nalah grow. If you can feed her as we have agreed for one month, there should be a change in her health. Do you think that you could bring Nalah back next month?

Mrs Parab: Yes, I can bring her back.

Nurse: Good. We will weigh and measure her again. When she is getting enough food, you will see her being more active instead of lying still. We should also see her growing in length and weight. So, next month we will speak about her feeding needs at 7–8 months, and maybe also look for ways to prevent problems like the runny nose that you mentioned.

Mrs Parab: Okay, I will bring her back in one month.

Nurse: That's great. Let me write the date for that visit in her book. Of course, if Nalah gets sick or if you have any problems or questions, you can come sooner. I look forward to seeing you again.

Mrs Parab: Thank you.

IV. Discussion and conclusion

14 minutes

- Ask participants if they have any questions, and try to answer them.
- Recall the Building Confidence and Giving Support Skills and ask participants to mention briefly which ones the nurse used in her dialogue with Mrs Parab (accept what a mother thinks and feels; praise what they are doing right; give practical help; give a little, relevant information; use simple language; make one or two suggestions, not commands). A more detailed a more detailed discussion of some of these will be done in Session 31.

- Make these points:

This script covered Step 8 of the job-aid titled Investigating Causes of Undernutrition. The “nurse” counselled Mrs Parab using relevant advice from the right-hand side of the job-aid, as well as feeding recommendations for age group 6 months to 1 year from the Growth Record.

Session 30

Investigate causes and counsel mother whose child is overweight

Objectives

After completing this session participants will be able to:

- explain when to investigate causes of overweight
- identify the key sections of the job-aid for investigating overweight causes
- identify the 5 steps involved in investigating causes and counselling for overweight
- involve the mother in identifying possible causes of overweight
- set goals for improving growth of an overweight child

Session outline

60 minutes

Participants are all together for a lecture presentation by one trainer, followed by group work with all trainers.

I.	Introduce the session	2 minutes
II.	Slides 30/2-30/4: Investigating causes of overweight and the job aid	12 minutes
III.	Script 3: Investigating causes of Toman's overweight	10 minutes
IV.	Discussion: Possible causes of Toman's overweight	15 minutes
V.	Slides 30/5-30/6:	15 minutes
VI.	Script 4: Counselling Toman's mother	6 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 31/1-31/6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flip chart and markers.
- You need tape or other means of fixing the page to the wall or board.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

2 minutes

Show Slide 30/1 - Session 30 Objectives and make the following points

30/1

Session 30 Objectives

- explain when to investigate causes of overweight
- identify the key sections of the job-aid for investigating overweight causes
- identify the 5 steps involved in investigating causes and counselling for overweight
- involve the mother in identifying possible causes of overweight
- set goals for improving growth of an overweight child

II. Present Slides 30/2 - 30/4

12 minutes

30/2

Investigate causes of overweight if a child ...

- is overweight (above 2 z-score WL/H)
- has a growth trend towards overweight
- is stunted and overweight or at risk of overweight
- is obese (where there is no referral system for the specialized management of obesity)

Make these points:

- As with problems of undernutrition, it is important to investigate the causes of overweight before giving advice to the mother. Investigate the causes by interviewing the mother of any child who:
 - is overweight (above 2 z-score for weight-for-length/height)
 - has a growth trend towards overweight (above 1 z-score for weight-for-length/height, with a trend towards the 2 z-score line)
 - A stunted child can be overweight or obese.
- **Note:** Obese children (above 3 z-score) need referral for medical assessment and specialized management. If there is a referral system for obese children, refer them. If not, interview the mother about causes and counsel her as you would for a child who is overweight.

- Show **Slide 30/3 - Job aid: Investigating causes of overweight** and make the following points

30/3

Investigating causes of overweight

- 2 columns – questions and feeding recommendations
- Take note of age-specific questions
- Complete investigation of causes before advice
- For older children ask about physical activity
- If one or both parents are overweight, this increases child's risk
- Focus on child's eating/activity patterns, not parents'
 - Ask all relevant questions for child's age
 - Listen carefully to what the mother says
 - Ask follow-up questions to obtain complete info
 - Note all likely causes
 - With mother, identify important causes

- Use the job-aid titled Investigating the Causes of Overweight provided with this course. The left side of this job-aid lists questions to ask the mother. The right side lists advice to be given depending on the mother's answers. Some questions in the job-aid are used only for children in a specific age group, while others apply to all children.
- To use the job-aid, first ask all of the relevant questions about causes. Give advice only after the investigation of causes is complete, so that you can tailor your advice to the most important causes.
- To investigate the causes of overweight:
 - Ask all the relevant questions for the child's age.
 - Listen carefully to the mother's answers.
 - Ask follow-up questions as needed to get complete information to understand the causes of the child's overweight.
 - Note causes that are applicable for the child.
- To identify the causes of overweight, you will ask the mother questions about her child's diet and frequency of feeding/eating. For older children, also ask about leisure activities (such as hours spent watching television) and level of physical activity. Take care to ask these questions in a sensitive way that will not offend the mother or imply that she is at fault. If a child is being fed too much or too often, ask follow-up questions to determine why. Particularly in late infancy (age 6–12 months), a child may be overfed by parents who are anxious to keep up the child's weight. Knowing the reasons for overfeeding will help you express your advice in the most relevant way.
- You may need to be particularly sensitive if the mother herself appears to be overweight. If one parent is obese, the child has 40% probability of being overweight; if both parents are obese, the probability that the child will be overweight goes up to 70%. Although children do have a genetic tendency towards leanness or overweight, the causes of overweight are primarily factors such as family eating patterns and environment (for example, poor dietary habits, high consumption of energy-dense foods, and little physical activity). If parents have poor eating and activity habits, the child is likely to learn the same habits. During the interview about causes of overweight, focus on the child's eating and activity patterns rather than the parents'. However, realize that the parents may need to

change some of their habits in order to address the causes of the child's overweight.

- When there are several possible causes, it is helpful to focus on the main ones that can be changed. After asking the questions in the interview, ask the mother's opinion of the main causes of overweight, so that you know which causes she recognizes. Then summarize what you see as the main causes.

Show **Slide 30/4 - Job aid: Steps in investigating causes of overweight** and make the following points

30/4

Job aid: steps in investigating causes of overweight

- **Step 1:** Initiate investigation of causes
- **Step 2:** Discuss age-specific questions about the child's feeding
- **Step 3:** Ask about physical activity (children over age 6 months)
- **Step 4:** Jointly with the caregiver, identify causes
- **Step 5:** Counsel

- Take time now to study the job-aid titled INVESTIGATING CAUSES OF OVERWEIGHT. Focus on the questions listed on the left side. Remember that you will ask all of the relevant questions for the child's age, listen to the mother's or caregiver's replies, and determine the most important causes of overweight **before** giving advice.
- Here is a summary of the steps to follow:

Step 1: Initiate investigation of causes

Step 2: Discuss age-specific questions about the child's feeding

Step 3: Ask about physical activity (*only for children over age 6 months*)

Step 4: Jointly with the caregiver, identify causes

Step 5: Counsel

III. Script 3: Investigating causes of Toman's overweight 10 minutes

- For this exercise, ask two participants to act out a script of an interview with Toman's mother.
- Explain that the scripted interview follows the job-aid titled Investigating the Causes of Overweight. The steps are labelled in the script. Preview the script as follows:
 - Step 1: First the nurse will explain the nutritional problem and the purpose of the interview to Mrs Baruni.
 - Step 2: Since Toman is exactly 2 years old, the nurse will start with the questions for a baby from 6 months to 2 years to establish how Toman has been fed up to this point.
 - Step 3: The nurse will ask about physical activity.
 - This script will end with Step 4, identifying likely causes of overweight. The next exercise

will deal with counselling to address these causes.

- ❑ Ask participants to follow along in the script (pages 193 to 194 of their manuals) and mentally compare the mother's answers about feeding to the recommended practices for Toman's age group to identify possible causes of his overweight, and to notice which Listening and Learning Skills the nurse applies.
- ❑ Give to the group the following background information:
 - Toman is now 2 years old. Toman is the only child at home living with his mother. Mr and Mrs Baruni are separated, and Toman spends weekends with his father. Both parents are in good health; neither is known to be HIV positive. Mrs Baruni does not appear to be overweight.
 - His growth has been charted in the Boy's Growth Record. Because Toman is above the 2 z-score line in weight-for-height, the nurse is going to counsel his mother, Mrs Baruni, about growth and feeding. Before giving any advice, the nurse will interview Mrs Baruni about Toman's feeding and the home situation in order to find out the possible causes of his overweight.

Script 3 – Dialogue with Toman's mother about the causes of overweight

Step 1

Nurse: Let's look together at Toman's Growth Record. Looking at his length-for-age, we see that he is a nice height, a bit taller than average for boys his age.

The other charts show that Toman is quite heavy for his height. What do you think? Would you agree that Toman is overweight?

Mrs Baruni: I don't know. I think that he is a big, healthy boy. I never thought he was really overweight. Is this a problem?

Nurse: It will be a problem if he continues gaining weight so fast. We need to slow down his weight gain until his height catches up. Do you mind if I ask you some questions about Toman's eating and his physical activity? Then we can both understand why he seems to be gaining weight faster than expected.

Mrs Baruni: Alright.

Step 2

Nurse: Is Toman breastfed?

Mrs Baruni: No, I stopped breastfeeding him when he was 3 months old.

Nurse: Is he fed any milk formula or other milk?

Mrs Baruni: He drinks lots of milk. He loves milk.

Nurse: About how much milk does he drink each day?

Mrs Baruni: Oh, probably a litre. He has a glass in the morning, then at about 10:00, and also with snacks. I also give him a bottle to help him go to sleep without crying at night.

Nurse: How is the milk prepared? Is anything added to sweeten or thicken it?

Mrs Baruni: Usually it's just fresh milk from a packet, but sometimes I warm it and add a bit of

sugar or chocolate powder.

Nurse: How many meals does he eat each day?

Mrs Baruni: Three.

Nurse: OK. About how much does he eat at each meal?

Mrs Baruni: A small bowl full.

Nurse: What type of bread does Toman eat?

Mrs Baruni: He likes regular sliced bread, toast, and sweet breads.

Nurse: Does he eat cakes or other sweets?

Mrs Baruni: Well, he eats sweets like cookies and cake when he stays with his father and his father's mother over the weekend. My mother-in-law likes to bake and feed Toman sweets. She is a bit heavy herself.

Nurse: Does Toman drink soft drinks?

Mrs Baruni: Yes, sometimes.

Nurse: How often?

Mrs Baruni: At my mother-in-law's house he has soft drinks with his meals. I give him juice instead.

Nurse: What about spreads on bread? Does Toman eat a lot of butter, margarine, or sweet spreads on his bread?

Mrs Baruni: Oh yes, he loves chocolate and hazelnut spread.

Nurse: Does he eat high-energy snacks like chips?

Mrs Baruni: No, I don't think so.

Nurse: What about fried foods, such as deep-fried breads or meats, or French fries?

Mrs Baruni: I don't usually fry foods. I may add some oil when I cook, but not much.

Nurse: Does he eat fatty meat?

Mrs Baruni: He likes meat, but I don't know whether the meat is fatty.

Nurse: You said that Toman eats 3 meals each day. Does he also have snacks?

Mrs Baruni: Well, he eats breakfast, a snack around 10:00, lunch, a snack after his nap, then dinner, and finally his bottle of milk before bed. So I guess he eats about 6 times each day.

Nurse: Do you think that Toman eats too much at meals?

Mrs Baruni: No, not really.

Nurse: Besides the planned snacks, does Toman eat between meals?

Mrs Baruni: I don't think so, but I don't really know what happens at his grandmother's house.

Nurse: Do you and Toman sit down at a table to eat?

Mrs Baruni: We try, but sometimes we may sit in front of the television to eat.

Step 3

Nurse: How many physically inactive hours does Toman spend each day, for example, watching the television?

Mrs Baruni: When he's at home with the babysitter while I am at work, he watches a lot of television.

Nurse: How often is that?

Mrs Baruni: Five days each week while I am working.

Nurse: When he is at his father's, what kind of meals does he have?

Mrs Baruni: Oh, at his father's he is sure to have fast foods. That's why they usually eat at his grandmother's.

Nurse: Does Toman have many opportunities for active physical play?

Mrs Baruni: He really doesn't. The babysitter stays indoors with him.

Step 4

Nurse: What do you think could be the main reasons that Toman is overweight?

Mrs Baruni: You know, I think he's just a big boy like his father. He seems healthy to me, but maybe he needs to play outside and run around more.

Nurse: I agree. From what you have told me, Toman's weight could be caused by a number of things, including lack of activity and food choices.

IV. Discussion: possible causes of Toman's overweight 15 minutes

- Lead the discussion on possible causes of Toman's overweight
- After the interview lead a discussion of the probable causes of Toman's overweight. Prepare the flipchart or blackboard with the following main headings: FOOD, CARE, and ENVIRONMENT. As each participant gives a probable cause of Toman's overweight, ask him/her which main heading the cause will fall under. List the cause under the appropriate heading. Focus on causes rather than possible solutions or advice to give the mother. Solutions and advice will be the focus of the next exercise.
- Recall the Listening and Learning Skills and ask participants to mention which ones the nurse used in her dialogue with Mrs Baruni (helpful non-verbal communication, open questions, responses and gestures that show interest, reflecting back what the mother says, empathizing, and avoiding judging words).

V. Present Slides 30/5 - 30/6

15 minutes

- Show **Slide 30/5 - Counselling related to the causes of overweight** and make the following points

30/5

Counselling related to causes of overweight

- What does the mother think she can do to help her child?
- Discuss what is feasible, encourage mother to take action, praise her efforts,
- Find feeding advice appropriate for the child's age in the right column of the job aid
- If a feeding practice differs from what is recommended, explain what is recommended
- Mention local examples of high-energy snacks/foods to be avoided and nutritious foods to offer
- Describe how to reduce energy density of food (less fat and added sugar)

- During the first part of the interview with the mother or other caregiver, you found out about the possible causes of the child's overweight and asked which causes seemed most important. Next, focusing on the main causes that the mother or caregiver recognizes as important, ask:
 - "What do you think that you can do to help the child, given these causes?"
 - Then discuss with her what is feasible to do and who can provide help and support. Acknowledge her situation and encourage her to take action.
 - Specific advice related to feeding and physical activity is given on the right-hand side of the job-aid, next to the related questions. If you noted that a feeding practice differs from what is recommended, explain the recommended practice. Also commend the mother if she is following some of the recommendations.
 - In your recommendations, include local examples of high-energy snacks to avoid and nutritious foods to provide. Describe specifically how to prepare foods using less fat and sugar. Also discuss feasible ways for the child to participate in active physical play. Encourage parents to find ways to increase the child's activity and reduce anxiety,

insecurity, or boredom, which are feelings that may lead to overeating.

- Also encourage parents to adopt a healthy lifestyle including healthy eating habits, physical activity, and positive interaction at family meals. The best way to influence children to have healthy lifestyles is for the parents to model the desired behaviours.

Show **Slide 30/6 - Set a goal for improving growth of an overweight child** and make the following points

Set a goal for improving growth of an overweight child

30/6

- Propose doable actions (2 or 3 , no more) for mother to try, write them down in Growth Record
- Do not recommend weight loss
- Goal is to slow down weight gain with continued growth in height to normalize weight-for-height
- Express goals in terms of improving growth so that length and weight increase proportionally
- Set appointment for follow-up visit
- Example: Counselling Toman's mother

- Set goals for a few (2–3) actions that the caregiver can take towards improving the child's growth. These actions can be reviewed at the next visit. Encourage and praise the caregiver when the actions are accomplished. Make notes (e.g. in the Growth Record) of the underlying causes of overweight for discussion at follow-up visits, when goals may be set for additional actions to take.
- It is not recommended for an overweight child to try to lose weight, but instead to decrease the rate of weight gain while growing in height.
- Because one cannot predict the child's rate of growth, it is not possible to set a specific weight target for a certain time. Instead, discuss the importance of slowing the child's weight gain so that he or she eventually reaches a more normal weight-for-height.
- At the end of the discussion with the mother or other caregiver, it is important to set a reasonable time for the child's next visit and to set a general goal for improved growth. The next visit may be at the time that an immunization is required or at another convenient time.
- The script we are going to read covers Step 5 of the job-aid titled Investigating Causes of Overweight. The "nurse" will counsel Mrs Baruni using relevant advice from the right-hand side of the job-aid. The three main actions suggested are indicated by numbers to the left of the script
- Follow the script on pages 196 to 197 of your manuals.

VI. Script 4: Investigating causes of Toman's overweight 6 minutes

Script 4 – Conclusion of counselling session with Toman's mother

Nurse: ① Your idea of taking Toman outside to play more is a good one. It will help him to have more physical activity. Can you ask the baby sitter to take him outside to play?

Mrs Baruni: Yes, I will ask her to do that.

Nurse: On the weekends, is it possible that Toman's father would take him outside to a playground or to play ball?

Mrs Baruni: I can explain to him that Toman is getting fat and ask him to do that. But I really do not have much control over what he does or eats with his father and grandmother. If I make a suggestion to her, she resents it.

Nurse: ② I understand. Then let's discuss first what you can do in your own home. I suggest that you stop adding sugar or sweetened chocolate to Toman's milk. If you sweeten it, it is more fattening. Also he is likely to drink more than he needs because it tastes so good.

Mrs Baruni: He will not like the milk as much if I don't sweeten it.

Nurse: ③ That is alright. He doesn't need so much milk as you are giving him. Half a litre each day is plenty. And if he is thirsty before bed, give him milk or water in a cup, not a bottle. He will drink more than he needs from a bottle, and it is bad for his teeth to fall asleep with a bottle.

Mrs Baruni: I will never get him to sleep then.

Nurse: It's alright to let him cry a bit as he falls asleep. He needs to be able to fall asleep without a bottle. It may help to rock him and sing to him. Besides, if he has been outside to play, he may be very tired and have no problem falling asleep.

Mrs Baruni: I had not thought of that.

Nurse: From what you have told me, there are more feeding changes that would be helpful, but for now let's focus on getting him out to play, reducing sugar in his diet, and decreasing the amount of milk given daily. How do you feel about trying these three things?

Mrs Baruni: I am willing to try, but his grandmother will give him all the sweet foods he wants!

Nurse: I understand the difficulty. Can you discuss the situation with your husband? Maybe he can help.

Mrs Baruni: Not easily, but I could write a letter, or perhaps you could write a note or call him?

Nurse: That is a good idea. I will call him. Please give me his phone number.

Mrs Baruni: Yes, he may listen to you more than me.

Nurse: I will call him. If you make the feeding changes that we have agreed on, and if your husband and mother-in-law make some changes as well, it will be very good for Toman, especially if he also gets more physical activity. Now, just to review, let me ask you how you will reduce the amount of sugar that Toman is taking.

Mrs Baruni: I will stop adding the sugar and chocolate to his milk.

Nurse: And how will you reduce the total amount of milk that Toman drinks each day to about half a litre?

**Checking
question**

Mrs Baruni: I will try to stop giving him the bottle at night.

Nurse: And how will you increase his activity?

Mrs Baruni: I will instruct the baby sitter to take him outside to play.

Nurse: That sounds great. We could weigh and measure Toman again in about 3 months to see his progress. Could you come back in 3 months?

Mrs Baruni: Yes, I will do that.

Nurse: Very well. At that time we will speak about more ways to improve Toman's health. Let me write the date for his next visit in his Growth Record.

Mrs Baruni: Could you tell me what Toman's father says after you speak with him?

Nurse: Of course! I will give you a call.

Mrs Baruni: Thank you.

VII. Discussion and conclusion

- Ask participants if they have any questions, and try to answer them.
- Recall the Building Confidence and Giving Support Skills and ask participants to mention which ones the nurse used in her dialogue with Mrs Baruni (accept what a mother thinks and feels; praise what they are doing right; give practical help; give a little, relevant information; use simple language; make one or two suggestions, not commands).
- Then go directly to Session 31 and discuss how to check understanding and arrange follow-up based on the dialogues with Mrs Parab (Session 29) and Mrs Baruni.

Session 31

Checking Understanding and Arranging Follow-up

Objectives

After completing this session participants will be able to:

- demonstrate how to ensure that a mother understands information provided by using checking questions
- arrange referral or follow-up of a child

Session outline

30 minutes

Participants are all together for a demonstration led by one trainer.

- | | | |
|------|---|------------|
| I. | Introduce the session | 5 minutes |
| II. | Review dialogues with Mrs Parab and Mrs Baruni | 10 minutes |
| III. | Demonstrate how to check understanding - Oral drill | 13 minutes |
| IV. | Summarize the session | 2 minutes |

Preparation

- Refer to the Introduction for guidance on how to give a demonstration.
- Make sure Slides 31/1-31/17 is ready.
- Prepare to conduct the ORAL DRILL. You may ask some participants to conduct parts of the drill after your demonstration of how it is done. In a drill, participants answer questions spontaneously, without preparation. A drill is intended to be a lively exercise that involves everyone in the group. It is a way to practise a skill quickly and repeatedly so that it becomes easier, almost automatic. Participants take turns responding, in order around the table. If one participant hesitates, simply move on to the next participant.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

I. Introduce the session**5 minutes**

- Show **Slide 31/1 - Session 31 Objectives** and read out the objectives:

31/1

Checking understanding and arranging follow-up

After completing this session participants will be able to:

- demonstrate how to ensure that a mother understands information provided by using checking questions
- arrange referral or follow-up of a child

- Make these introductory points:

- In this session we will review two further skills to help support mothers: Checking understanding and arranging follow-up.
- We have already practised the counselling skills of 'Listening and Learning' and 'Building Confidence and Giving Support'. The dialogue with the mother includes suggestions to help her decide on a course of action. Your suggestion does not automatically become what a mother will do.
- In addition, you need to check that a mother understands a practice or action she plans to carry out. For example, if you have talked about 'feeding frequently', you may need to check her understanding of the term 'frequently'.
- It is not enough to ask a mother if she understands, and what she understands because she may not realize that she understood incorrectly.
- Ask open questions to find out if further explanation is needed. Avoid asking closed questions, because they suggest the answer and can be answered with a simple 'yes' or 'no' that does not tell you if a mother really understands.
- 'Checking understanding' also helps to summarize what you have talked about.

II. Review dialogues with Mrs Parab and Mrs Baruni**10 minutes**

- Review the counselling session with Nalah's mother (see Session 29 Script 2):
- Let's review the dialogue between the Nurse and Nalah's mother (Script 2) on pages 188-190 of your manual. Did the nurse ask Mrs Parab any checking questions?
 - One checking question is identified in the script. Please identify other checking questions that the nurse asked. (There are 5 more:

- . Now, to review, please tell me how you will feed Nalah for the next month.
 - . What else?
 - . How much porridge and how often?
 - . And what other foods will you start giving, one at a time?
 - . What food will you give that comes from an animal?)
 - Did the nurse adequately tailor the advice to Mrs Parab's situation?
 - Please note that the last step in the counselling session was to thank the mother and agree on when to bring the child back to see her progress.
- ☐ Review the counselling session with Toman's mother (Session 30 Script 4):
- Let's review the dialogue between the Nurse and Toman's mother (Script 4) on pages 196-197 of your manual.
 - One checking question is identified in the script. Please identify two more checking questions that the nurse asked.
 - . Now just to review, let me ask, how will you reduce the amount of sugar that Toman is taking?
 - . And how will you increase his activity?
 - Did the nurse adequately tailor the advice to Mrs Baruni's situation?
 - The last step in the counselling session was to agree on when to bring the child back to see his progress.

III. Demonstrate how to check understanding - Oral drill 13 minutes

- ☐ Make these points:
- We will now run a drill to practice formulating checking questions. These are open-ended rather than "yes" or "no" questions. The subject matter in this drill is child feeding recommendations, but checking questions may be used in any type of counselling.
 - Slides with recommendations are going to be projected and you will each be called upon to formulate a checking question to see if the mother has understood that recommendation. If your question is closed, the person conducting the drill will respond with a "yes" or a "no", and then the next person in line will be called to formulate a proper checking question.
 - We will move through the drill rapidly - the idea is to form a habit of spontaneously asking open-ended questions as part of your counselling skills.
 - Several checking questions may apply to the recommendations that will be presented.

ORAL DRILL - CHECKING UNDERSTANDING

31/2

Give your child only breast milk from birth to 6 months of age

How old should your child be before you start giving any other food or fluids besides breast milk?

31/3

Breastfeed as often as your child wants, at least 8 times in 24 hours

How often should you breastfeed?

31/4

Breastfeed whenever your child shows signs of hunger, such as fussing, sucking fingers, or moving his lips

How will you know when your child is hungry?

31/5

Now that your baby is 6 months old, start giving 2–3 tablespoons of thick porridge or well-mashed foods 2–3 times a day.

What food will you start giving your baby now?

How often will you give it?

How much will you give?

31/6

Feed your child a staple food such as rice or wheat cereal

What staple foods will you give your child?

31/7

You need to give your child some animal-source foods such as meat, chicken, fish, eggs, milk, cheese, yogurt, and curds

What foods will you give that come from animal sources?

31/8

Peas and beans are another good source of protein

Besides animal and milk foods, what is another good source of protein for your child?

31/9

Also give a variety of other foods such as leafy green and yellow-coloured vegetables and fruits

What leafy green vegetables will you give?

What yellow vegetables will you give?

What fruits will you give?

31/10

At 9-11 months of age, give your baby 3-4 meals per day plus 1-2 snacks

How many meals and snacks does your baby need at age 9 months?

31/11

At each meal your baby (age 9 months) needs about $\frac{1}{2}$ cup of finely chopped or mashed foods

How much food should you give at each meal?

31/12

Feed your child from her own plate or bowl so you will know when she has eaten her entire serving

Why is it important to feed your child from her own plate or bowl?

31/13

Patently help your baby eat. Talk to her, look into her eyes, and encourage her

When you feed your child, how will you keep her interested?

31/14

Now that your child is 2 years old, he should eat family foods at 3 meals each day

How many family meals should your child have each day?

31/15

Twice daily between meals, give nutritious snacks such as yogurt or fruit

How many snacks will you give?

What are some nutritious snacks that you can give?

31/16

Constructing Checking Questions

- Identify the key words or phrases in the recommendation that the mother should know
- Construct the checking question using some key words/phrases; start the question with the words:
 - How
 - Why
 - When
 - What
 - Please show me . . . ?

31/17

Checking questions . . .

- Avoid questions that can be answered by Yes/No such as those starting with:
 - Do you?
 - Will you? (e.g., Will you breastfeed you child until 6 months?)
 - Are you?

ARRANGE FOLLOW-UP OR REFERRAL

- Make these points:
 - All children should receive visits to check that their general health and feeding. If a child has a difficulty that you are unable to help with, you may need to refer him for more specialized care.
 - Follow-up is especially important if there has been any difficulty with feeding. Ask the mother to visit the health facility in five days for follow-up.
 - This follow-up includes checking what foods are used and how they are given, checking how breastfeeding is going, checking the child’s weight, health, general development and care.
 - The follow-up visits also give an opportunity to praise and reinforce practices thus building the mother’s confidence, to offer relevant information and to discuss suggestions as needed.
 - It is especially important for children with special difficulties, for example children whose mothers are living with HIV to receive regular follow-up from health workers. The follow-up is important also to help the mother cope with her own health and difficulties.
 - Mrs Parab was asked to return in a month while Mrs Baruni was asked to return in 3 months. What explains the difference in the follow-up dates of those two children?
- Give the participants time to consider and discuss

The difference is determined by how soon it is possible to detect a difference in growth. Nalah at age 6 months should be growing rapidly so it is possible to see an improvement in her growth status and activeness within as little as a month if she receives appropriate feeding and care. Toman who is overweight needs to "decrease the rate of weight gain while growing in height" and this requires a longer time (at least 3 months) before a change in weight relative to height becomes measurable. ... Other points include the different family circumstances and how many people need to change care and feeding practices that affect the children's growth.

IV. Summarize the session	2 minutes
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- Ask participants if they have any questions, and try to answer them.
- Explain that a summary of this session can be found on page 199 of the Participant’s Manual.

Notes

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Session 32

Gathering Information and counselling on feeding and growth - *Role plays*

Objectives

After completing this session participants will be able to gather information on feeding practices by:

- demonstrating appropriate use of counselling skills
- investigating causes of growth problems
- providing appropriate counselling on the identified problem
- setting a target for growth to be reviewed at a follow-up visit
- using the job aid for investigating causes of undernutrition and overweight
- using the Food Intake Job Aid, 6-23 Months

Session outline

60 minutes

Participants are all together for the introduction by one trainer, followed by small group work with all trainers.

- | | |
|--|------------|
| I. Introduce the session | 2 minutes |
| II. Practise gathering information using the FOOD INTAKE JOB AID, 6-23 MONTHS, the job aid INVESTIGATING THE CAUSES OF UNDERNUTRITION and INVESTIGATING THE CAUSES OF OVERWEIGHT | 55 minutes |
| III. Summarize the session | 3 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Prepare the room so that the participants can break out into groups of three
- Ask each to have their Growth Record (boy and girl), the job aid on investigating causes of undernutrition and overweight, the FOOD INTAKE JOB AID, 6-23 MONTHS, a pen/pencil and notebook
- Before they break out into groups inform the participants that this is a preparation for the next day's practical session when they will meet real-life situations that they have to understand quickly and counsel appropriately

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

2 minutes

Show **Slide 32/1 - Session Objectives** and read out the objectives:

32/1

Gathering information on feeding practices

After completing this session participants will be able to gather information on feeding practices by:

- demonstrating appropriate use of counselling skills
- investigating causes of growth problems
- providing appropriate counselling on the identified problem
- setting a target for growth to be reviewed at a follow-up visit
- using the job aid for investigating causes of undernutrition and overweight
- using the Food Intake Job Aid, 6-23 Months

II. Role plays on interviewing and counselling 55 minutes

- Divide participants into groups of three for role plays. Three role play situations are provided in the module, each of which presents a different scenario. Each small group will do all of the role plays, with participants taking turns in the roles of health care provider, mother, and observer. The small groups will do their role plays simultaneously, in separate parts of the room.
- When the small groups go to their separate areas, each person will need to take their job-aid on investigating causes, their Boy's Growth Record and Girl's Growth Record, the FOOD INTAKE JOB AID, 6-23 MONTHS, a note pad, and a pen or pencil.
- Each participant plays a different role in each of the three role play scenarios. It is important that they take time to study each scenario before acting their role as health care provider, mother or observer. Detailed instructions for each of these roles are printed in the Participant's Manual, pages 201-208.
- Ask the participants to read these instructions now, and in each group to divide up their roles.
- Ask the groups if they have any questions about what to do, and clarify the instructions as needed. Then send each small group of three to a separate area, or perhaps out in a corridor. They should not go far away, however, as the facilitators need to observe them.
- Observe as the groups get started and help them as necessary. Move around to be sure that each group is staying on track. Give instruction and feedback as necessary. Watch and listen for the following during each role play (refer to the trainer's background information on the role plays):
 - The correct growth problem is identified when the health worker interprets the graphs (e.g. trend towards overweight).
 - Health worker uses the correct job aid to investigate causes (e.g. too much food, lack of physical activity); health worker remembers to turn to the page to ask about physical activity.

- Actions are suggested to address causes found.
- After each role play, the observer in the group should make brief comments, followed by the mother and health worker.
- Then encourage the group to quickly switch roles and move on to the next role play. It is important to keep the role plays moving along so that participants do not become bored or frustrated.

Role plays – Interviewing and counselling mothers

In this exercise participants will practise interviewing and counselling mothers in role plays. They will work in groups of three. Three role play situations are described on the following pages. Each small group will do all three role plays, with participants taking turns in the roles of health care provider, mother, and observer.

Participants will need the following materials when they go to the small groups:

- JOB-AID ON INVESTIGATING CAUSES OF UNDERNUTRITION and INVESTIGATING CAUSES OF OVERWEIGHT
- The FOOD INTAKE JOB AID, 6-23 MONTHS
- Boy's Growth Record and Girl's Growth Record
- Note pad and pen or pencil for taking notes during the interview

When you are the 'health care provider':

1. Study your 'patient's' growth charts thoroughly and determine:
 - a. Whether the child is growing well or has a growth problem
 - b. If they have a growth problem whether it is undernutrition or overweight
 - c. Which of the three counselling job aids you will use
2. Greet the "mother" and introduce yourself. Ask for her name and her child's name, and use them
3. Ask one or two open questions to start the conversation and to find out in general how the child is
4. Explain to the "mother" the growth status of her child using the points plotted on the three growth charts
5. Refer to the relevant job-aid as a guide for conducting the interview and counselling session with the mother.
6. If the child has no growth problem:
 - a. explain that you would like to learn about how her child is eating. Ask the mother to tell you about the child's eating on the previous day. Prompt as needed. Fill out the FOOD INTAKE JOB AID, 6-23 MONTHS as you listen.
 - b. think of suggestions you would make and Key Messages to give to the mother.
7. If there is a growth problem,
 - a. explain the growth problem to the mother. Then use the job-aid to investigate causes. It is helpful to take notes on the causes.
 - b. after discussing causes, work out with the mother what actions (2–3) to take. Use the Growth Record as a reference for giving feeding advice. Ask checking questions as needed.
8. Try to praise the things the mother is doing right.

9. Agree on a time that the mother and child will return for follow-up.

When you are the 'mother':

1. Study the background information presented about you and your child in the role play situation in which you are the mother.
2. Respond to the health care provider's questions realistically, as if you were the mother described. If necessary, you may make up additional information that is realistic and fits in with the story.
3. Answer the questions, but do not volunteer information unless the health care provider asks for it. If your health care provider uses good listening and learning skills, and makes you feel that he/she is interested, you can tell more.

When you are observing:

1. Study the background information on the mother and child and the growth charts shown on the following pages for the role play situation that you will observe.
2. As the health care provider interviews the mother, follow the relevant job-aid.
3. Notice which counselling skills the health care provider uses and which he/she does not use
4. After the role play, be prepared to praise what the health care provider does right, and suggest what he/she could do better. Comment on whether:
 - a. all of the relevant questions were asked;
 - b. the most important, relevant advice was given in an appropriate manner;
 - c. checking questions were asked to ensure that the mother understood what to do.
5. Ask the mother and then the health care provider for their comments on the role play, for example, what was done well, what was omitted, or possible improvements.

When all the small groups have finished with the role plays, the facilitators will lead a brief discussion of lessons learned during the role plays.

Background information for role plays

Role play situation 1 – Mrs Khan and her son Veebol

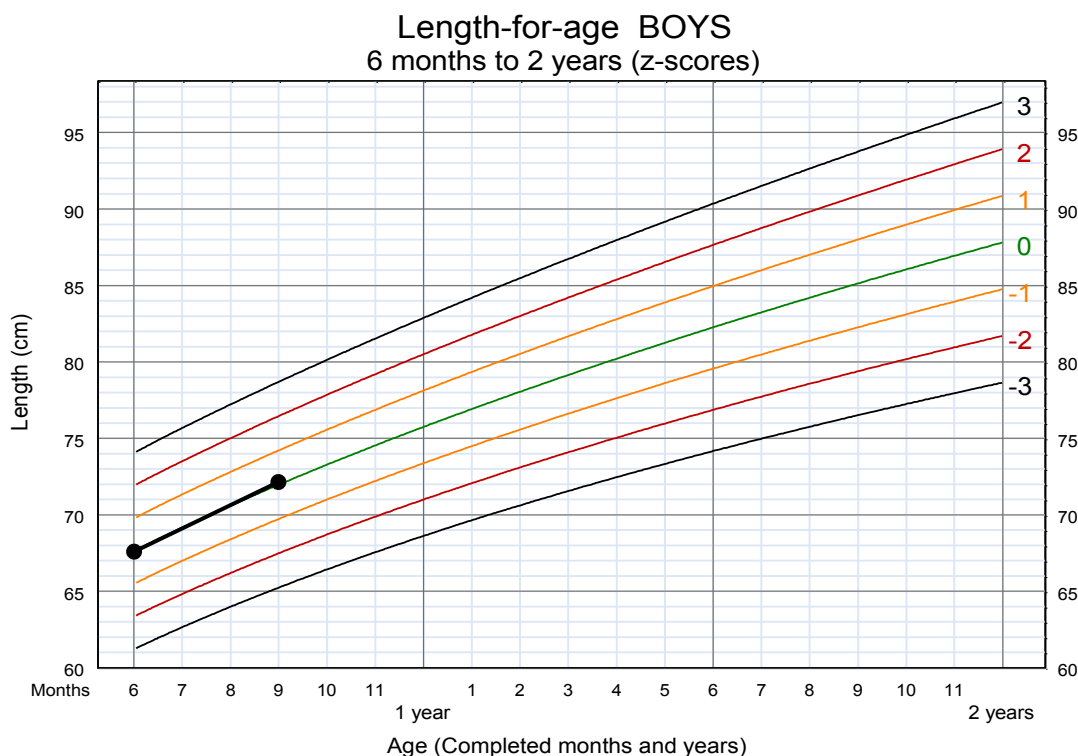
Mrs Khan has a son named Veebol, who is 9 months old. He is still breastfed, but he also takes formula in a bottle occasionally. Mrs Khan stays home to care for her son while her husband travels as a bicycle salesman. Their home is comfortable and has many conveniences, including a television. There is plenty of money for food. Veebol takes about a cup of mashed foods (such as porridge or sweet potatoes) 3 or 4 times each day. Mrs Khan appears to be overweight, and her son's growth lines show a trend towards overweight, but Mrs Khan does not think that there is any problem. He is beginning to crawl but is carried around much of the time because his mother does not want him to get his hands dirty and put them into his mouth.

Trainer's background information on Mrs Khan and her son Veebol

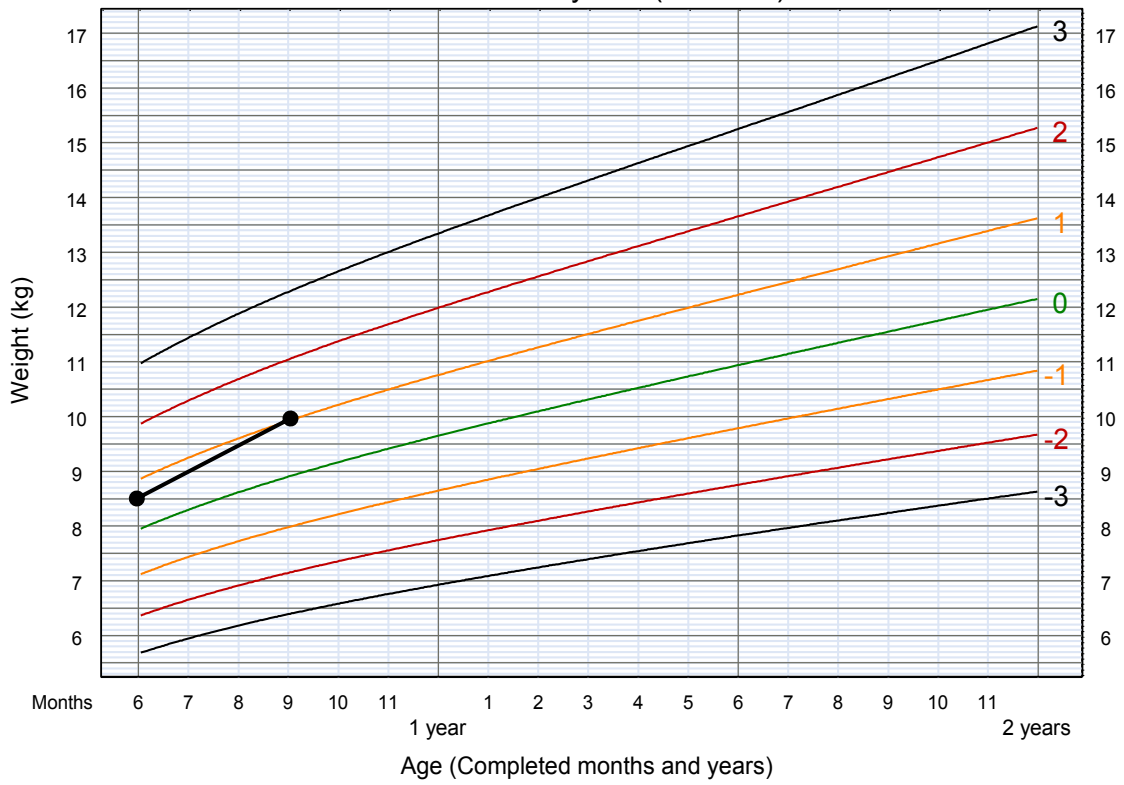
Veebol's growth lines (at age 9 months) show a trend toward overweight. His portions are too large (1 cup instead of the recommended $\frac{1}{2}$ cup per meal). He eats 3 to 4 meals, instead of the recommended 3 meals plus one snack. The health worker should explore whether he has sufficient physical activity.

Mrs Khan should be advised about portion size and frequency of meals, and also to provide opportunities for Veebol to move around freely and play in a safe environment.

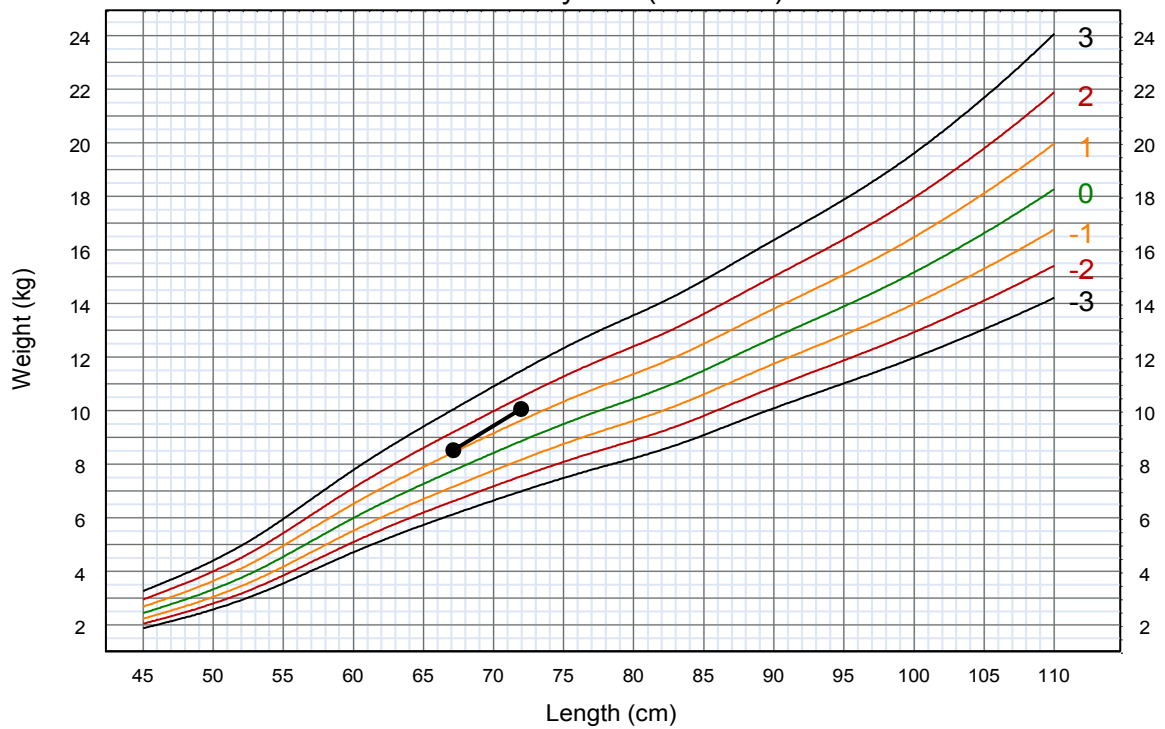
Growth Charts for Veebol



Weight-for-age BOYS 6 months to 2 years (z-scores)



Weight-for-length BOYS Birth to 2 years (z-scores)



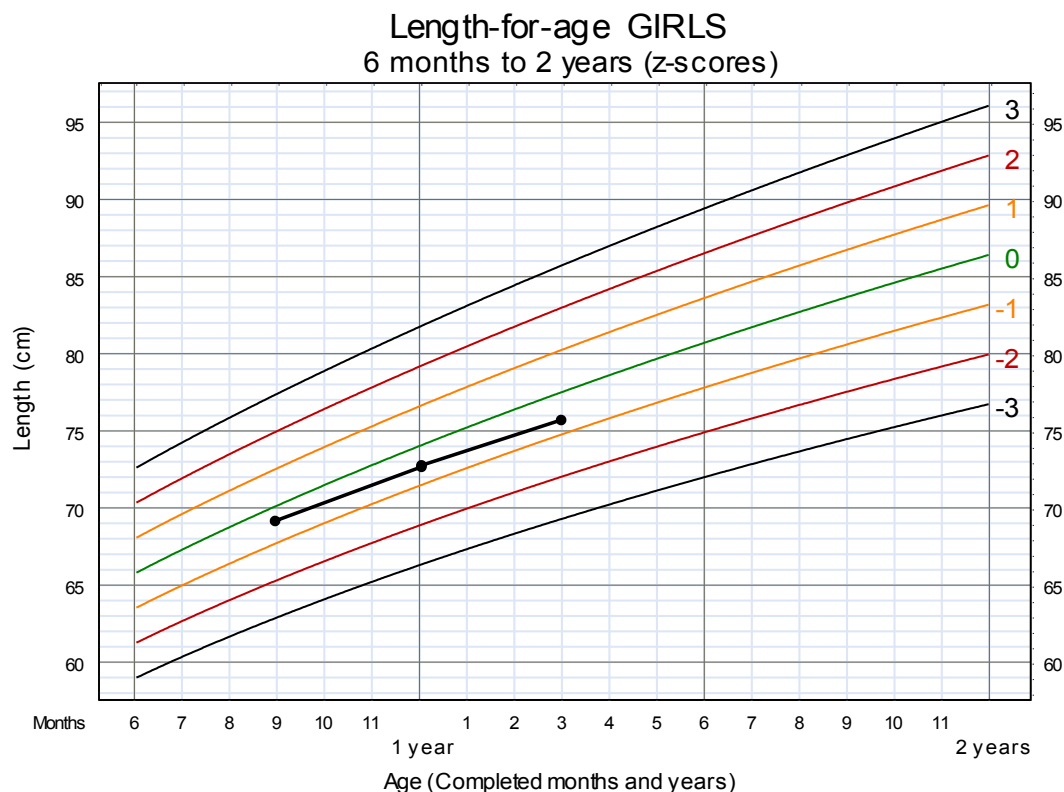
Role play situation 2 —Mrs Smith and her daughter Mary

Mrs Smith has a daughter Mary who is 15 months old. Her growth charts indicate that she is growing well. Her mother says that she breastfeeds frequently (she can't keep count of how many times in a day). The health care provider asks about Mary's complementary feeding (using the 24-hour recall method). Yesterday Mary had 3 meals and two snacks. She had $\frac{1}{2}$ cup of mixed-cereal porridge in the morning and some bread and peanut butter at mid-morning. She had bean stew and a little rice for lunch followed by a slice of mango. She did not have any snack in the afternoon but breastfed several times. For supper she ate steamed fish and greens. The health care provider has measured Mary and plotted all measurements in her growth charts.

Trainer's background information on Mrs Smith and her daughter Mary

Mary is growing very well in both length and weight. Her weight-for-length shows that she is growing proportionally. The health worker needs to compliment Mrs Smith on her child's growth. Then she/he should use the 24-hour recall method to ask about her complementary feeding, to encourage the mother to continue the good work.

Growth Charts for Mary





Role play situation 3 – Mrs Lima and her daughter Anete

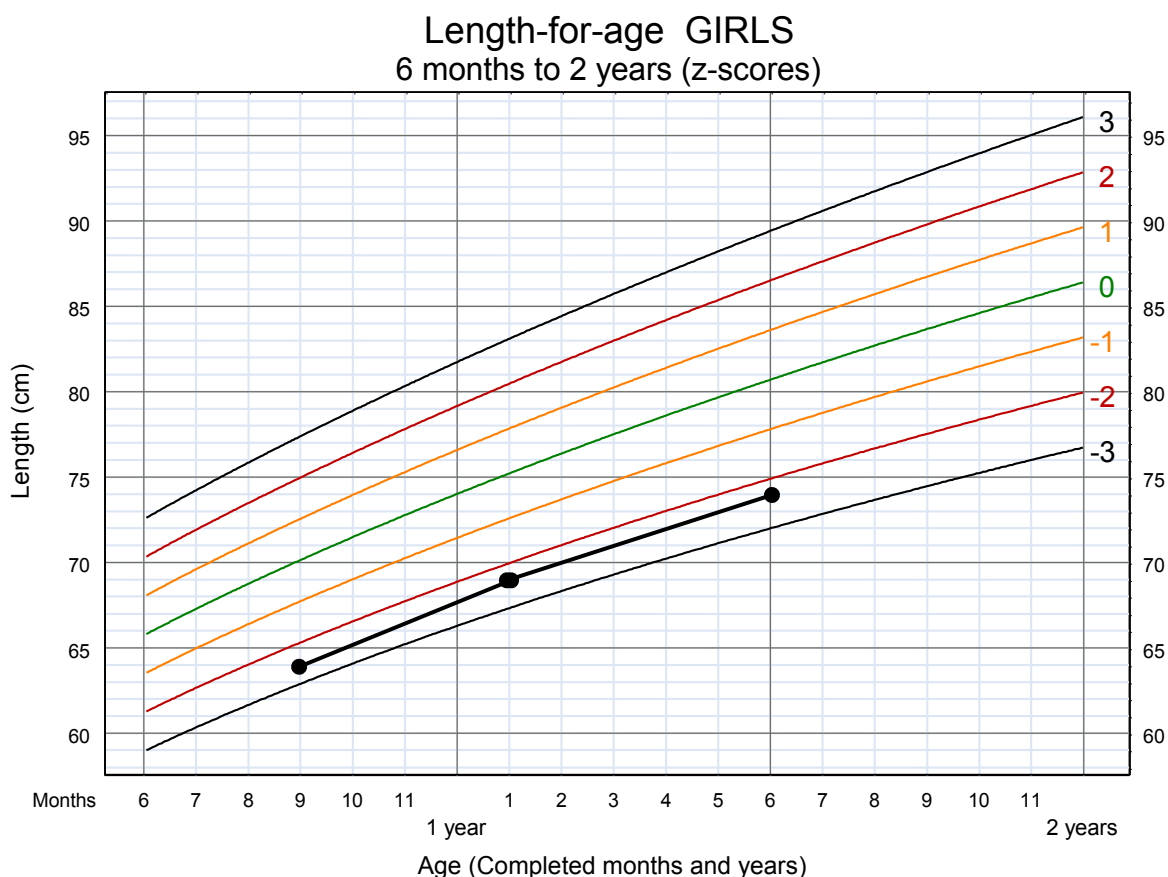
Mrs Lima is the mother of Anete, age 18 months, who seems happy and active. Anete is stunted but looks healthy. She is not breastfed. She does not like to eat and prefers to move around rather than sit still for meals. Although Mrs Lima tries to feed Anete 3 times each day, sometimes she will only take $\frac{1}{4}$ cup of food at a time. Anete's growth charts are shown on pages 207– 208. Mrs Lima appears to be normal height. She does not have HIV. Her home is simple, but there is enough money for food.

Trainer's background information on Mrs Lima and her daughter Anete

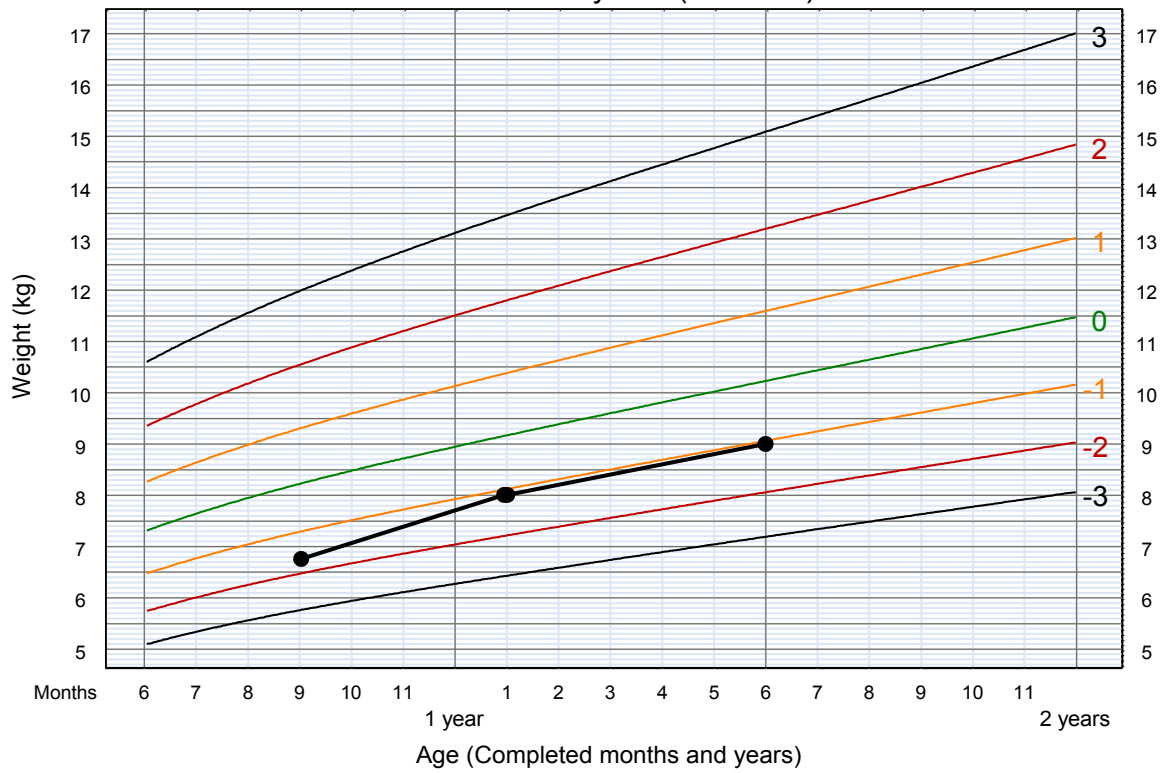
Anete (age 18 months) is stunted, though she seems healthy and active. Inadequate nutrition over a period of time seems to have caused her stunting.

Anete does not have much appetite or interest in eating. She eats only $\frac{1}{4}$ cup at 3 meals per day. Mrs Lima should be advised to try to increase her portion to $\frac{3}{4}$ –1 cup and to sit with her to encourage her to eat. Since Anete is stunted, her mother should be given the special advice for a stunted child, that is, to add legumes and animal-source foods to meals to improve the nutrient quality of the diet so that she grows in height while keeping a her normal weight-for-height. She could also try to offer Anete wider variety of good foods, to increase her interest, and offer her two healthy snacks each day in addition to her meals.

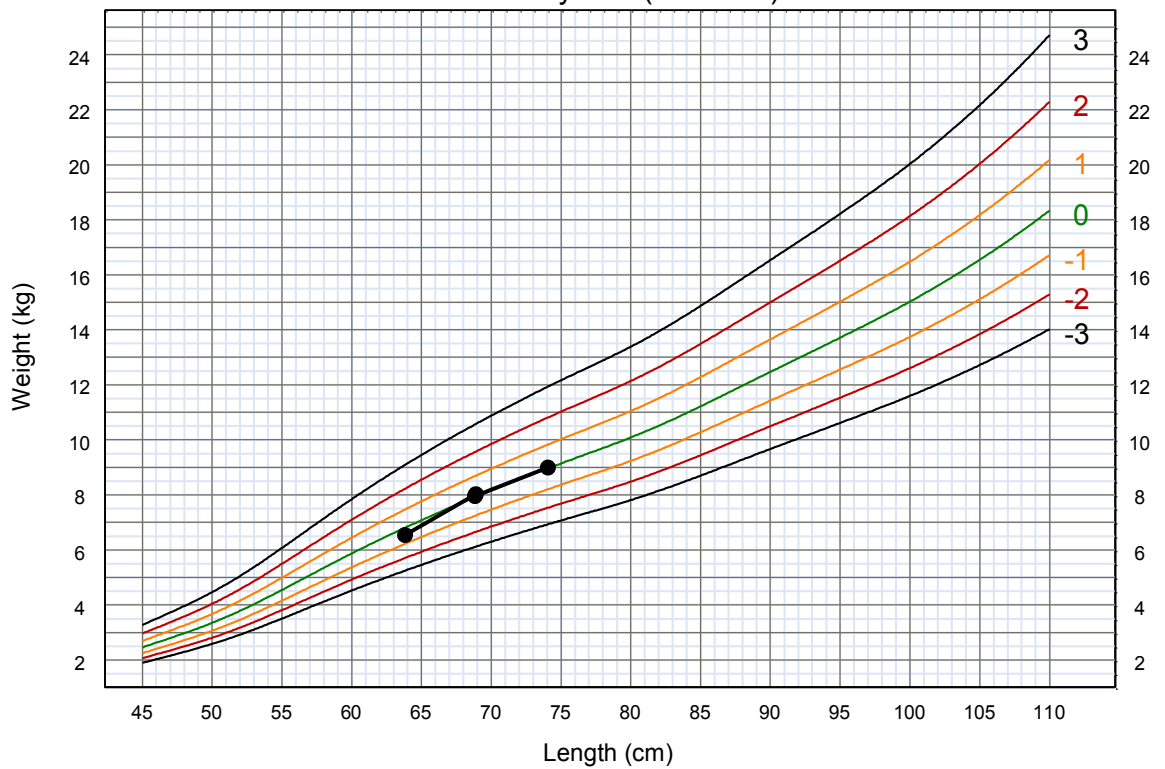
Growth Charts for Anete



Weight-for-age GIRLS 6 months to 2 years (z-scores)



Weight-for-length GIRLS Birth to 2 years (z-scores)



Group Discussion:

- When all of the small groups have finished with the role plays, gather the entire group for a brief discussion of lessons learned during the role plays.
- Summarize the steps that the health care provider should follow after weighing/measuring the child and plotting the indicators. Suggested steps are as follows:
 1. Show and explain the meaning of the charts to the mother.
 2. If there is no growth problem, use the Food Intake Job Aid, 6-23 Months to collect information on how the child was fed yesterday and use the occasion to compliment the mother and reinforce her good practices, and to counsel on how to feed the child in an approaching age group
 3. If there is a growth problem, determine if the mother recognizes it.
 4. Follow the steps in the relevant job-aid: Investigating causes of undernutrition or overweight.
 5. Ask the mother what she thinks are the most likely causes of her child's growth problem, if existing.
 6. Counsel: 2-3 actions (only) for her to take. (Do not forget to praise the mother for things she is doing correctly!)
 7. Ask checking questions.
 8. Set date of next clinic visit.
 9. Thank the mother.

III. Summarize the session**3 minutes**

- Ask participants if they have any questions or if there are points you can make clearer.
- Make these points:
 - The practice scenarios you have acted out gave you a chance to use various ways of gathering information on complementary feeding practices. This included observation, listening, using growth charts and asking questions.
 - In preparation for interacting with mothers in Practical Session 3, you have worked with the FOOD INTAKE JOB AID, 6-23 MONTHS and the job aid for investigating causes of malnutrition. You will use these when counselling mothers.
 - In Practice Session 3, tomorrow, you will meet mothers and children whose growth status may be normal or otherwise, so you will be expected to use the appropriate tools to gather information and the appropriate skills to counsel them.

Session 33

Hygienic preparation of feeds and food demonstration

Objectives

After completing this session participants will be able to:

- explain ways of assisting clean and safe feeding of young children
- demonstrate how to prepare a cup hygienically for feeding a baby
- prepare a plate of food suitable for an infant or young child
- explain why they have chosen these foods
- conduct a food demonstration with a caregiver

Session outline

60 minutes

Participants are all together for a lecture presentation by one trainer for the first part and work in groups of 8-10 with two trainers for the second.

- | | | |
|------|---|------------|
| I. | Introduce the session | 5 minutes |
| II. | Explain the requirements for clean and safe feeding | 10 minutes |
| III. | Role-play of a demonstration for mothers | 20 minutes |
| IV. | Prepare a plate of food | 10 minutes |
| V. | Discuss the meals prepared | 10 minutes |
| VI. | Summarize the session | 5 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides and on how to give a demonstration.
- Make sure that Slides 33/1 – 33/6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- EXERCISE 33.A PREPARE A YOUNG CHILD'S MEAL - one copy for each group.
- Display all the Counselling Skills and Key Messages from previous sessions.
 - To prepare the plate of food you need:
 - . A room in which you can bring food
 - . A table for each group to work at
 - . A variety of common foods (cooked if needed) that young children would eat, enough to make a child size bowlful for each group, from the kitchen at the course facilities or elsewhere. Include some inappropriate food, if possible. Do not divide the food for the groups. Cover the food until you are ready to use it.
 - . One plate, knife, fork and eating spoon for each group
 - . A local measure that holds 250 ml as used in Session 25, marked at $\frac{1}{2}$ and $\frac{3}{4}$ full. Do not distribute this until after the plate of food is prepared by the group
 - . Facilities for washing hands before and after preparing food
 - . Waste container and materials for cleaning up afterwards
- Ask one participant and one trainer to assist you in DEMONSTRATION 33.A. Choose names for the people in the story. Adapt foods in the story as needed.
- You will need a small amount of food and a set of equipment similar to the plate of food exercise above for DEMONSTRATION 33.A. Adapt the text to suit the food you have available.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session**5 minutes**

- Show **Slide 33/1 - Hygienic Preparation of Food** and read out the objectives:

33/1

Hygienic preparation of feeds

After completing this session participants will be able to:

- explain ways of assisting clean and safe feeding of young children
- demonstrate how to prepare a cup hygienically for feeding a baby
- prepare a plate of food suitable for an infant or young child
- explain why they have chosen these foods
- conduct a food demonstration with a caregiver

II. Explain ways of assisting clean and safe feeding of young children**10 minutes**

- Make these points:
- After six months of age all children require complementary feeds. Clean, safe preparation and feeding of complementary foods are essential to reduce the risk of contamination and the illnesses that it causes.
 - The main points to remember for clean and safe preparation of feeds are:
 - . Clean hands
 - . Clean utensils
 - . Safe water and food
 - . Safe storage

Ask: *When is it important to wash your hands?*

Wait for a few replies and then continue.

Show Slide 33/2 - Clean hands and make the points that follow:

33/2

Clean hands

- After using toilet
- After cleaning baby's bottom
- Before preparing or serving food
- Before feeding children or eating




- Always wash your hands:
 - after using the toilet, after cleaning the baby's bottom, after disposing of children's stools, and after washing nappies and soiled cloths
 - after handling foods which may be contaminated, for example, raw meat and poultry products
 - after touching animals
 - before preparing or serving food
 - before eating, and before feeding children.
- However it is not necessary to wash hands before every breastfeed if there is no other reason to wash them.
- It is important to wash your hands thoroughly
 - with soap or ash
 - with plenty of clean running or poured water
 - front, back, between the fingers and under the nails.
- Let your hands dry in the air or dry them with a clean cloth. It is best not to dry them on your clothing or a shared towel.

☐ Show **Slide 33/3 - Clean utensils** and make the points that follow:

33/3

Clean utensils

- Clean surface (table, mat or cloth)
- Wash utensils immediately after use
- Keep clean utensils covered
- Use clean utensils for baby

A black and white line drawing of a woman wearing a headscarf and a long-sleeved dress, standing at a sink. She is washing a bowl in the sink. On the counter next to the sink, there is a plate with a spoon and a cup. The sink has a faucet and a drain.


- You need to keep both the utensils that you use, and the surface on which you prepare feeds, as clean as possible.
- Use a clean table or mat, that you can clean each time you use it.
- Wash utensils with cold water immediately after use to remove milk before it dries on, and then wash with hot water and soap.
- If you can, use a soft brush to reach all the corners.
- Keep utensils covered to keep off insects and dust until you use them.
- Use a clean spoon to feed a baby complementary foods. Use a clean cup to give a baby milk or fluids.
- If a caregiver wants to put some of the baby's food into her mouth to check the taste or temperature, she should use a different spoon from the baby.

Show Slide 33/4 – Safe water and food and make the points that follow:

33/4

Safe water and food

- Treat water for drinking and baby's feeds
- Keep water in clean covered container
- Boil milk before use
- Give freshly prepared complementary foods



- Safe water and food are especially important for babies

Ask: *How can water be made safer for feeding babies?*

Wait for a few replies and then continue.

- Bring the water to a rolling boil before use. This will kill most harmful micro-organisms. A rolling boil is when the surface of the water is moving vigorously. It only has to 'roll' for a second or two.
- Put the boiled water in a clean, covered, container, and allow to cool.
- The best kind of container has a narrow top, and a tap through which the water comes out.
- This prevents people from dipping cups and hands into the water, which can make it not safe.
- If the water has been stored for more than 48 hours it is better to use it for something else, for example cooking or give to older children to drink.
- Now we will talk about safe food.

Ask: *How can food and milk be made safer for babies?*

Wait for a few replies and then continue.

- Fresh cow's milk or other animal's milk to be used for a baby also needs to be briefly boiled to kill harmful bacteria.
- Boiling also makes the milk more digestible. The milk and water can be boiled together.


- Milk sold in the shops may already have been heat-treated in various ways such as pasteurization, UHT (ultra-high temperature) or sterilization. These treatments kill the harmful micro-organisms, and they help the milk to keep longer if it is not opened.
- If a mother is giving complementary foods, she should prepare them freshly each time she feeds the baby, especially if they are semi-liquid.

Show **Slide 33/5 - Safe storage** and make the points that follow:

33/5

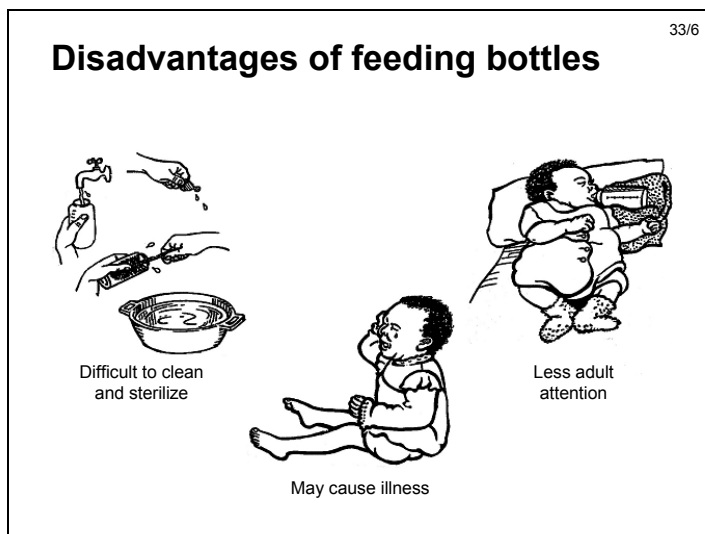
Safe storage

- Keep foods in tightly covered containers
- Store foods dry if possible (e.g. milk powder, sugar)
- Use milk within one day if refrigerated
- Use prepared feeds within one hour



- Food should be kept tightly covered to stop insects and dirt getting into it.
- Food can be kept longer when it is in a dry form, such as milk powder, sugar, bread and biscuits, than when it is in liquid or semi-liquid form.
- Fresh fruits and vegetables keep for several days if they are covered, especially if they have thick peel, like bananas.
- Fresh milk can keep in a clean, covered, container at room temperature for a few hours. Exactly how long depends on the condition of the milk when bought, and what the room temperature is.
- Discuss with the mother or other caregiver how the household routine works – whether the mother cooks once or twice a day, whether she can prepare feeds many times a day, how often she goes to the market and what facilities she has for storage. Help her to find ways of preparing the baby's food in a clean and safe way.

- Show Slide 33/6 - Disadvantages of feeding bottles and make the points that follow:



- You will remember in Session 20 that we talked about the advantages of cup feeding.
- Bottles are difficult to clean and easily contaminated with harmful bacteria, particularly if milk is left in a bottle for a long time. Bottles and contaminated milk can make babies ill with diarrhoea.
- A bottle may be propped for a baby to feed itself, or given to a young sibling to feed the baby, so the baby has less adult attention and social contact.
- Mothers need to know how to clean cups.

Cleaning a cup

- A cup does not need to be boiled, in the way that a bottle does.
- To clean a cup, wash it and scrub it in hot soapy water each time it is used.
- If possible, dip the cup into boiling water, or pour boiling water over it just before use, but this is not essential.
- An open, smooth surfaced cup is easiest to clean.
- Avoid tight spouts, lids or rough surfaces where milk could stick and allow bacteria to grow.

Keys to safer food

- Preparation and consumption of safer foods is important for the health of the child as well as the whole family. There are five sets of simple measures that help to ensure safety of foods, they are summarized on page 212 of your manuals.

FIVE KEYS TO SAFER FOOD

- **Keep clean**
 - Wash your hands before handling food and often during food preparation.
 - Wash your hands after going to the toilet, changing the baby or in contact with animals.
 - Wash very clean all surfaces and equipment used for food preparation or serving.
 - Protect kitchen areas and food from insects, pests and other animals.

- **Separate raw and cooked foods**
 - Separate raw meat, poultry and seafood from other foods.
 - Use separate equipment and utensils such as knives and cutting boards for handling raw foods.
 - Store foods in covered containers to avoid contact between raw and prepared foods.

- **Cook thoroughly**
 - Cook food thoroughly, especially meat, poultry, eggs and seafood.
 - Bring foods like soups and stews to boiling point. For meat and poultry, make sure juices are clear not pink.
 - Reheat cooked food thoroughly. Bring to the boil or heat until too hot to touch. Stir while re-heating.

- **Keep food at safe temperatures**
 - Do not leave cooked food at room temperature for more than 2 hours.
 - Do not store food too long, even in a refrigerator.
 - Do not thaw frozen food at room temperature.
 - Food for infants and young children should ideally be freshly prepared and not stored at all after cooking.

- **Use safe water and raw materials**
 - Use safe water or treat it to make it safe.
 - Choose fresh and wholesome foods.
 - Use pasteurized milk.
 - Wash fruits and vegetables in safe water, especially if eaten raw.
 - Do not use food beyond its expiry date.

Adapted from Food Safety Unit, WHO, Geneva, 2001. WHO/SDE/PHE/FOS/01.1

III. How to help a mother learn to prepare a suitable meal

20 minutes

- Make these points:
 - Ask: In your experience, what is the best way to teach a mother a new skill or behaviour? For example, teaching a mother to prepare a new food recipe?*

Wait for a few replies and then continue.
 - To teach a new skill or behaviour, you could:
 - Tell the mother how to do it – this is good, but the mother might not understand all you say or remember it.
 - Ask the mother to watch while you talk and prepare the food – this is better, because the mother is seeing and hearing together.
 - Help the mother to actually prepare the food herself – this is the BEST method, because the mother is doing the activity, so will understand more.
 - *How you assist the mother to learn is important. Your counselling can also be used when helping a mother to learn a new skill (Point to the list of Counselling Skills).*
 - You can use your skills to:
 - use open questions to find out if the mother understands
 - avoid words which sound judging or critical
 - praise the mother
 - explain things in a simple and suitable way to help her understand.
 - Now we will see a demonstration of helping a mother to learn in a supportive way. Listen for supportive ways of giving information.

- Ask the participant and the trainer whom you prepared to give Demonstration 33.A. They should both stand at the same side of the table facing the rest of the group. A small selection of food and the equipment listed is on the table or beside it. Have the food and equipment clean and covered with a clean cloth.

- Introduce the role-play by making the following points:
 - (Mother name) has talked to the health worker a few days ago about her 10-month-old baby. (Child's name) grew well for the first six months but his weight gain has slowed down since then. The health worker gathered information by observation, listening and learning.
 - The health worker discussed (child's name) feeding and praised good practices. The health worker gave some information on two Key Messages and offered some suggestions on putting two new practices into place – to offer food frequently and to offer a larger amount each time.
 - Today the health worker has called to the home of (mother's name) to help her learn more about foods and amounts to offer (child's name). The health worker asked (mother's name) to keep some of the food from the family meal.

DEMONSTRATION 33.A SUPPORTIVE TEACHING

Health Worker:	“Good morning (mother name). How are you and (child’s name) today?”
Mother:	“We are well, thank you.”
Health Worker:	“A few days ago, we talked about feeding (child’s name) and you decided you would try to offer (child’s name) some food more often. How is that going?”
Mother:	“It is good. One time he had about a half of a banana. Another time he had a piece of bread with some butter on it.”
Health Worker:	“Those sound good snacks. Now, we want to talk about how much food to give for his main meal.”
Mother:	“Yes, I’m not sure how much to give.”
Health Worker:	“It can be hard. What sort of bowl or cup do you feed him from?”
Mother:	“We usually use this bowl.” (Shows a bowl – about 250 ml size) ²⁶
Health Worker:	“How full do you fill the bowl for his meal?”
Mother:	“Oh, about a third.”
Health Worker:	“(Child’s name) is growing very fast at this age so he needs increasing amounts of food.”
Mother:	“What foods should I use?”
Health Worker:	“You have some of the food here from the family today. Let us see.” (Uncovers food) ”First we need to wash our hands.”
Mother:	“Yes, I have some water here.”(Washes hands with soap and dries them on clean cloth.)
Health Worker:	“Now, what could you start with for the meal?”
Mother:	“I guess we would start with some rice.” (Puts in 2 large spoonfuls)
Health Worker:	“Yes, the rice would almost fill half of the bowl.” “Animal-source foods are good for children – is there some you could add to the bowl?”
Mother:	“I kept a few pieces of fish from our meal.” (Puts in 1 large spoonful)
Health Worker:	“Fish is a good food for (child’s name). A little animal-source food each day helps him to grow well.”
Mother:	“Does he need some vegetables too?”
Health Worker:	“Yes, dark-green or yellow vegetables help (child’s name) to have healthy eyes and fewer infections. What vegetables could you add?”
Mother:	“Some spinach?” (Puts in some)
Health Worker:	“Spinach would be very nutritious. Some would fill half the bowl.”

²⁶ If a different size cup or bowl is used, adjust the text according. If a smaller cup is used, it will need to be a full cup. If a larger cup is used, it may only need to be less than half full.

Mother:	“Oh, that isn’t hard to do. I could do that each day. Two spoons of rice, a spoon of an animal-source food and some dark-green or yellow vegetable so the bowl is half full.”
Health Worker:	“Yes, you are able to do it. Now, what about his morning meal?”
Mother:	“I can give some porridge, with milk and a little sugar.”
Health Worker:	“That’s right. How much will you put in the bowl?”
Mother:	“Until it is at least ½ full.”
Health Worker:	“Yes. So, we’ve talked about his morning meal, and the main meal with the family. (Child’s name) needs three to four meals each day. So what else could you give?”
Mother:	“Well, he would have some banana or some bread like I said before.”
Health Worker:	“Those are healthy foods to give between meals. (Child’s name) needs at least ½ full bowl of food three to four times a day as well.”
Mother:	“Oh, I don’t know what else to give him.”
Health Worker:	“Your family has a meal in the middle of the day. What do you eat in the evening?”
Mother:	“Usually there is a pot of soup with some beans and vegetables in it. Could I give him that?”
Health Worker:	“Thick foods help him to grow better than thin foods like soup. Could you take out a few spoons of the beans and vegetables and mash them for (child’s name). And maybe soak some bread in the soup?”
Mother:	Yes, I could do that easily enough.
Health Worker:	“So, how much will you put in (child’s name) bowl for each meal?”
Mother:	“I will fill it ½ full.”
Health Worker:	“Very good. And how often each day will you give him some food?”
Mother:	“I will give ½ bowlful of food three to four times a day. If he is hungry I will give some extra food between meals.”
Health Worker:	“Exactly. You know how to feed (child’s name) well. Will you bring (child’s name) back to the health centre in two weeks so we can look at his weight?”
Mother:	“Yes, I will. With all this food, I know he will grow very well.”

Ask: What did you observe about how the health worker taught this mother?

Wait for a few replies, which should include the following points:

- The health worker let the mother prepare the food.
- The health worker explained points carefully.
- The health worker used the Key Messages so the information was familiar.
- The health worker used counselling skills:
 - ‘Listening and learning’ skills: open questions, empathy, and no judging words.
 - ‘Building confidence and giving support’ skills: praise, she did not criticize mistakes, and used simple language.
- The health worker offered information and suggestions rather than giving commands.
- The health worker checked the mother’s understanding and arranged follow-up.

- Explain any points that the participants did not mention.

Ask: *How will this mother manage with preparing food for her/his child?*

Wait for a few replies.

- This mother probably will be able to prepare foods well.

- Continue the discussion with the following points:

- Remember to use the counselling skills when you teach a mother. This supportive teaching can help to build her confidence as well as making it easier for her to learn.
- Whenever possible, let the mother prepares the food herself, with the support of the health worker, until she is confident and competent. Watching a health worker prepare foods is not enough, particularly if there is a problem with the child's weight gain or feeding.
- The health worker in our demonstration could also stay and observe *how* the mother feeds the child.

Ask: *What practices would the health worker look for when the child was being fed?*

Wait for a few replies and then continue.

- The health worker would be looking for techniques such as:
 - . Assist children to eat, being sensitive to their cues or signals
 - . Feed slowly and patiently, encourage but do not force
 - . Talk to children during feeding with eye-to-eye contact.
- We discussed these responsive feeding practices in Session 34.

IV. Prepare a plate of food

10 minutes

- Each group will now prepare a bowl or plate of food suitable for the age of child they are assigned: 6½ month old, 8 month old, 10 month old, 15 month old.
- Give your child a name and describe the family setting, for example that they live in the town, or have many children in the family.

- Assign an age to each group. Add other ages as needed for more groups.

- Give these directions:

- A selection of foods is provided. Each group will choose suitable foods, and decide on the amount and consistency to make up the meal. You are a mother with a large family to feed – do not take more food than you need for the one child. Also, keep in mind what foods local mothers give to young children.
- You are a busy mother. Do this task quickly.
- Be prepared afterwards to say why your group chose those particular foods and if there are any additional foods you would include that are not available here.
- Decide on one or two Key Messages you would give if you were preparing this food in a demonstration for mothers to explain the importance of adequate complementary feeding.

- Choose only one or two Key Messages that are relevant to the child for whom you are preparing the meal.
- Trainers observe their group and assist as needed.
 - First, the group should discuss the foods and agree on choices rather than taking spoonfuls of all of the different foods and then deciding what they will use.
 - Allow 10 minutes to choose and prepare the meal.
 - Keep to the time, a mother would do this very quickly.

V. Discuss the meals prepared

10 minutes

- Gather all the groups together with their finished plates of food. Distribute EXERCISE 33.A PREPARING A YOUNG CHILD'S MEAL to each group.
 - Ask each group to score their own meal using the worksheet.**
 - Allow 2 minutes for the group to fill in the worksheet.**
- Ask each group in turn to explain their meal:
 - . why they chose those foods
 - . why they prepared it in the way they did (mashed finely, chopped, etc.)
 - . how thick is the consistency (for a young child) - test with a spoon
 - . any additional foods they would include that are not available
 - . the one or two Key Messages they would use in a demonstration for mothers
 - . why they gave that amount.
- Except for the group with the baby of 6½ months²⁷, give the group the 250 ml container to measure the amount of food they prepared for their child.
 - . They are not allowed to 'test' the size of the meal during preparation.
 - . They must wait until they have finished to see if they have judged correctly.
 - . See box AMOUNTS OF FOODS TO OFFER (page 445 of *Trainer's Guide*).
 - Is it the correct amount for a child of that age?
 - How many meals of this size does a child of this age need each day?

Ask the whole group: Were all the recommendations contained in the meal? Any suggestions you could give this group?
- Repeat so each group has the opportunity to explain and discuss their meal.

²⁷ The baby of 6½ months would have 2-3 spoonfuls.

AMOUNTS OF FOODS TO OFFER			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal²⁸
6-8 months	Start with thick porridge, well mashed foods Continue with mashed family foods	2-3 meals per day plus frequent breastfeeds Depending on the child's appetite 1-2 snacks may be offered	Start with 2-3 tablespoonfuls per feed increasing gradually to ½ of a 250 ml cup
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	½ of a 250 ml cup/bowl
12-23 months	Family foods, chopped or mashed if necessary	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	¾ to one 250 ml cup/bowl
If baby is not breastfed, give in addition: 1-2 cups of milk per day, and 1-2 extra meals per day.			

- Turn to page 216 in your Manuals. There is a guide for planning and conducting a group demonstration in your health facility and examples of a clear recipe format. You can refer to this guide when planning a demonstration in your health facility (This is on page 448 of the *Trainer's Guide*).

²⁸ Adapt the chart to use a suitable local cup/bowl to show the amount. The amounts assume an energy density of 0.8 to 1 Kcal/g.

EXERCISE 33.A PREPARING A YOUNG CHILD'S MEAL		
Group:		
Task	Achieved	Comments
Mixture of foods:		
Staple		
Animal-source food		
Bean / pulse plus Vitamin C fruit or vegetable		
Dark-green vegetable or yellow-coloured fruit or vegetable		
Consistency		
Amount		
Prepared in a clean and safe manner		

Key Messages:

1.

2.

VI. Summarize the session**5 minutes**

- Ask participants if they have any questions or if there are points that you can make clearer.

- Make these points:
 - In this session we discussed safe and clean preparation of complementary feeds and helping a mother to learn feeding and care practices.
 - Health workers need to discuss safe and clean preparation of foods with mothers.
 - In your Manual on page 212 there are the FIVE KEYS TO SAFER FOOD. You can read these at another time.
 - To be effective, teaching should be supportive, using counselling skills.
 - In addition to watching a demonstration, mothers may need to practise new skills under the gentle supervision of the counsellor, until they are competent and confident.
 - Food demonstrations can be carried out individually or in groups in the community. A group demonstration reaches more families and can help to reinforce Key Messages on feeding.

- Explain that a summary of this session can be found on pages 209-218 of the *Participant's Manual*.

Planning guide for a group demonstration of the preparation of young children's food

Gather the Equipment and Materials

- Cooked food for the preparation
- Plates and utensils for the preparation
- Utensils for mothers and infants to taste the preparation
- Table on which to prepare the food
- Facilities for washing hands

Review Objectives of the Demonstration:

1. Teach mothers how to prepare a simple and nutritious food for young children using local ingredients (to learn through doing).
2. Demonstrate to mothers the appropriate consistency (thick) for these foods.
3. Demonstrate the taste and acceptability of the food preparations for mothers and young children.

Decide the Key Messages

Select 1-3 Key Messages to say to mothers (see Key Messages, inside back cover)
Follow each message with a checking question (a question that you cannot answer with a simple 'yes' or 'no')

For example:

1. Foods that are thick enough to stay in the spoon give more energy to the child.
Checking question: What should the consistency of foods be for a small child? (*Answer:* thick, so the food stays in the spoon).
2. Animal-source foods are especially good for children, to help them grow strong and lively.
Checking question: What animal-source food could you give your child in the next two days?
(*Answer:* meats, fish, egg, milk, cheese – these are special foods for the child).
3. A young child needs to learn to eat: encourage and give help...with lots of patience.
Checking question: How should you feed a child learning to eat?
(*Answer:* with patience and encouragement).

Give the Participatory Demonstration

- Thank the mothers for coming.
- Present the recipe that will be prepared.
- Hold up each of the ingredients. Mention any ingredients that can be easily substituted, for example oil for butter, powdered milk or tinned milk (unsweetened) for fresh milk, or cooking water or boiled water if no milk is available.
- Invite at least two mothers to prepare the food. If possible, have enough ingredients to have 2 or 3 pairs of mothers to participate in the preparation, each pair working with their own plate of ingredients and utensils.
- Talk the mothers through each step of the preparation, for example:
 - Wash hands
 - Mashing a potato or _____
 - Adding the correct quantity of fish or egg, etc.
 - Adding correct quantity of milk or water.
- Point out the consistency of the preparation as the mothers are making it, and demonstrate with a spoon when they are finished.
- Reinforce the use of local inexpensive and nutritious ingredients, especially using foods from the family pot.
- Ask the mothers if they would have difficulty in obtaining any of the ingredients (suggest alternatives). Ask the mothers if they could prepare the food in their household.

Offer Food Preparations to Taste

- Invite the mothers who prepared the food to taste it in front of the rest and give their opinion (use clean spoons).
- Invite all the mothers to taste the preparation and to give it to their small children (who are at least 6 months old). Use a clean spoon for each child.
- Use this time to stress the Key Messages you decided to use when planning the demonstration.

Ask Checking Questions

- What are the foods used in this recipe? Wait for responses.
- Then the health worker reads out the list of the foods again.
- Ask the mothers when they think they can prepare this food for their young child (e.g. tomorrow.)
- You may repeat the Key Messages and checking questions again.

Conclude Demonstration

- Thank the mothers for coming and participating.
- Ask the mothers to share their new knowledge of preparing this food with a neighbour who has small children.
- Invite mothers to visit the health facility for nutrition counselling and growth checks.

Recipes for Food Demonstration^{29,30} fill in the food and the amount needed

Recipe 1

Family food for a 10-month-old child's main course
(about 1/2 cupful – a cup/bowl that holds 250 ml)

Staple: _____

Meat or fish or beans: _____

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption:

Dark-green or yellow vegetable: _____

Milk or hot boiled water or soup water if milk is not available: 1 Tablespoon (large spoon)

Wash hands and use clean surface, utensils and plates.
Take the cooked foods and mash them together.
Add the oil or margarine and mix well.

Check the consistency of the mashed food with a spoon – it should stay easily on the spoon without dripping off.
Add the milk or water to the mashed foods and mix well. Only add a small amount of milk or water to make the right consistency.

Recipe 2

Family food for a 15-month-old child's main course (a full cup)

Staple: _____

Meat or fish or beans: _____

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption:

Dark-green or yellow vegetable: _____

Oil or margarine: 1 teaspoon (small spoon)

Wash hands and use clean surface, plates and utensils.
Take the cooked foods cut them into small pieces or slightly mash them together (depending on the child's age).
Add the oil or margarine and mix well.

²⁹ The amounts indicated are recommended if the energy content of the meals is 0.8-1.0 Kcal/g. These amounts should be adjusted if the foods are diluted

³⁰ If there is need to increase the amounts of food for each meal, instruct the participants to make the change in their recipes

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Session 34

Feeding Techniques

Objectives

After completing this session participants will be able to:

- describe feeding practices and their effect on the child's intake
- explain to families specific techniques to encourage young children to eat
- list the Key Message from this session

Session outline

30 minutes

Participants are all together for a lecture presentation by one trainer.

- | | | |
|------|--|------------|
| I. | Introduce the session | 7 minutes |
| II. | Describe feeding care practices and their effect on intake | 25 minutes |
| III. | Summarize the session | 3 minutes |

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Overheads 34/1-34/3 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Have ready the feeding recommendations which participants wrote down in Session 22.
- Ask two participants to assist with the Demonstrations 34.A, 34.B, 34.C.
- For demonstrations you need a spoon, a feeding bowl with some mashed food in it, a biscuit or piece of bread or other finger food, a cloth to use as a bib and a basin, water, soap and towel for hand washing. You also need a mat or chairs to sit on while feeding the child; whatever is common in your area.
- You need a flipchart and markers.
- Prepare a flipchart with the list of Responsive Feeding Practices. Keep it covered until needed.
 - Assist children to eat, being sensitive to their cues or signals
 - Feed slowly and patiently, encourage but do not force
 - Talk to children during feeding with eye-to-eye contact
- Write the Key Message from this session on a page of flip chart paper. Keep it covered until later in the session:

Key Message 9: A young child needs to learn to eat: encourage and give help...with lots of patience.

As you follow the text, remember:

Integrated course on IYCF counselling and child growth assessment. *Trainer's Guide*

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Introduce the session

7 minutes

- Make these points:
 - Health workers like you frequently give information to caregivers about feeding their young child. We will now look at the recommendations and suggestions that you give and that you wrote down in an earlier session.

- Make two columns on the flip chart. Write 'What to Feed' at the top of one column and 'How to Feed' at the top of the other. Read out the recommendations on complementary feeding which participants wrote on paper in Session 22, one by one. Remember these were the most frequent recommendations or information that participants give to caregivers about feeding young children. After you read out each recommendation put a tick mark ✓ in the column that relates to the recommendation. For example, the recommendation 'Give fruits' or 'Give animal-source foods' or 'Give more food' go in the What column; the recommendation 'Pay attention to the child while feeding' or 'Wash your hands before feeding the child' go in the How column.

Ask: What do you see? Which type of information do you give most often?

Wait for a few replies and then continue.

*Which column has the most tick marks ✓ in it?
It is probably the WHAT column.*

- Often health workers talk about what foods to give the child. Yet, when we listen to families, they say, 'my child does not eat enough' or 'my child is very difficult to feed'.
- Imagine a young child first eating. What comes to mind?
- When a child is learning to eat, he often eats slowly and is messy. He may be easily distracted.
- He may make a face, spit some food out, and play with the food. This is because the child is learning to eat.
- A child needs to learn how to eat, to try new food tastes and textures.
- A child needs to learn to chew, move food around the mouth and to swallow food.
- The child needs to learn how to get food effectively into the mouth, how to use a spoon and how to drink from a cup.
- Therefore, it is very important also to talk to caregivers and offer suggestions about how to encourage the child to learn to eat the foods offered. This can help families to have happier meal times.

- Show **Slide 34/1 – Session 34 Objectives** and read out the objectives:

34/1

Feeding techniques

After completing this session participants will be able to:

- describe feeding practices and their effect on the child's intake
- explain to families specific techniques to encourage young children to eat
- list the Key Message from this session

II. Describe feeding care practices and their effect on intake

25 minutes

- Make these points:
- A child needs food, health and care to grow and develop. Even when food and health care are limited, good care-giving can help make best use of these limited resources.
 - Care refers to the behaviours and practices of the caregivers and family that provide the food, health care, stimulation and emotional support necessary for the child's healthy growth and development.
 - An important time to use good care practices is at mealtimes – when helping young children to eat.
- Uncover the first **Responsive Feeding Practice** on the flip chart list, and make these points:
- The first Responsive Feeding Practice to look at is: Assist children to eat, being sensitive to their cues or signals.
 - Children need to learn to eat. Eating solid foods is a new skill and, at first, the child will eat slowly and may make a mess. It takes lots of patience to teach children to eat.
 - The child needs help and time to develop this new skill, to learn how to eat, to try new food tastes and textures.
 - At first, the young child may push food out of his mouth. This is because they do not have the skill of moving it to the back of their mouth to swallow it.

- Caregivers may think that this pushing out of food means the child does not want to eat. Talk with them about children needing time to learn to eat, just as they need time to learn to walk and to learn other skills.

Ask: *At what age do caregivers in your community expect young children to be able to eat by themselves?*

Wait for a few replies and then continue.

- A child's ability to pick up a piece of solid food, hold a spoon, or handle a cup increases with age and practice.
 - Children under two years of age need assistance with feeding.
 - However, this assistance needs to adapt so that the child has opportunities to feed himself, as he is able.
 - A child may eat more if he is allowed to pick up foods with his newly learned finger skills from about 9-10 months of age.
 - The child may be at least 15 months old before he can eat a sufficient amount of food by self-feeding. At this age, he is still learning to use utensils and will still need assistance.
 - Families tend to feed their young children in one of three different ways:
 - . One way is **high control** of the feeding by the caregiver who decides when and how much the child eats. This may include force-feeding.
 - . Another feeding style is that the **children are left to feed themselves**. The caregiver believes that the child will eat if hungry. The caregiver may also believe when the child stops eating that he has had enough to eat.
 - . The third style is feeding **in response to the child's cues** or signals using encouragement and praise.
 - The easiest way to see the difference in these three feeding styles is to demonstrate them.
- Introduce the three DEMONSTRATIONS 34.A, 34.B, 34.C.
- Now we see demonstrations of three ways to feed a young child. After each demonstration, we will discuss what it shows.
- Ask the two participants whom you prepared to give DEMONSTRATIONS 34.A, 34.B AND 34.C. One participant plays the part of a child aged about 18 months and another participant is the 'caregiver'. Have the items for the demonstration ready.

DEMONSTRATION 34.A CONTROLLED FEEDING

The 'young child' is sitting next to the caregiver (or on the caregiver's knees). The caretaker prevents the child from putting his/her hands near the bowl or the food.

The caregiver spoons food into the child's mouth.

If the child struggles or turns away, he is brought back to the feeding position.

Child may be slapped or forced if he does not eat.

The caregiver decides when the child has eaten enough and takes the bowl away.

Ask: *What style of feeding did we see here?*

Wait for a few replies and then continue.

- This is an example of controlled feeding. Children may not learn to regulate their intake, which may lead to obesity and food refusal later.

Ask: *How do you think this child feels about eating?*

Wait for a few replies and also ask the 'child' how he felt.

- The 'child' may feel eating is very frightening and uncomfortable. He may feel scared.
- Now we see another way of feeding a young child.

DEMONSTRATION 34.B LEAVE TO THEMSELVES

The 'young child' on the floor sitting on a mat.

Caregiver puts a bowl of food beside the child with a spoon in it.

Caregiver turns away and continues with other activities (nothing too distracting for those watching).

Caregiver does not make eye contact with the child or help very much with feeding.

Child pushes food around the bowl, looks to caregiver for help, eats a little, cannot manage a spoon well, he tries with his hands but drops the food, he gives up and moves away.

Caregiver says, "Oh, you aren't hungry" and takes the bowl away.

Ask: *What style of feeding did we see here?*

Wait for a few replies and then continue.

- This is an example of feeding by leaving children to do it themselves. If the child has a poor appetite or is too young to manage the skills of eating, this can result in malnutrition.

Ask: *How do you think this child feels about eating?*

Wait for a few replies and also ask the 'child' how he felt.

- The 'child' may feel eating is very difficult. He may be hungry or sad
- Now we see a third way of feeding a young child.

DEMONSTRATION 34.C RESPONSIVE FEEDING

Caregiver washes the child's hands and her own hands and then sits level with child. Caregiver keeps eye contact and smiles at child. Using a small spoon and an individual bowl, small amounts of food are put to the child's lips and child opens his mouth and takes it a few times.

Caregiver praises child and makes pleasant comments – “Aren't you a good boy”, “Here is lovely dinner” while feeding slowly.

Child stops taking food by shutting mouth or turning away. Caregiver tries once – “Another spoonful of lovely dinner?” Child refuses and caregiver stops feeding.

Caregiver offers a piece of food that child can hold - bread crust, biscuit or something similar.

“Would you like to feed yourself?” Child takes it, smiles and sucks/munches it.

Caregiver encourages “You want to feed yourself, do you?”

After a minute, the caregiver offers a bit more from the bowl. Child starts taking spoonfuls again.

Ask: *How did the child feel this time about feeding?*

Wait for a few replies. *Ask the 'child' too.*

- The child may feel happy about eating. He may like the contact and the praise and enjoy feeding himself.

Ask: *What style of feeding did we see in the last demonstration?*

Wait for a few replies and then continue.

- In this last demonstration, the caregiver was feeding the child in response to the child's cues.
- The child's cue or signal that he is hungry may include restlessness, reaching for food, or crying.
- Cues or signals that he does not want to eat more may include turning away, spitting out food or crying.
- Caregivers need to be aware of their child's cues, interpret them accurately, and respond to them promptly, appropriately and consistently.

Uncover the second **Responsive Feeding Practice** on the flip chart list.

- Now we have another Responsive Feeding practice: Feed slowly and patiently, encourage but do not force.

Ask: *What good practices did we see in the last demonstration that we could encourage?*

Write participants' responses on the flip chart and then continue.

- We could encourage many good responsive feeding practices here. When you are talking with caregivers notice what practices they are doing that you can praise.

- Offer a few suggestions for other practices they could try.
 - Some practices you can suggest are listed in your Manual.
- Ask participants to turn to page 220 of their Manual and find the box **RESPONSIVE FEEDING TECHNIQUES**. Ask participants to take it in turns to read out the points.

RESPONSIVE FEEDING TECHNIQUES
<ul style="list-style-type: none">▪ Respond positively to the child with smiles, eye contact and encouraging words▪ Feed the child slowly and patiently with good humour▪ Try different food combinations, tastes and textures to encourage eating▪ Wait when the child stops eating and then offer again▪ Give finger foods that the child can feed him/herself▪ Minimize distractions if the child loses interest easily▪ Stay with the child through the meal and be attentive.

- Uncover the third **Responsive Feeding Practice** on the flip chart list, and make these points:
- The third Responsive Feeding Practices to encourage is: Talk to children during feeding with eye-to-eye contact.
 - Feeding times are periods of learning and love. Children may eat better if feeding times are happy.
 - Feed when the child is alert and happy. If the child is sleepy or over-hungry and upset, he may not eat well.
 - Regular mealtimes and the focus on eating without distractions, may also help a child to learn to eat.
 - When you talk with a caregiver, ask who feeds the child.
 - Children are more likely to eat well if they like the person who is feeding them.
 - Give positive attention for eating not just attention when eating poorly.
 - Older siblings may help with feeding but may still need adult supervision to ensure the young child is actively encouraged to eat and that the sibling does not take his food.

Show Slide 34/2 - Feeding situation and ask the question:



Ask: What can we see in this feeding situation that could encourage the young child to eat?

Write participants' responses on the flip chart and then continue. Refer to the responses as you make these points:


- The overall feeding environment may also affect food intake. This includes:
 - to sit with the family or other children at mealtimes so the child sees them eating
 - to sit with others eating to provide an opportunity to offer extra food to the young child
 - to use a separate bowl for the child so the caregiver can see the amount eaten
 - to talk with the child
 - to encourage all the family to help with responsive feeding practices.
- In this session we saw three Responsive Feeding Practices to encourage (point to list):
 - Assist children to eat, being sensitive to their cues or signals
 - Feed slowly and patiently, encourage but do not force
 - Talk to children during feeding with eye-to-eye contact.

- Show **Slide 34/3 - Key Message 9: Responsive feeding** and read out the message:

34/3

Key Message 9

A young child needs to learn to eat:
encourage and give help
... with lots of patience



VI. Summarize the session

3 minutes

- Ask participants if they have any questions or if there are points that you can make clearer.
- Make these points:
 - In this session, we discussed the importance of feeding and care practices to assist in feeding a young child.
 - We learnt another Key Message in this session.
- Point out the Key Message on the flipchart.
- Explain that a summary of this session can be found on pages 219-220 of the *Participant's Manual*.

Session 35

Practical Session 3

Gathering Information and counselling on Feeding Practices and Growth

Objectives

After completing this session participants will be able to:

- measure a child and correctly determine if they are growing normally or have a problem
- inform the mother about growth assessment results and identify possible causes of growth problems
- provide counselling to a mother whose child has undernutrition or overweight
- demonstrate how to gather information about complementary feeding using counselling skills and the FOOD INTAKE JOB AID, 6-23 MONTHS
- provide information about complementary feeding and continuing breastfeeding to a mother of a 6-23 month old child

Session outline

180 minutes

Participants are together as a class led by one trainer to prepare for the session, and to discuss it afterwards.

Participants work in small groups of 2-4 each with one trainer, or in pairs for practice in a ward or clinic.

I.	Prepare the participants for the Practical Session	15 minutes
II.	Conduct the Practical Session	150 minutes
III.	Discuss the findings as a whole group	15 minutes

(Note: this does not include travel time)

Preparation

- Ensure you know exactly where the practice will be held and what times you are expected there.
- Make sure Slide 35/1 is ready. Alternatively, as there is only one slide in this session, you might prefer to read aloud the objectives on Slide 35/1 without projecting onto the screen.
- Make sure that two copies of the FOOD INTAKE JOB AID, 6-23 MONTHS and two copies of the COUNSELLING SKILLS CHECKLIST are available for each participant.
- Make sure that each participant has the job aids for INVESTIGATING CAUSES OF UNDERNUTRITION AND OVERWEIGHT

- Make sure that each participant has growth charts for boys and girls, pen or pencil and a notebook
- Make sure that each trainer has a copy of the PRACTICAL DISCUSSION CHECKLIST to help conduct discussions.
- Make sure the one set of the food consistency pictures is available for each participant.
- Each group needs a typical bowl that a young child would use.
- The health facility may keep different types of growth records on children. If so, the Course Director will advise you on how to handle the situation

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

I. Prepare the participants for the practical (one trainer) 15 minutes

- Show **Overhead 35/1 – Practical Session** and read out the objectives:

Practical session 35/1

After completing this session participants will be able to:

- measure a child and correctly determine if they are growing normally or have a problem
- inform the mother about growth assessment results and identify possible causes of growth problems
- provide counselling to a mother whose child has malnutrition
- demonstrate how to gather information about complementary feeding using counselling skills and the FOOD INTAKE JOB AID, 6-23 MONTHS
- provide information about complementary feeding and continuing breastfeeding to a mother of a 6-23 month old child

- Explain to the participants that there will be a visit to a clinic or clinics so that they can practice measuring children, gathering feeding practices and counselling mothers.
- The measurements must be taken and plotted accurately to provide a correct assessment of the child's growth status for the counselling to be appropriate.
- Explain what the participants should take with them:
 - You do not need to bring many items with you. Carrying many things can be a barrier between you and the mother you are talking with. Take with you:
 - Your child age calculator
 - The Food Intake Reference Tool, 6-23 Months.

- Pencil
 - Two copies of the Counselling Skills Checklist
 - Two copies of the FOOD INTAKE JOB AID, 6-23 MONTHS and the picture of the thick and thin consistency porridge
 - The job aid for investigating causes of undernutrition and of overweight
 - One copy of Boy's Growth Record and one of Girl's Growth Record
 - Common bowl used to feed a young child - between each pair of participants.
- Distribute two blank copies to each person of the COUNSELLING SKILLS CHECKLIST, the FOOD INTAKE JOB AID, 6-23 MONTHS and consistency pictures.
- Review the steps to follow in counselling mothers (or other caregivers):
1. After measuring and plotting, show and explain the meaning of the charts to the mother.
 2. If the child is growing well, let the mother know and congratulate her. Then review the feeding recommendations for the child's present age or the one approaching. Thank the mother and let her go.
 3. If there is a growth problem, determine if the mother recognizes it as this will influence how the dialogue continues.
 4. Follow the steps in the relevant job-aid: Investigating causes of undernutrition or overweight.
 5. Ask the mother what she thinks are the most common causes of her child's growth problem.
 6. Counsel: suggest 2 – 3 actions only for her to take (do not forget to praise the mother for things she is doing correctly!)
 7. Ask checking questions
 8. Speak to a staff member of the facility if you have proposed a return visit for follow-up. Thank the mother and let her go.
- Explain how the participants will work:
- You will work in your groups of 2-4 and each group will have one trainer.
 - You will measure the child as you have done during practical session 1
 - **It will not be necessary to start growth records for the children seen at the clinic. Note each child's age and measurements on a note pad. Plot the child's measurements on the appropriate pages of a growth record (in pencil, so that you can erase them later). Then use those pages for interpretation and conversation with the caregivers.**
 - In case of children 6-23 months old with appropriate growth one participant talks with the mother, filling in the FOOD INTAKE JOB AID, 6-23 MONTHS at the same time.
 - The others in the group observe and fill in the counselling checklist.
 - If you meet a child who is ill or has a major feeding difficulty, encourage the mother to bring the child to the local health centre.
 - Do not offer suggestions for treatment of an ill child.

- In case of children with a growth problem, use the job aids for investigating causes of undernutrition or overweight, as appropriate
 - For all children 2 years or older, use the growth charts and job aids for investigating causes of undernutrition or overweight, as appropriate
 - Counsel the mother according to findings
 - **When you talk with a mother:**
 - . Introduce yourself to the mother and ask permission to talk with her. Introduce the others in your group and explain you are interested in learning about feeding young children in general.
 - . You may wish to say you are on a course.
 - . Measure the child with the mother's help
 - . Try to find a chair or stool to sit on, so you are at the same level as the mother.
 - . Practise as many of the counselling skills as possible as you gather information from the mother using the Food Intake Job Aid, 6-23 Months, or the job aid for investigating causes of malnutrition
 - . Listen to what the mother is saying and try not to ask a question if you have already been told the information.
 - . Fill out the Food Intake Job Aid, 6-23 Months or the card as you listen and learn from the mother.
 - . Use the information you have gathered and then:
 - Try to praise things that are going well
 - Offer the mother two or three pieces of relevant information
 - Offer two or three suggestions that are useful at this time.
 - . Be careful not to give a lot of advice.
 - . Answer any questions the mother may ask as best you can. Ask your trainer for assistance if necessary.
 - The participants that are observing can mark a ✓ on the COUNSELLING SKILLS CHECKLIST for every skill that they observe their partner practising. Remember to observe what the 'counsellor' is doing rather than thinking about what you would say if you were talking to the mother. The observers do not ask the mother any questions.
 - When you have finished talking with a mother, thank her and move away.
 - Briefly, discuss with the group and your trainer what you did and what you learnt and clarify any questions you may have about conducting the exercise.
 - Discuss what practices you praised, what feeding problems you noticed, information and suggestions that you offered, and counselling skills used.
 - Find another mother and repeat the exercise with another participant doing the counselling.
- Each pair of participants should see as many children and mothers as possible. Participants should take turns with the measuring, recording, and counselling tasks
- Encourage participants to note feeding practices such as:
- . if children eat any food or have any drinks while waiting
 - . whether children are given a bottle or soother/pacifier while waiting
 - . general interaction between mothers and children
 - . any posters or other information on feeding in the area.
- Use the PRACTICAL DISCUSSION CHECKLIST to guide you as you give feedback to the participants.

- Discuss arrangements for travel (if needed) and any other details of the Practical Session and whether the discussions will be done at the site or back at the classroom.

II. Conduct the practice (all trainers) 220 minutes

These notes are for the trainers. Trainers should read these notes to ensure that they know what to do. There is no need to read these notes to the participants.

- Take your group to the working area and introduce your group to the person in charge. Listen to any directions that this contact person gives. This may include suitable areas to use as well as children and mothers not to talk with.
- Remind the participants to try and find mothers of children over six months of age.
- If you cannot find any more children over six months of age, you can take a feeding history from mothers with children under six months of age using the FEEDING HISTORY JOB AID, 0-6 MONTHS from Session 18.
- About 10 minutes before the end of the time, remind the groups to start finishing up.

III. Discuss the findings as a whole group (one trainer) 15 minutes

- Return to the whole class group. Discuss what the participants learnt from listening to the mothers and from the completed FOOD INTAKE JOB AID, 6-23 MONTHS as well as from the use of the job aids for investigating causes of malnutrition.
 - Ask: What did you observe in general looking around the health centre?*
 - Wait for a few replies. Prompt if needed – posters, leaflets, food for sale, children with food/bottles/soothers?*
 - Look at the FOOD INTAKE JOB AIDS, 6-23 MONTHS which you filled in.
 - . What practices are mothers doing that you could praise and encourage?
 - . What areas need improvement?
 - . Give some examples of suggestions you made to mothers about complementary feeding practices.
 - . Would these suggestions be easy to carry out?
 - Measure a child and inform the mother about growth assessment results
 - . provide counselling to a mother whose child has malnutrition
- Ask participants if they have any questions or if there are points you can make clearer.
- Ask participants whether they can implement this process in their own health facilities.

COUNSELLING SKILLS

Listening and learning skills:

- Use helpful non-verbal communication.
- Ask open questions.
- Use responses and gestures that show interest.
- Reflect back what the mother/caregiver says.
- Empathize - show that you understand how she/he feels.
- Avoid words that sound judging.

Building confidence and giving support skills:

- Accept what the caregiver thinks and feels.
- Recognize and praise what a mother/caregiver and child are doing right.
- Give practical help
- Give relevant information.
- Use simple language.
- Make one or two suggestions, not commands

KEY MESSAGES FOR COMPLEMENTARY FEEDING

1. Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.
2. Starting other foods in addition to breast milk at 6 months helps a child to grow well.
3. Foods that are thick enough to stay in the spoon give more energy to the child.
4. Animal-source foods are especially good for children to help them grow strong and lively.
5. Peas, beans, lentils, nuts and seeds are good for children.
6. Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections.
7. A growing child needs 2 - 4 meals a day plus 1 - 2 snacks if hungry: give a variety of foods.
8. A growing child needs increasing amounts of food.
9. A young child needs to learn to eat: encourage and give help... with lots of patience.
10. Encourage the child to drink and to eat during illness and provide extra food after illness to help the child recover quickly.

Session 36

Overview of HIV and Infant Feeding

Objectives

After completing this session participants will be able to:

- explain the risk of mother-to-child transmission of HIV
- describe factors which influence mother-to-child transmission
- explain HIV-free survival
- describe the key principles and recommendations for infant feeding in the context of HIV
- describe the importance of antiretroviral drugs in reducing mother-to-child transmission of HIV and increasing HIV free survival in infants

Session outline

60 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	5 minutes
II.	What is HIV and how is it transmitted	5 minutes
III.	Review the risk of mother-to-child transmission of HIV	8 minutes
III.	Explain factors which affect mother-to-child transmission and HIV-free survival	8 minutes
IV	Explain HIV-free survival	2 minutes
V.	Review key principles and recommendations for infant feeding in the context of HIV	15 minutes
VI.	Outline approaches to prevent mother-to-child transmission, including the use of antiretroviral drugs	15 minutes
VII.	Summarize the session	2 minutes

As you follow the text, remember:

- Indicates an instruction to you, the trainer
- Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 36/1-36/16 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Find out the local prevalence of HIV infection among women of childbearing age (15-49 years) and among women receiving antenatal care in the area, if known.
- Review recent WHO documents so that you are able to refer participants to these documents as needed for further information:
 - *Guidelines on HIV and infant feeding 2010: Principles and recommendations for infant feeding in the context of HIV and a summary of evidence*
 - *Antiretroviral drugs for treating pregnant women and preventing HIV infections in infants, 2010.*
- Familiarize yourself with national policies, strategies and guidelines on infant and young child feeding, if they exist. Check if they include issues related to HIV/AIDS, and whether there is a specific infant feeding recommendation for HIV-infected mothers in your region or district.

I. Introduce the session**5 minutes**

- Show **Slide 36/1 - Overview of HIV and infant feeding** and read out the objectives:

36/1

Overview of HIV and infant feeding

After completing this session participants will be able to:

- explain the risk of mother-to-child transmission of HIV
- describe factors which influence mother-to-child transmission
- explain HIV-free survival
- describe the key principles and recommendations for infant feeding in the context of HIV
- Describe the importance of antiretroviral drugs in reducing mother-to-child transmission of HIV and in increasing HIV free survival in infants

- Make these points:
 - HIV is a devastating disease which touches many aspects of our lives. It affects people of all ages, the rich and the poor, all sectors of society, and can lead to the breakdown of community and family life. It is a worldwide challenge, though it is more prevalent in some countries than in others.
 - How does HIV affect us in infant and young child feeding, and why do we include it in this course?
 - A woman who is HIV positive can pass HIV on to her baby during pregnancy, labour and delivery and importantly also during breastfeeding; once a person is infected with the virus there is no cure, and many untimely deaths of young children and their mothers, fathers and grandparents occur as a result of being infected with HIV.
 - In this session we will concentrate on issues which affect the way a baby is fed if the mother is HIV positive; how the baby can be kept alive, healthy and free of HIV and other common, but life threatening infections (this is what we call HIV-free survival); and how to reduce the risk of HIV infection from the mother to her baby, which is known as 'mother-to-child transmission'.
 - We will look particularly at the major progress made in recent years showing that antiretroviral interventions for HIV positive women and HIV exposed babies can dramatically reduce mother-to-child transmission of HIV including during breastfeeding. As a result breastfeeding is, for the first time, a real feeding option for HIV-positive mothers, for at least the first twelve months of their baby's life.
 - This quote is from the 2010 revised HIV and infant feeding guidelines

- Show **Slide 36/2 - HIV and infant feeding: What is new?** and read it out:

36/2

HIV and infant feeding: What is new?

Significant programmatic experience and research evidence regarding HIV and infant feeding have accumulated since 2006. In particular:

Evidence has been reported that antiretroviral (ARV) interventions to either the HIV-infected mother or HIV-exposed infant can significantly reduce the risk of postnatal transmission of HIV through *breastfeeding*

2

Make these points:

- This breakthrough, resulting from programmatic experience and research evidence was published in two WHO documents in 2010. These are 'Guidelines on HIV and Infant Feeding 2010' and 'Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants'
- These publications are important to us because they show that improved antiretroviral drug regimens given to women can reduce the risk of mother-to-child-transmission during pregnancy, labour and delivery as well as during breastfeeding, all of which increases the chances of HIV free survival of the baby.
- Other major changes have also been made, to the decision making process of how babies of HIV positive mothers should be fed, and there are important new modifications in the infant feeding recommendations which we will discuss later in this session.
- Throughout this course we must emphasise the vital role that Health workers have in communicating information to all women and counselling and supporting individual women, including HIV positive women in feeding their babies. Health workers have another very important role in the context of HIV, to help educate men and women from becoming infected with HIV in the first place and particularly ensuring men understand their responsibility in protecting their family's health.
- First let us remind ourselves what the terms HIV and AIDS stand for and look at the factors involved in mother-to-child transmission.

II. What is HIV and how is it transmitted**5 minutes**

- Show **Slide 36/3 - Defining HIV and AIDS** and read out the definitions:

36/3

Defining HIV and AIDS

HIV

- *Human immunodeficiency virus* is the virus that causes AIDS

AIDS

- *Acquired immune deficiency syndrome* is the active pathological condition that follows the earlier, non-symptomatic state of being HIV-positive

- Make these points:

- People infected with HIV feel well at first and usually do not know they are infected. They may remain healthy for many years. During this time the body produces antibodies and other specialised immune cells called CD4 cells that fight HIV.
- For many years the CD4 cells are able to keep the virus under control in the body. However, eventually the HIV virus gets control and destroys the CD4 cells.
- When these cells are destroyed, the body becomes less able to fight other types of infections such as pneumonia, diarrhoea, TB and meningitis. The person then becomes very ill, loses weight - when these symptoms are present, we call the disease 'AIDS'. Without treatment, eventually he or she usually dies.
- A special blood test can be done to see if people have HIV antibodies in their blood. A positive test means that the person is infected with HIV. This is called HIV-positive or seropositive.
- Once people have the virus in their body, they can give the virus to other people.
- HIV is passed from an infected man or woman to another person through:
 - exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse
 - HIV-infected blood transfusions or
 - contaminated needles, for example in the case of drug users sharing needles or due to needle injuries in hospitals.
- HIV is not however transmitted by saliva or touching people or sharing food utensils like spoons or forks

- Show **Slide 36/4 - Mother-to-child transmission of HIV** and read it out:

36/4

Mother-to-child transmission of HIV

Young children who get HIV are usually infected through their mother

- during pregnancy across the placenta
- at the time of labour and birth through blood and secretions
- through breastfeeding

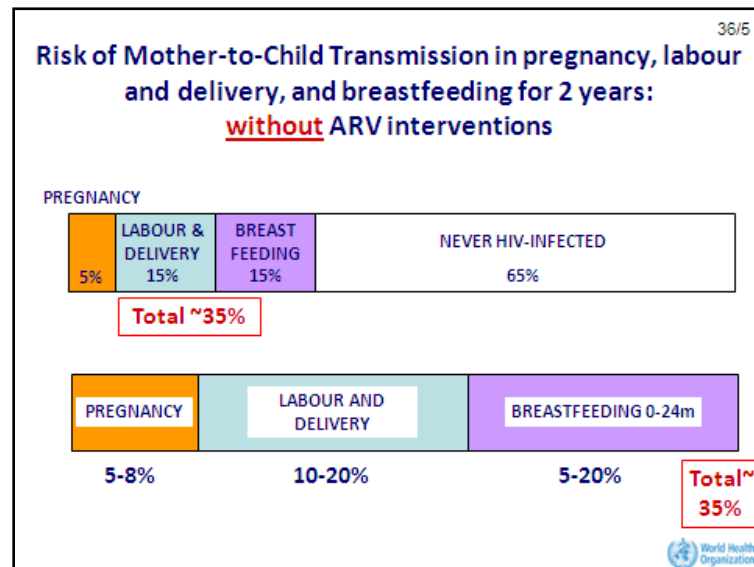
This is called mother-to-child transmission of HIV or MTCT

- Make this point:
- This slide is important for us. It shows another route of transmission of HIV when the virus passes from an infected woman to her child at different periods of time, including in the postnatal period. It is at these times that the risk of MTCT is of particular concern to us.

II. Review the risk of mother-to-child transmission of HIV 8 minutes

- Make this point:
- Let us now consider how often mother-to-child transmission of HIV occurs and how many mothers and babies are likely to be affected.

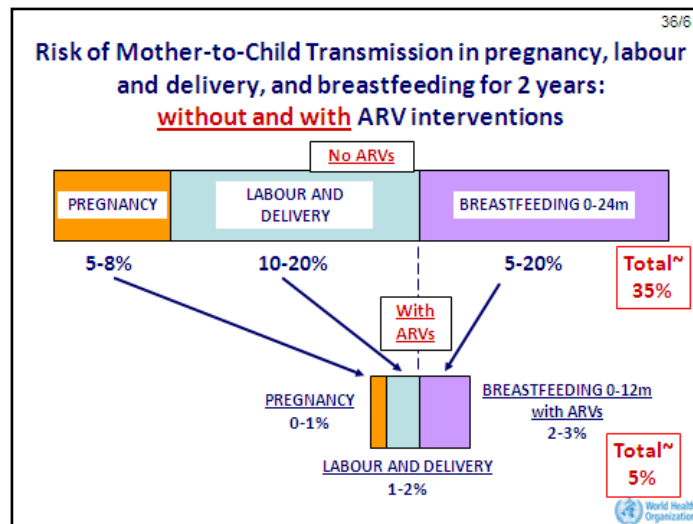
- Show Slide 36/5 - Risk of mother-to-child transmission in pregnancy, labour and delivery, and breastfeeding for 2 years: without ARV interventions:



- Make these points:

- This slide shows the percentage of babies who may become infected with HIV during different periods when pregnant women and mothers receive no antiretroviral drug interventions and the baby is breastfed for up to 2 years.
- Look at the first bar on this slide (show the first bar); you can clearly see in the first three boxes that an average of 35% of babies will become HIV infected through mother-to-child transmission if the mother receives no ARV treatment. But you can also clearly see that a much larger percentage of babies, 65%, do not become infected with HIV at all and remain healthy and HIV free. (Show the second bar) The second horizontal bar shows the same information as the first bar but helps us to see when infants become infected with HIV, most of this happens during the time of labour and delivery or later, if the mother is breastfeeding.
- This is the situation for HIV-positive women who do not learn their HIV status or who do not receive ARV treatment. Although the number of mothers and babies receiving antiretroviral drugs is increasing, there are still many women and babies who do not yet have access to them.
- It is important when counselling a mother about HIV testing that she understands the risk to her baby if she is HIV positive but remains untreated.

- Show Slide 36/6 - Risk of mother-to-child transmission in pregnancy, labour and delivery, and breastfeeding for 2 years: with and without ARV interventions:



- Make these points:

- This slide shows the average percentage of babies who become infected if the mother remains untreated compared to the percentage who become infected if she is treated with ARV drugs.
- Look first at the pregnancy box (show the pregnancy area). During pregnancy, on average 5-8% of babies will be infected if the woman is not treated, if you follow the arrow down you will see the percentage reduces to 0-1% when treatments of newly recommended ARV regimes are used (show the arrow and pregnancy area in the lower bar). This is a large reduction of risk.
- Look now at the labour and delivery box (show the labour and delivery area). Without treatment around 10-20% babies may be infected with HIV during labour and delivery; this is a very high percentage considering how short this time period is when compared with the length of pregnancy and the breastfeeding periods. Now look at the percentages when the mother is treated with ARVs, 1-2% (show the labour and delivery area in the lower bar). This is a great reduction in the risk of transmission.
- Now look at the breastfeeding box (show the breastfeeding area). About 5-20% of babies born to HIV-infected mothers will get the virus through breastfeeding if no treatment is given. The risk continues as long as the mother breastfeeds, and is more or less constant over time. But look at the percentages when ARVs are given either to the mother or the baby and continued until the baby completely stops breastfeeding (show the breastfeeding area in the lower bar). Only 2-3% of babies may become HIV infected which again is a considerable reduction in risk.

- The overall risk in MTCT when mothers are treated with antiretroviral drugs is an average of 5% compared to an average of 35% when mothers do not receive treatment. This tremendous reduction in risk illustrates the impact of ARVs in increasing the number of babies who can be expected to be free of HIV if the 2010 recommendations are followed correctly.

III. Explain factors which affect mother-to-child transmission

8 minutes

Make these points:

- The chance of mothers transmitting the virus to their infants depend on a number of factors such as how ill the mothers are, how much virus is in their blood, whether they are taking ARVs and how long breastfeeding lasts. This also explains the differences in risk of infection for individual mothers.
- Since several factors affect these rates, and interventions can reduce them, understanding the factors may help us to find ways to reduce transmission.

Ask: What are some factors that affect mother-to-child transmission of HIV?

Wait for a few replies and then continue.

Show **Slide 36/7 - Factors which affect mother-to-child transmission of HIV** and read it out:

36/7

Factors which affect mother-to-child transmission of HIV

- Recent infection with HIV
- Severity of disease
- Sexually transmitted infections
- Obstetric procedures
- Duration of breastfeeding
- Exclusive breastfeeding or mixed feeding
- Condition of the breasts
- ARV treatment or prophylaxis to the mother
- ARV prophylaxis to the baby

- Some of these factors affect transmission of HIV through breastfeeding. Sexually transmitted infections and obstetric procedures only affect transmission during pregnancy or delivery. We will discuss the factors related to breastfeeding.

Ask participants to turn to page 229 of their Manual and find the section **FACTORS WHICH AFFECT MTCT OF HIV THROUGH BREASTFEEDING**.

Ask participants to read out each point in turn.

▪ **Recent infection with HIV**

If a woman becomes infected with HIV during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent an HIV-negative woman from becoming infected at this time because then both the woman and her baby are at risk. All sexually active people need to know that unprotected sex exposes them to infection with HIV. They may then infect their partners, and their baby too will be at high risk, if the infection occurs during pregnancy or while breastfeeding.

▪ **Severity of HIV infection**

If the mother is ill with HIV-related disease or AIDS and is not being treated with drugs for her own health, she has more virus in her body and transmission to the baby is more likely.

▪ **Duration of breastfeeding**

The virus can be transmitted at any time during breastfeeding. In general, the longer the duration of breastfeeding the greater the risk of transmission.

▪ **Exclusive breastfeeding or mixed feeding**

The risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding during the first months of life. The risk is less if breastfeeding is exclusive. Other food or drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby's body.

▪ **Condition of the breasts**

Nipple fissure (particularly if the nipple is bleeding), mastitis or breast abscess may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions, and may also reduce transmission of HIV.

▪ **ARV treatment or prophylaxis to the mother**

HIV-infected mothers provided with lifelong antiretroviral treatment or antiretroviral prophylaxis interventions have a much lower risk of passing on HIV to their infants.

▪ **ARV prophylaxis to the baby**

Drugs to the baby soon after birth, or a daily drug to the infant during the breastfeeding period also greatly reduce the risk of mother-to-child transmission.

Make these additional points:

- This list of factors suggests several strategies that would be useful for all women, whether they are HIV-positive or HIV-negative. They provide ways to reduce the risk of HIV transmission, which can be adopted for everyone, and they do not depend on knowing women's HIV status.
- Other strategies, such as the avoidance of breastfeeding, can be harmful for babies, so they should only be used if a woman knows that she is HIV-positive and has been counselled fully on using replacement feeding.
- It is clear, from the 2010 publications, that antiretroviral drugs mean more babies who are breastfed will survive their infancy HIV-free, because MTCT is greatly reduced. This means when deciding how a baby should be fed we now have to consider which method of feeding poses the lowest risk of illness or of death.

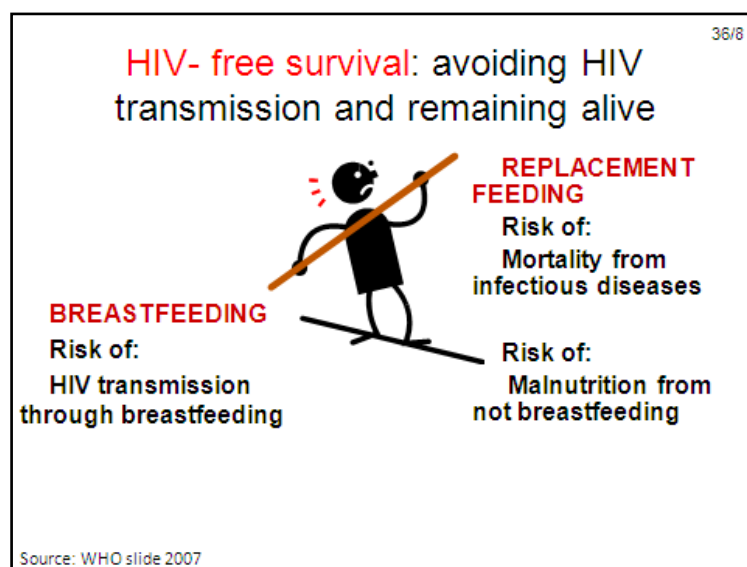
IV. Explain HIV-free survival

2 minutes

Make these point:

- HIV-free survival describes the goal of infants of HIV-infected mothers remaining both HIV uninfected and also alive and healthy.
- The problem is that some interventions that can prevent transmission of HIV e.g. giving the infant formula feeds can also increase the risk of HIV exposed infants dying from other common infections and illnesses such as diarrhoea, pneumonia and malnutrition.
- Preventing HIV infection to the infant is not enough if the child then dies of another common childhood illness.

Show **Slide 36/8 - HIV-free survival** and read it out:



Make the following points:

- You can see on this slide that there is a fine balance between the risk of the baby becoming infected with HIV through breastfeeding and the risk of the baby dying from serious infectious diseases such as diarrhoea or pneumonia or from malnutrition if he/she is NOT breastfeeding.

Ask: *Why is it so important for any baby to be breastfed?*

Wait for a few replies and refer to session 2 about advantages of breastfeeding, then make these points

- We know that HIV exposed babies benefit from breastfeeding for all the reasons we have already discussed, but we also know there is still a very small possibility of the baby becoming HIV positive even when the mother is being treated with antiretroviral drugs.
- It is also very clear that statistically many babies who are not breastfed but who have replacement feeding are slightly more likely to die from the infections we mentioned earlier.
- The dilemma is which is the safest method of infant feeding for a mother who is HIV positive or a mother who does not know her HIV status? Or for a baby who is HIV exposed and is HIV negative.
- In the next slide we look at ways which may provide guidance to overcome these dilemmas.

V. Review key principles and recommendations for infant feeding in the context of HIV

15 minutes

Show Slide 36/9 - The Key Principles:

36/9

The Key Principles

- **National authorities** should make strong **recommendations** about infant feeding
 - Breastfeeding and ARV interventions, OR
 - Avoid all breastfeeding
- **Balance HIV prevention** with **protection from other causes** of child mortality
- **When antiretroviral drugs are not immediately available breastfeeding may still provide** infants born in HIV-infected mothers with a **greater chance of HIV-free survival**
- **Inform mothers** known to be HIV-infected **about infant feeding alternatives**
- **Provide services to** specifically **support mothers** to appropriately feed their infants

Make these points:

- This slide sets out the current principles of HIV and infant feeding which help to shape national infant feeding strategies.
- The first point is that national health authorities should now clearly communicate which feeding practices is promoted and supported in public clinics and hospitals throughout a country or region for HIV positive mothers and their babies. The national health authority will decide whether to promote and support breastfeeding with antiretroviral intervention to reduce HIV transmission or to avoid all breastfeeding and give replacement feeding. Health workers should communicate to pregnant women and mothers what the national health authority recommends. It is not expected that health workers will sit with every pregnant woman to individually discuss what is the most appropriate feeding practice for the infant.
- This means that infant feeding counselling should focus on the practical aspects of feeding rather than focussing on the one-to-one decision-making process which happened previously.
- It is felt that recommending one feeding practice for all HIV positive mothers and their babies will make it easier than trying to decide what is most appropriate for each individual mother and child.

Ask: Do you know which feeding method is promoted and supported by your national authority for mothers who are HIV-positive?

Wait for a few replies and state the feeding method adopted by the national authority

- The second point emphasises the need to have a balanced approach to HIV prevention by protecting the baby from other causes of child mortality.
- The next point continues with this theme. If antiretroviral drugs are not immediately available mothers should be counselled to exclusively breastfeed for the first 6 months of life and then continue breastfeeding alongside complementary feeding. Breastfeeding may still provide the baby with a best chance of HIV-free survival, unless the social and environmental conditions are safe and supportive for replacement feeding
- The fourth point ensures that HIV positive pregnant women and mothers are informed about the national recommendations, but they should also be informed about feeding alternatives which a woman has a right to use if she chooses not to follow national recommendations.
- The last point states that ALL pregnant women and mothers, regardless of their HIV status should receive skilled counselling and support for their infant feeding practices.
- This means having health workers specifically trained specifically in infant feeding counselling available to support HIV positive and HIV negative pregnant women and mothers.
- Support is crucially important. There is a lot of evidence to show that poor infant feeding practices and malnutrition increases the risk of babies dying so this point when combined with the others should be aimed at making sure babies survive and remain HIV-free.
- Some of the main infant feeding recommendations from the 2010 Guidelines are outlines in the next slide.

- Show **Slide 36/10 - Main infant feeding recommendations (1) for HIV-positive women**

36/10

Main infant feeding recommendations (1) for HIV positive women

Mothers known to be HIV-infected should be provided with **lifelong ARV treatment** or **ARV prophylaxis** to reduce HIV transmission through breastfeeding (**recommendation 1**)

- ARVs reduce the risk of HIV transmission in the first 6 months when infants breastfeed (either EBF or mixed feeding) and after 6 months when infants continue to breastfeed while taking complementary feeds
- ARVs are given either as lifelong treatment (ART) or as ARV prophylaxis i.e. for prevention during the period of breastfeeding only
- When given as prophylaxis, ARVs should be given until one week after all breastfeeding stops

- Ask participants to read each point in turn and highlight the following points:
- The first main recommendation is that HIV positive mothers who are breastfeeding should receive antiretroviral drugs (ARVs) throughout the period of time the baby is breastfeeding and until one week after all breastfeeding has stopped.
 - These ARVs reduce the risk of HIV transmission to the child when she is breastfeeding in the first 6 months – even if the mother is not exclusively breastfeeding – and also when the mother continues to breastfeed after 6 months when she also gives complementary feeds.
 - ARVs may be given to some women if they have more advanced HIV infection and need this treatment in order to improve their own health. We call this lifelong antiretroviral treatment (ART) and mothers should continue taking these drugs even when all breastfeeding has stopped.
 - Alternatively, ARVs may only be given for the duration of breastfeeding to prevent transmission of the virus to the infant. We call this antiretroviral prophylaxis
 - We will look at ARVs in more detail in the next part of this session.

- Show **Slide 36/11 - Main infant feeding recommendations (2 and 3) for HIV-positive women**

36/11

Main infant feeding recommendations (2+3) for HIV positive women

HIV positive mothers should **exclusively breastfeed their infants for the first 6 months of life**, introduce appropriate complementary foods thereafter and **continue breastfeeding for the first 12 months of life (recommendation 2)**

- exclusive breastfeeding reduces the risk of death from diarrhoea, pneumonia and malnutrition among babies born to HIV positive mothers in the same way that it protects babies of HIV negative mothers against infections

When deciding **to stop BF**, HIV positive mothers should do so **gradually within one month (recommendation 3)**

- The second recommendation is that HIV positive mothers who breastfeed should exclusively breastfeed their infants for the first six months of life, introduce complementary foods thereafter, and continue breastfeeding for the first 12 months of age
 - HIV positive mothers should exclusively breastfeed their babies in the first 6 months because it reduces the risk of death from diarrhoea, pneumonia and malnutrition in the same way that it protects babies of HIV negative mothers against infections.
- And the third recommendation is that, if the mother decides to stop breastfeeding, she should do it gradually within one month

- Highlight the recommendations that differ from previous ones:

- As you can see, the current recommendation continues to promote exclusive breastfeeding and also complementary feeding and continued breastfeeding but now ARVs should also be given.
- Also, a gradual cessation of breastfeeding is recommended rather than stopping abruptly as was previously recommended.
- Now we will look at one recommendation that reviews the conditions needed to safely formula feed.

- Show **Slide 36/12 - Conditions needed to safely formula feed** and read the first part

36/12

Conditions needed to safely formula feed (Recommendation 5)

HIV-infected mothers **should only give commercial infant formula milk as a replacement feed** to their HIV-negative infants or infants who are of unknown HIV status, when **specific conditions are met**:

- Safe water and sanitation are assured at household level and in the community
- The mother or other care giver can reliably provide sufficient infant formula milk to support normal growth and development
- The mother or care giver can prepare it cleanly and frequently enough so that it is safe and carries a low risk of diarrhoea and malnutrition
- The mother or care giver can in the first 6 months, exclusively give infant formula milk
- The family is supportive of this practice
- The mother or caregiver can access health care that offers comprehensive child health services.

- Ask participants to read each point in turn.
- Remind participants that these conditions correspond to what was formerly referred to as AFASS. These points are almost the same as previously but have now been expressed more simply.

Show **Slide 36/13 - When the infant is HIV-infected** and read it out

36/13

When the infant is HIV-infected (Recommendation 7)

If Infants and young children are known to be HIV-infected, **mothers are strongly encouraged to exclusively breastfeed for the first six months of life** and continue breastfeeding as per the recommendations for the general population that is up to two years or beyond

- Then make the following points
 - Inevitably and sadly, some babies will become HIV positive, and as you can see in this slide, mothers of these babies are strongly encouraged to breastfeed for all the reasons we discussed earlier.

- These babies should all be started on lifelong antiretroviral treatment as soon as possible.
- To give this baby replacement feeds would increase the likelihood of the baby dying from common infections because he or she would no longer be receiving the constant source of protective factors breast milk provides. There are emotional benefits to breastfeeding for both the mother and the baby as well as health benefits and these should also be considered when making the decision to breastfeed.

Show **Slide 36/14 - Policy of supporting breastfeeding** and read it out:

36/14

Policy of supporting breastfeeding

“As a general principle, in all populations, irrespective of HIV infection rates, breastfeeding should continue to be protected, promoted and supported.”

HIV and Infant Feeding: a policy statement, developed collaboratively by UNAIDS, WHO and UNICEF, 1997.

Then make the following point

- This policy statement has not changed since 1997, the three UN Organizations strongly support breastfeeding.

VI. Outline approaches to prevent mother-to-child transmission including the use of antiretroviral drugs 15 minutes

Make these points:

- Reducing HIV transmission to pregnant women, mothers and their children, including transmission by breastfeeding, should be part of a comprehensive approach both to HIV prevention, care and support, and to antenatal, perinatal and postnatal care and support.
- Policies should serve the best interests of the mother and infant as a pair, in view of the critical link between survival of the mother and that of the infant.

- Prevention of HIV transmission during breastfeeding should be considered in a broad context that takes into account the need to promote breastfeeding of infants and young children in the general population.

Show **Slide 36/15 - The 2010 WHO guidelines on PMTCT and infant feeding** and indicate:

36/15

The 2010 WHO guidelines on PMTCT and infant feeding

include new evidence on:

- the best time to start lifelong antiretroviral treatment (ART) in women who need treatment for the disease
- the **use of antiretroviral (ARV) for prevention (prophylaxis)** to prevent mother-to-child transmission of HIV, including during breastfeeding
- safe feeding practices for HIV-exposed babies

- In 2010 WHO issued two new sets of guidelines on preventing mother to child transmission also known as PMTCT and infant feeding, these described:
- The new evidence concerning the best time to start lifelong antiretroviral treatment, known as ART, in women who meet the eligibility conditions to start this treatment for HIV
- The use of antiretroviral prophylaxis to prevent mother-to-child transmission of HIV, including during the complete breastfeeding period, and finally
- Safe feeding practices for HIV exposed babies, which means, babies who have been exposed to HIV during pregnancy, labour or delivery or during breastfeeding but who remain free of HIV. And remember this will be the majority of babies born to HIV positive mothers.
- When a woman tests positive for HIV, in addition to the counselling she will receive on a variety of different topics, the decision also has to be made about appropriate treatment for her.

Show Slide 36/16 - New PMTCT ARV recommendations and indicate:

36/16

**New PMTCT ARV recommendations
are based on these two key areas**

Lifelong ART for HIV-positive women in need of treatment for their own health, which is also safe and effective in reducing MTCT

ARV prophylaxis (short term) to prevent MTCT during pregnancy, delivery and breastfeeding for HIV-infected women who do not need treatment for their own health

- This slide outlines the two key areas of the new PMTCT recommendations

Ask one participant to read the first point of the slide; then make these points:

- A woman requiring lifelong antiretroviral treatment (ART) will be suffering from HIV related conditions and symptoms and will require ART for her own health, but if she is pregnant the same treatment will reduce the risk of passing HIV on to her baby.

Ask one participant to read the second point of the slide; then make these points:

- An HIV-positive pregnant woman, who is well and does not need treatment for her own health should be given antiretroviral prophylaxis. This is given for a limited period of time only.
- Antiretroviral prophylaxis is only given to prevent mother to child transmission of HIV during pregnancy, labour and delivery and if she breastfeeds it is continued postnatally.
- The decision about eligibility for lifelong antiretroviral treatment is based on the woman's CD4 count or whether she has any of the conditions or symptoms in a classification system known as the WHO clinical stages
- Once the decision is made that a woman is eligible for ART, it should begin as soon as possible regardless of her gestational stage.
- The important point is that she will need to continue to take ART for the rest of her life.
- We will now look in more detail at HIV positive women who are not eligible for ART and the types of ARV prophylaxis that they need

Ask: What is the purpose of a woman taking ARV prophylaxis?

Wait for a few replies and then continue.

- The purpose of ARV prophylaxis is to prevent mother-to-child transmission of HIV during pregnancy, labour and delivery and in the postnatal period, if she breastfeeds her baby.

Show **Slide 36/17 - ARV Prophylaxis to prevent MTCT** and indicate:

36/17

ARV Prophylaxis to Prevent MTCT

For HIV+ women not eligible for ART

- Two possibilities
 - Option A: Maternal AZT
 - Option B: Maternal triple ARV prophylaxis
- Begin as early as 14 weeks gestation (2nd trimester) or as soon as possible thereafter
- **With Option B+, all HIV positive pregnant women are immediately started on lifelong treatment**

- There are two antiretroviral regimes recommended for preventing HIV transmission to babies i.e. prophylaxis, Option A and Option B, in HIV positive women who do not need lifelong ART.
- Both are considered equally effective.
- In Option A, the mother is given the antiretroviral drug AZT during pregnancy and delivery, and, if the baby is to be breastfed then the baby is given ARV prophylaxis from birth until breastfeeding stops. The mother stops ARV prophylaxis at 7 days postpartum.
- In Option B, the mother is given three ARVs during pregnancy and delivery and she continues with these drugs until one week after all breastfeeding stops. The mother then stops taking these drugs.
- Antiretroviral prophylaxis should be started from 14 weeks gestation or as soon as possible afterwards, for example, if a woman comes to the hospital in late pregnancy, or in labour or at delivery and is then found to be HIV positive, the antiretroviral prophylaxis should be commenced then.
- The choice of which option to adopt should be made at country level not by individual women.

Show Slide 36/18 – Option B+ to prevent MTCT and indicate

36/18

Three options for PMTCT Programmes

	Woman receives		Infant receives
	Treatment (for CD4 count ≤ 350 cells/mm ³)	Prophylaxis (for CD4 count > 350 cells/mm ³)	
Option A	Triple ARVs starting as soon as diagnosed <i>continued for life</i>	Antepartum: AZT from 14 wk Intrapartum: at onset labour sdNVP and 1 st dose AZT/3TC Postpartum: daily AZT/3TC through 7 days postpartum	Daily NVP from birth through 1 wk beyond complete cessation of BF (if not BF or mother on treatment through ages 4-8 wk)
	Same initial ARVs for both		
Option B	Triple ARVs starting as soon as diagnosed <i>continued for life</i>	Triple ARVs from 14 wk continued intrapartum and through childbirth if not BF (or until 1 wk after cessation of BF)	Daily NVP or AZT through 4-8 wk regardless feeding method
	Same for treatment and prophylaxis		
Option B+	Regardless of CD4 count, triple ARVs starting as soon as diagnosed <i>continued for life</i>		Daily NVP or AZT through 4-8 wk regardless feeding method

Source: Programmatic Update ARVs for treating pregnant women and preventing HIV in infants. Executive Summary, WHO Geneva April 2012

- Another ARV intervention is recommended in some countries that is called Option B+.
- With Option B+, all HIV positive pregnant women should be started on lifelong ART even if they do not fulfil all the conditions for starting this treatment.
- It is felt that in some settings, this strategy will be easier to implement and will improve the survival of mothers as well as protecting young babies

VII. Summarize the session

2 minutes

Ask participants if they have any questions, and try to answer them.

Make these points:

- In summary: our challenge is to make sure those health professionals, HIV services and appropriate Government departments are fully aware of the newest research findings and the latest PMTCT and infant feeding guidelines.
- It is a priority to ensure antiretroviral drugs are available to HIV positive women who need either ART and ARV prophylaxis
- Our goal is for HIV exposed babies to remain HIV free and to survive. If they do not breastfeed they run an increased risk of becoming ill or dying from other common infections.
- The national decision to breast or replacement feed has to be made according to local conditions.

- Breastfeeding is the best way to feed babies who are HIV positive or of unknown HIV status in order to improve their long term survival. HIV positive infants need to be started on lifelong ART immediately.
- Mixed feeding should be avoided because it brings both the risks of HIV infection and the risk of diarrhoea and other infectious diseases.
- Breastfeeding should continue to be protected, promoted and supported in all populations.

Explain that a summary of this session can be found on pages 225-236 of the Participant's Manual.

Further information

Explanation of terms

Breast-milk substitute: any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not suitable for that purpose.

HIV-free survival: refers to young children who are both alive and HIV-uninfected at a given point in time, usually measured at 18 months. This composite measure reflects that the intention of interventions is to both prevent HIV transmission through breastfeeding, while at the same time ensuring that mortality among these children does not increase because of avoidance or modifications of breastfeeding practices.

HIV-exposed: refers to the infant or young child of a mother who is living with HIV.

Mixed feeding: means breastfeeding while also receiving water-based drinks, food-based fluid, semi-solid or solid food or non-human milk (also called partial breastfeeding).

Prophylaxis: in the context of mother-to-child transmission of HIV, refers to giving one or more antiretroviral drugs to an HIV-infected mother to prevent HIV transmission during pregnancy, labour and delivery, postpartum and during the breastfeeding period, or to an HIV-exposed infant to prevent transmission during the breastfeeding period.

Replacement feeding: the process of feeding an infant or young child, who is not receiving any breast milk, with a diet that provides all the nutrients needed.

Treatment: in the context of mother-to-child transmission of HIV, refers to antiretroviral drugs given to an HIV-infected mother who meets criteria for life-long treatment, or to an infant or young child who is HIV-infected.

Difference between the former WHO guidelines on HIV and infant feeding and the 2010 WHO guidelines

There are two significant revisions in the 2010 Guidelines:

The 2010 Guidelines state that national health authorities should promote a single infant feeding practice for HIV-infected mothers as the standard of care. While information about other practices should be made available to HIV-infected mothers, health services would principally recommend one infant feeding approach, either breastfeeding with antiretroviral drugs (ARVs) or replacement feeding, for all HIV-infected mothers. The 2007 recommendations suggested that health workers should individually counsel all mothers known to be HIV-infected, who would then decide the most appropriate infant feeding strategy for their circumstances.

The 2010 guidelines state

i. National health authorities, or even subnational authorities where appropriate, should decide whether health services will principally counsel and support mothers known to be HIV-infected to either breastfeed and receive ARV interventions (for themselves or for their infants), or, avoid all breastfeeding, as the strategy that will most likely give infants the greatest chance of remaining HIV uninfected and alive. The 2010 Guidelines state that, in view of the effectiveness of ARV interventions, continued breastfeeding by HIV-infected mothers until the infant is 12 months of age capitalizes on the maximum benefit of breastfeeding to improve the infant's chances of survival while reducing the risk of HIV transmission. The 2007 recommendations, which were formulated in the absence of ARV interventions, suggested that exclusive breastfeeding should be practiced until the infant reached 6 months of age unless specific conditions for

replacement feeding (referred to as AFASS) were in place. Thereafter, breastfeeding should continue with the addition of complementary foods.

ii. In settings where national authorities promote breastfeeding and ARVs: Mothers known to be HIV-infected (and whose infants are HIV uninfected or of unknown HIV status) should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life. Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided.

Evidence to support these changes

There is high quality evidence that ARV drug interventions, either to the mother or infant, significantly reduce the risk of HIV transmission through breastfeeding and that in most high HIV prevalence countries, the risk of infant mortality from not breastfeeding, or from stopping breastfeeding early, are greater than the risk of HIV infection. WHO has a guideline review committee which oversees the development, approval and updating of WHO recommendations, according to the WHO GRADE process. Systematic reviews were undertaken of all evidence relating to HIV and infant feeding and considered the effect of interventions on infant HIV-free survival. A multidisciplinary panel of experts and civil society representatives met on 22-23 October 2009 to review the evidence, consider the balance of evidence for benefits and harms of the recommendations and their implications, and finalize the recommendations. All systematic reviews, GRADE profiles, and presentations are available at http://www.who.int/child_adolescent_health/documents/9789241599535/en/index.html.

Differences between the two antiretroviral drug strategies - Option A and Option B1 - for preventing HIV transmission through breastfeeding

Current evidence indicates that the efficacy and safety of Options A and B to prevent HIV transmission through breastfeeding are equivalent - both will significantly reduce transmission during pregnancy and during breastfeeding, and both are safe. The main differences are in implementation.

Option A is cheaper, and for some women it may be easier to give the infant a single medicine once per day rather than taking medicines herself. If for whatever reason she omits doses to the infant, either because she forgets or because there are stock-outs at the clinics, then the long half-life of nevirapine (NVP) will continue to provide some protection.

Option B is more expensive, but may provide some benefit to the mother while she is taking the ARVs during breastfeeding. If the mother does not take the medicines consistently every day, then the protection to the infant will decrease, and it may result also in resistance developing in the mother. More information about the advantages and disadvantages are available in the 2010 WHO prevention of mother-to-child transmission (PMTCT) guidelines.

Effectiveness as prophylaxis of antiretroviral drugs if the mother does not exclusively breastfeed

The research does not give precise information on this question, but ARVs are likely to offer protection, even if the mother does not exclusively breastfeed. The research studies all state that they promoted and supported mothers to exclusively breastfeed. In most cases the research reports do not break the results down according to whether the mothers did in fact exclusively breastfeed for 6 months, or whether they added other foods to their infants' diets. However, looking across many studies where mothers took either lifelong antiretroviral treatment (ART) or ARVs as prophylaxis, the risk of breastfeeding transmission was still very low. This suggests that even if mothers do not exclusively breastfeed, ARVs still provide infants with very significant protection from HIV transmission through breastfeeding.

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Session 37

Feeding During Illness and Low-Birth-Weight Babies

Objectives

After completing this session participants will be able to:

- explain why children need to continue to eat during illness
- describe appropriate feeding during illness and recovery
- describe feeding of low-birth-weight babies
- estimate the volume of milk to offer to a low-birth-weight baby
- list the Key Message from this session

Session outline

30 minutes

Participants are all together for a lecture presentation by one trainer.

I.	Introduce the session	3 minutes
II.	Explain why children need to continue to eat during illness	5 minutes
III.	Describe appropriate feeding during illness and recovery	10 minutes
IV.	Discuss feeding of low birth-weight babies	10 minutes
V.	Summarize the session	2 minutes

Preparation

- Refer to the Introduction for guidance on giving a presentation with slides.
- Make sure that Slides 38/1-38/6 are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- You need a flipchart and markers.
- Write the Key Message for this session on a flip chart page. Keep covered until later in the session.

Key Message 10: Encourage the child to drink and to eat during illness and provide extra food after illness to help the child recover quickly.

- You need
 - the flip chart list of Responsive Feeding Practices from Session 34.
 - a flip chart of all the Key Messages from earlier sessions.
 - to find out what % of babies are low-birth-weight in your area.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

Do not present the Further Information sections.
Use them to help you to answer questions.

I. Introduce the session

3 minutes

Make these points:

- Some of the children you see for feeding counselling may be ill or recovering from an illness.
- Children who are ill may lose weight because they have little appetite or their families may believe that ill children cannot tolerate much food.
- If a child is ill frequently, he or she may become malnourished and therefore at higher risk of more illness. Children recover more quickly from illness and lose less weight if they are helped to feed when they are ill.
- Children who are fed well, when healthy, are less likely to falter in growth from an illness and more likely to recover faster. They are better protected.
- Breastfed children are protected from many illnesses. Special care needs to be given to those who are not breastfed and who do not have this protection.

Show **Slide 37/1 - Session 37 Objectives** and read out the objectives:

Feeding during illness and low-birth-weight babies 37/1

After completing this session participants will be able to:

- explain why children need to continue to eat during illness
- describe appropriate feeding during illness and recovery
- describe feeding of low-birth-weight babies
- estimate the volume of milk to offer to a low-birth-weight baby
- list the Key Message from this session

II. Explain why children need to continue to eat during illness

5 minutes

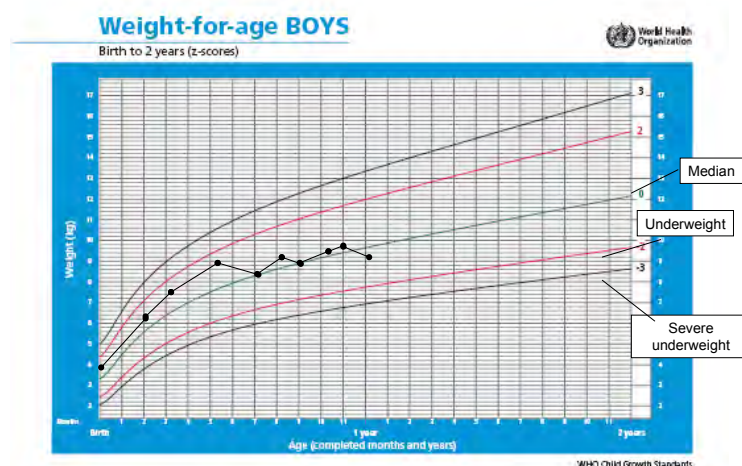
Ask: Why might a young child feed less during illness?

Write participants' replies on the flip chart. Refer to their responses as you make these points:

- **A child may eat less during illness because:**
 - the child does not feel hungry, is weak and lethargic
 - the child is vomiting or the child's mouth or throat is sore
 - the child has a respiratory infection which makes eating and suckling more difficult
 - caregivers withhold food thinking that this is best during illness
 - there are no suitable foods available in the household
 - the child is hard to feed and the caregiver is not patient
 - someone advises the mother to stop feeding/breastfeeding.

Show **Slide 37/2 - Weight chart of ill child** and make the points that follow:

37/2



- This is the growth chart for weight-for-age of John who is 12 months old.

Ask: What do you think of the growth chart?

Wait for a few replies and then continue.

- John grew well for the first five months, then his growth started to falter. He was ill and lost weight.


- He recovered some weight but then became ill again and lost more. After each illness, he did not get back to his previous growth curve and is heading towards being malnourished.
- During infections, the child needs more energy and nutrients to fight the infection.
- If they do not get extra food, their fat and muscle tissue is used as fuel. This is why they lose weight, look thin and stop growing.

Show **Slide 37/3 - Key Message 10: Feeding during and after illness** and read it out:

37/3

Key Message 10

Encourage children to drink and eat during illness and provide extra food after illness to help them recover quickly

A black and white line drawing illustration showing a woman on the left feeding a young child with a spoon. Another child is sitting next to them, looking on. There is a bowl of food on the table in front of them.

- The goal in feeding a child during and after illness is to help him to return to the growth he had before he was ill.

III. Describe appropriate feeding during illness and recovery

10 minutes

- Show **Slide 37/4 - Feeding the child who is ill** and ask a participant to read out the points:

37/4

Feeding the child who is ill

- Encourage the child to drink and to eat
– with lots of patience
- Feed small amounts frequently
- Give foods that the child likes
- Give a variety of nutrient-rich foods
- Continue to breastfeed – often ill children breastfeed more frequently

- Show **Slide 37/5 - Feeding during recovery** and ask a participant to read out the points:

37/5

Feeding during recovery

- Give **extra** breastfeeds
- Feed an **extra** meal
- Give an **extra** amount
- Use **extra** rich foods
- Feed with **extra** patience and love

- The child's appetite usually increases after the illness so it is important to continue to give extra attention to feeding after the illness.
- This is a good time for families to give extra food so that lost weight is quickly regained. This allows 'catch-up' growth.
- Young children need extra food until they have regained all their lost weight and are growing at a healthy rate.

IV. Discuss feeding of low-birth-weight babies

10 minutes

Ask: What does the term low-birth-weight mean?

Wait for a few replies and then continue.

- The term *low-birth-weight* (LBW) means a birth weight of less than 2,500 grams (up to and including 2,499g), regardless of gestational age. This includes babies who are born *premature* (that is, who are born before 37 weeks of gestational age), and babies who are *small for gestational age*. Babies may be small for both these reasons.
- In many countries 15-20% of all babies are low-birth-weight.

Ask: How many babies are low-birth-weight in this country?

Wait for a few replies and then continue.

- In this country% of all babies are low-birth-weight.
- Low-birth-weight babies are at particular risk of infection, and they need breast milk more than larger babies. Yet they are given artificial feeds more often than larger babies.

Ask: Why is it sometimes difficult for LBW babies to breastfeed exclusively?

Wait for a few replies and then continue. (Participants may give answers such as: LBW babies are not able to suckle strongly at the breast; they need more of some nutrients than breast milk can provide; it can be difficult for mothers to express enough breast milk).

- Many LBW babies can breastfeed without difficulty. Babies born at term, who are small-for-date, usually suckle effectively. They are often very hungry and need to breastfeed more often than larger babies, so that their growth can catch up.
- Babies who are born preterm may have difficulty suckling effectively at first. But they can be fed on breast milk by tube or cup, and helped to establish full breastfeeding later. Breastfeeding is easier for these babies than bottle feeding.
- Mothers of LBW babies need skilled help to express their milk and to cup feed.

Ask: When should a mother with a low-birth-weight baby start to express her milk?

Wait for a few replies and then continue. Encourage participants to think back to Session 20 on Expressing breast milk.

- It is important to start expressing on the first day, within six hours of delivery if possible. This helps to start breast milk to flow, in the same way that suckling soon after delivery helps breast milk to 'come in'.
- If a mother can express just a few millilitres of colostrum it is valuable for her baby.

Ask: *At what age can low-birth-weight babies suckle from the breast?*

Wait for a few replies and then continue by displaying the next slide.

- Show **Slide 37/6 - Feeding low-birth-weight babies** and make the points that follow:

37/6

Feeding low-birth-weight babies

- 32 weeks gestation
 - able to start suckling from the breast
- 30-32 weeks gestation
 - can take feeds from a small cup or spoon
- Below 30 weeks gestation
 - usually need to receive feeds by tube in hospital

- Babies of about 32 weeks gestational age or more are able to start suckling on the breast.
- Babies between about 30-32 weeks gestational age can take feeds from a small cup, or from a spoon.
- Babies below 30 weeks usually need to receive their feeds by a tube in hospital.
- Let the mother put her baby to her breast as soon as he is well enough. He may only root for the nipple and lick it at first, or he may suckle a little. Continue giving expressed breast milk by cup to make sure the baby gets all that he needs.
- When a LBW baby starts to suckle effectively, he may pause during feeds quite often and for quite long periods. For example, he may take 4-5 sucks and then pause for up to 4 or 5 minutes.
- It is important not to take him off the breast too quickly. Leave him on the breast so that he can suckle again when he is ready.
- He can continue for up to an hour if necessary. Offer a cup-feed after the breastfeed.
- Make sure that the baby suckles in a good position. Good attachment may make effective suckling possible at an earlier stage.
- The best positions for a mother to hold her LBW baby at the breast are:
 - . across her body, holding him with the arm on the opposite side to the breast
 - . the underarm position.

- Ask participants to turn to page 66 of their Manuals to remind themselves of these positions. Continue with these points:
 - Low-birth-weight babies need to be followed up regularly to make sure that they are getting all the breast milk that they need.

V. Summarize the session

2 minutes

- Ask participants if they have any questions or if there are points you can make clearer.
- Make these points:
 - In this session, we discussed the importance of adequate feeding during illness and recovery.
 - We also discussed feeding of low-birth-weight babies.
- Point to the flip chart page and read out the Key Message:

Key Message 10: Encourage the child to drink and to eat during illness and provide extra food after illness to help the child recover quickly.
- Point to the flip chart with the 10 Key Messages listed. Explain to participants that they can find this list at the back of their Manuals.
- Explain that a summary of this session can be found on pages 237-240 of the Participant's Manual.

Further Information:

Low-birth-weight babies

Whenever possible, LBW babies should be under the care of a health worker with specialist training. However, this information may help you if specialist care is not easily available.

Time of first oral feed

If oral feeding is possible as soon as a baby is born, the first feed should be given within the first 2 hours, and every 2-3 hours thereafter to prevent hypoglycaemia (low blood sugar).

Until the mother has produced colostrum, give feeds of donated breast milk if available. If breast milk is not available, give glucose water or formula. Glucose water is not necessary for well, term babies who are not at risk of hypoglycaemia.

Cup-feeds

Cup-feeds give a baby valuable experience of taking food by mouth, and the pleasure of taste. They stimulate the baby's digestion. Many babies show signs of wanting to take things into their mouths at this stage, yet they are not able to suckle effectively at the breast.

Development of coordinated suckling

Babies can already swallow and suck long before 32 weeks. From about 32 weeks, many babies can suckle from the breast, and some can breastfeed fully from this age, but they may have difficulty in coordinating suckling, swallowing and breathing. They need to pause during a breastfeed to breathe. They can suckle effectively for a short time, but they often cannot suckle long enough to take all the breast milk that they need. By about 36 weeks, most babies can coordinate suckling and breathing, and they can take all that they need by breastfeeding.

Weight as a guide to feeding method

Gestational age is a better guide to a baby's feeding ability than weight. However, it is not always possible to know gestational age. Many babies start to take milk from the breast when they weigh about 1,300-1,500 grams. Many can breastfeed fully when they weigh about 1,600-1,800 grams or less.

Skin-to-skin contact and kangaroo care

Skin-to-skin contact between a mother (or father) and baby has been found to help both bonding and breastfeeding, probably because it stimulates the secretion of prolactin and oxytocin.

If a baby is too sick to move, contact can be between the mother's hand and the baby's body. If a baby is well enough, let his mother hold him next to her body. Usually the best place is between her breasts, inside her clothes. This is called *kangaroo care*. It has the following advantages:

- The warmth of the mother's body keeps her baby warm. He does not get cold, and he does not use up extra energy to keep warm. There is less need for incubators.
- The baby's heart works better, and he breathes more regularly.
- The baby cries less and sleeps better.
- It is easier to establish breastfeeding.

Session 38

Follow-up After Training

Objectives

After completing this session participants will be able to:

- describe the contents and arrangement of the table of competencies they are expected to acquire
- describe the components of the follow-up session
- list the tasks that they should complete for the follow-up session

Session outline

45 minutes

Participants are all together for a lecture presentation by one trainer

I.	Introduce the session	5 minutes
II.	Discuss the competencies expected of participants	20 minutes
III.	Discuss the follow-up session	5 minutes
IV.	Discuss the preparation for the follow-up session	10 minutes
V.	Summarize the session	5 minutes

Preparation

- Refer to the Introduction for guidance on how to give a lecture presentation. Study the notes for the session so that you are clear about what to do.
- Make sure that Slide 38/1 is ready. As there is only one slide, you might prefer to read aloud the objectives on Slide 38/1 without projecting them onto the screen.
- Prepare a flipchart with two columns. Write 'CONFIDENT' at the top of one column and 'NOT YET CONFIDENT' at the top of the other column.
- Ask participants to look at the TABLE OF COMPETENCIES starting on page 243 of their Manuals the night before this session. Ask them to tick the knowledge and skills that they feel confident about and put a cross by those that they feel they need more practice at.

As you follow the text, remember:

- Indicates an instruction to you, the trainer
 - Indicates what you say to participants.

I. Introduce the session**5 minutes**

- Show **Slide 38/1 - Session 38 Objectives** and read out the objectives:

38/1

Follow-up after training

After completing this session participants will be able to:

- describe the contents and arrangement of the table of competencies they are expected to acquire
- describe the components of the follow-up session
- list the tasks they should complete for the follow-up session

- Make these introductory points:

- In this session we will discuss the follow-up you will all receive after this training course.
- This follow-up is not an exam or a test. It is designed to help you to continue to practise the skills expected of participants, and to help you with any difficulties you may have come across in infant feeding when you return to your facilities.
- The trainer who comes to conduct this follow-up session might be one of the trainers who has facilitated on this course or another trainer whom you may not have met. However, it will be someone who is experienced in infant feeding counselling and who is a trainer on this course.

II. Discuss competencies**20 minutes**

- Ask participants to turn to page 243 of their Manuals and find the Table of Competencies they are expected to learn. (These competencies are in your Trainer's Guide on page 4 in the Introduction). They should have looked at this the previous evening.

- Make these points:
 - You will see a table of competencies. To become competent at something you need to have the relevant knowledge and also the relevant skills.
 - You will see that the table has three columns - a column for the competency, a column for the knowledge required and a column for the skills required.
 - Most people find that they obtain the 'knowledge' part of the competency more quickly than the 'skills' part.
 - The first competencies in the table are essential for managing many situations.
 - Looking down the table you may feel that you already have acquired much of the knowledge from attending this course.
 - However, you may feel that you need much more practice to develop the *skills* listed - for example the skill to cup-feed a low-birth-weight baby or the skill to measure the length of an infant, or the skill to gather information on complementary feeding using the FOOD INTAKE JOB AID, 6-23 MONTHS.
 - When you go back to your facility you will have the opportunity to practise many of these skills. The more you practise the more skilled you will become.
 - In addition, there is a list of exercises in the *Participant's Manual* describing situations where you have to correctly apply these competencies. The exercises are to be completed before the follow-up visit.

- Ask participants to take five minutes to look at the table. (The previous evening they put a tick by the knowledge and skills that they already feel confident about and put a cross by the knowledge and skills that they feel they need more practice at).

- After five minutes ask participants to list the knowledge and skills they feel confident about and the knowledge and skills they do not feel confident about yet. Write these on a flip chart under two headings: 'Confident' and 'Not Yet Confident.' Do not take too long over this.

- Make this point about competencies:
 - You can see from your table and where you have placed your ticks, which skills you may need to practise more. Try to make time when you return to your facility to practise these skills. All the knowledge you need for these competencies is in your *Participants Manual*.

III. Discuss the follow-up session**5 minutes** Make these points:

- The follow-up session will take place between 1-3 months after this training course.
- The follow-up session will take one full day. The trainer who is coming to assess you will make arrangements with your facility for this follow-up to occur.
- The morning will be practical sessions and the afternoon will be used to go over written exercises and to discuss any difficulties you have had. This is the time to discuss any difficult cases you may have seen.
- If there are several of you at one facility the afternoon discussion can take place together, but the practical assessments and written exercises will be individual.
- The competencies that you will be assessed on in the morning are all in the table you have in your Manual. You may be taken to the post-natal ward and asked to help a mother with a newborn baby to position and attach her baby. Or you may be asked to assess the growth of a child and counsel a mother on feeding and growth.

IV. Discuss the preparation for the follow-up session 10 minutes Make these points:

- There are some things you need to prepare for the follow-up session.
- Firstly there is a list of exercises for you that start on page 252 of your Manual. These are all exercises on breastfeeding difficulties so that you can practise applying the knowledge and counselling skills that you have learnt. Complete the answers in your Manual in pencil, as you have been doing during this course.
- During your follow-up session the trainer will go over these exercises individually with you.
- On page 248 of your Manuals you will find a log of skills to be completed. This log has three columns. There is one column for the date, one column for skills, and one column for any comments. When you practise a skill at your facility you should list the skill and write the date next to it and any comments. Remember the skills which you are expected to learn are on pages 243-247 of your Manual.
- So, for example. On the 1st July 2005 you practise the skill of assessing a breastfeed using the BREASTFEED OBSERVATION JOB AID. You would write the date in the first column and the skill in the second column.
- Perhaps you found that the mother was not holding her breast in the recommended way, but was using the scissor grip. You might have suggested to her that she tries to hold her breast in a different way. Note this down in the third column.
- Make particular notes of any difficult cases you have had to deal with so that you can discuss these with your trainer when she comes for follow-up.
- Finally on page 250 of your Manuals there is a place where you can note down any difficulties you have experienced in trying to implement what you have learnt during the course.
- For example, you may have had difficulty counselling mothers about complementary feeding practices because the clinic in which you work is too crowded and there are too few staff.

- You may have had difficulties trying to help mothers who have had a caesarean section to give the first breastfeed because their babies are kept in the nursery after delivery etc. These difficulties can be discussed with your trainer at the follow-up session.
- During the afternoon of the follow-up session the trainer will look at your log of skills with you and see which skills you have been able to practise.
- So you have three tasks to complete before the follow-up session:
 - To complete the exercises starting on page 252 of your manuals
 - To complete the log of skills you practise over the next few months
 - To complete the table of difficulties you come across in the organization of your work and the implementation the things you have learnt on this course.

V. Summarize the session

5 minutes

- Ask participants if they have any questions, and try to answer them.
- Make sure that everyone is clear about what is expected of them and that they understand the table of competencies. This concept will be new to many participants.
- Make these points:
 - You have now completed this course in infant feeding and growth assessment.
 - We have covered aspects of infant feeding from birth to two years of age, including an overview of special situations, such as mothers who are HIV-positive and low-birth-weight infants.
 - We have also covered aspects on growth assessment of children up to five years of age, including advice for mothers or caregivers of children with undernutrition or overweight.
 - It is important that you now continue revising the knowledge and practising the skills you have learnt, when you return to your facility.
 - You will be contacted about the date of the follow-up session at a time which suits both you and the facility.
- Explain that a summary of this session can be found on pages 241-266 of the *Participant's Manual*.

Glossary of Terms

Absorbed iron: This is the iron that passes into the body after it has been released from food during digestion. Only a small proportion of the iron present in food is absorbed. The rest is excreted in the faeces.

Accuracy: Correctness. The accuracy of a measurement depends on whether the instrument is correctly calibrated and whether the observer measures correctly (i.e. takes, reads, and records the measurement correctly).

Active encouragement: Assistance given to encourage a child to eat. This includes praising, talking to the child, helping the child put food on the spoon, feeding the child, making up games.

Afterpains: Contraction of the uterus during breastfeeding in the first few days after childbirth, due to oxytocin released.

AIDS: Acquired immune deficiency syndrome, which means that the HIV-positive person has progressed to active disease.

Allergy: Symptoms when fed even a small amount of a particular food (so it is not dose-related).

Alveoli: Small sacs of milk secreting cells in the breast.

Amenorrhoea: Absence of menstruation.

Anaemia: Lack of red cells or lack of haemoglobin in the blood.

Antenatal preparation: Preparing a mother for the delivery of her baby.

Antibodies: Proteins in the blood and in breast milk which fight infection.

Anti-infective factors: Factors which prevent or which fight infection. These include antibodies.

Appropriate touch: Touching somebody in a socially acceptable way.

Areola: Dark skin surrounding the nipple.

Artificial feeding: Feeding an infant on a breast-milk substitute.

Artificial feeds: Any kind of milk or other liquid given instead of breastfeeding.

Artificially fed: Receiving artificial feeds only, and no breast milk.

Asthma: Wheezing illness.

Attachment: The way a baby takes the breast into his mouth; a baby may be well attached or poorly attached to the breast.

Baby-friendly Hospital Initiative (BFHI): An approach to transforming maternity practices as recommended in the joint WHO/UNICEF statement on Protecting, promoting and supporting breastfeeding: the special role of maternity services (1989).

Baby-led feeding: See demand feeding.

Bedding-in: A baby sleeping in bed with his mother, instead of in a separate cot.

Bilirubin: Yellow breakdown products of haemoglobin which cause jaundice.

Blocked duct: A milk duct in the breast becoming blocked with thickened milk, so that the milk in that part of the breast does not flow out.

BMI: body mass index; a number that indicates a person's weight in proportion to height/length, calculated as kg/m².

BMI-for-age: a growth indicator that relates BMI to age.

Bonding: Mother and baby developing a close loving relationship.

Bottle-feeding: Feeding an infant from a bottle, whatever is in the bottle, including expressed breast milk, water, formula, etc.

Breast pumps: Devices for expressing milk.

Breast refusal: A baby not wanting to suckle from his mother's breast.

Breastfeeding support: A group of mothers who help each other to breastfeed.

Breast-milk substitute: Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not it is suitable for that purpose.

Calibrate: to check a measuring instrument for accuracy and adjust if necessary and possible.

Calories: Kilocalories or Calories measure the energy available in food.

Candida: Yeast which can infect the nipple, and the baby's mouth and bottom. Also known as 'thrush'.

Care for development: care intended to stimulate emotional, intellectual, and motor development.

Casein: Protein in milk which forms curds.

Cessation of breastfeeding: Completely stopping breastfeeding, including suckling.

Chapati: A flat bread made by mixing whole wheat flour with water and then shaping pieces of the dough into flat circles and baking on a griddle (hot metal sheet). Traditionally eaten in India and Pakistan.

Cleft lip or palate: Abnormal division of the lip or palate.

Closed questions: Questions which can be answered with 'yes' or 'no'.

Colic: Regular crying, sometimes with signs suggesting abdominal pain, at a certain time of day; the baby is difficult to comfort but otherwise well.

Cold compress: Cloths soaked in cold water to put on the breast.

Colostrum: The special breast milk that women produce in the first few days after delivery; it is yellowish or clear in colour.

Confidence: Believing in yourself and your ability to do things.

Contaminated: Containing harmful bacteria or other harmful substances.

Commercial infant formula: A breast-milk substitute formulated industrially in accordance with applicable *Codex Alimentarius* standards to satisfy the nutritional requirements of infants during the first months of life up to the introduction of complementary foods.

Complementary feeding: The process of giving an infant food in addition to breast milk or infant formula, when either becomes insufficient to satisfy the infant's nutritional requirements.

Complementary food: Any food, whether manufactured or locally prepared, used as a complement to breast milk or to a breast-milk substitute.

Counselling: A way of working with people so that you understand their feelings and help them to develop confidence and decide what to do.

Cup-feeding: Feeding from an open cup without a lid, whatever is in the cup.

Deficiency: Shortage of a nutrient that the body needs.

Dehydration: Lack of water in the body.

Demand feeding: Feeding a baby whenever he shows that he is ready, both day and night. This is also called 'unrestricted' or 'baby-led' feeding.

Distraction (during feeding): A baby's attention easily taken from the breast by something else, such as a noise.

Ducts, milk ducts: Small tubes which take milk to the nipple.

Dummy: Artificial nipple made of plastic for a baby to suck. Also known as a pacifier/soother.

Early contact: A mother holding her baby during the first hour or two after delivery.

Eczema: Skin condition, often associated with allergy.

Effective suckling: Suckling in a way which removes the milk efficiently from the breast.

Empathize: Show that you understand how a person feels from her point of view.

Engorgement: Swollen with breast milk, blood and tissue fluid. Engorged breasts are often painful and oedematous and the milk does not flow well.

Essential fatty acids: Fats which are essential for a baby's growing eyes and brain, which are not present in cow's milk or most brands of formula.

Exclusive breastfeeding: An infant receives only breast milk and no other liquids or solids, not even water, with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

Expressed breast milk (EBM): Milk that has been removed from the breasts manually or by using a pump.

Express: To squeeze or press out.

Family foods: Foods that are part of the family meals.

Feeding history: All the relevant information about what has happened to a mother/caregiver and baby, and how their present feeding situation developed.

Fermented foods: Foods that are soured. For example, yoghurt is fermented milk. These substances can be beneficial and kill pathogens that may contaminate food.

Fissure: Break in the skin, sometimes called a 'crack'.

Flat nipple: A nipple which sticks out less than average.

Foremilk: The watery breast milk that is produced early in a feed.

Formula: Artificial milks for babies made out of a variety of products, including sugar, animal milks, soybean, and vegetable oils. They are usually in powder form, to mix with water.

Fortified foods: These are foods that have certain nutrients added to improve their nutritional quality.

Full breasts: Breasts which are full of milk, and hot, heavy and hard, but from which the milk flows.

Gastric suction: Sucking out a baby's stomach immediately after delivery.

Germinated seeds/flour: Seeds that have been soaked and allowed to sprout. The sprouted seeds can be dried and milled to make germinated flour. If a little of this flour is added to warm thick porridge it makes the porridge soft and easy to eat. Germinated seeds are easier to digest than ungerminated seeds.

Gestational age: the number of weeks of pregnancy.

Ghee: Butter that has been heated so that the fat melts and the water evaporates. It looks clear. It can be made from cow or buffalo milk and is widely used in India. In the Middle East it is called *samna*.

Gross motor development: development of movement and body control related to use of the larger muscles (e.g. development of crawling and walking skills), as contrasted with fine motor development (e.g. use of hands and fingers to grasp small objects). See *gross motor milestones below*.

Gross motor milestones: important achievements related to movement and body control, including sitting without support, standing with assistance, hands-and-knees crawling, walking with assistance, standing alone, and walking alone.

Growth factors: Substances in breast milk which promote growth and development of the intestine, and which probably help the intestine to recover after an attack of diarrhoea.

Growth spurt: Sudden increased hunger for a few days.

Gruel: Another name for thin porridge. Examples are *atole* in Central America, *uji* in East Africa.

Gulp: Loud swallowing sounds, due to swallowing a lot of fluid.

'High needs' babies: Babies who seem to need to be carried and comforted more than other babies.

Hindmilk: The fat-rich breast milk that is produced later in a feed.

HIV: Human immunodeficiency virus, which causes AIDS (acquired immune deficiency syndrome).

HIV-infected: Refers to a person infected with HIV, but who may not know that he/she is infected.

HIV-negative: Refers to people who have taken a test with a negative result and who know their result.

HIV-positive: Refers to persons who have taken an HIV test, whose results have been confirmed and who know and/or their parents know that they tested positive.

HIV-status unknown: Refers to people who have not taken an HIV test or who do not know the result of their test.

HIV testing and counselling: Testing for HIV status, preceded and followed by counselling. Testing should be voluntary and confidential, with fully informed consent. The expression means the same as the terms: *counselling and voluntary testing, voluntary counselling and testing, and voluntary and confidential counselling and testing*. Counselling is a process, not a one-off event: for the HIV-positive client it should include life planning, and, if the client is pregnant or has recently given birth, it should include infant-feeding considerations.

Hormones: Chemical messengers in the body.

Infant: A child not more than 12 months of age.

Infant feeding counselling: Counselling on breastfeeding, on complementary feeding, and, for HIV-positive women, on HIV and infant feeding.

Infantometer: a board designed to be placed on a horizontal surface to measure length (lying down) of a child less than 2 years old.

Immune system: Those parts of the body and blood, including lymph glands and white blood cells, which fight infection.

Immunity: A defence system that the body has to fight diseases.

Ineffective suckling; Suckling in a way which removes milk from the breast inefficiently or not at all.

Infective mastitis: Mastitis due to bacterial infection.

Inhibit: To reduce or stop something.

Inspection: Examining by looking.

Intolerance (of food): Inability to tolerate a particular food.

Inverted nipple: A nipple which goes in instead of sticking out, or which goes in when the mother tries to stretch it out.

Jaggery: Brown sugar made from the sap of the palm flower. It is widely used in the Indian subcontinent.

Jaundice: Yellow colour of eyes and skin.

Judging words: Words which suggest that something is right or wrong, good or bad.

Kwashiorkor: a form of severe undernutrition referred to alternatively as oedematous malnutrition. Symptoms may include oedema; thin, sparse or discoloured hair; and skin with discoloured patches that may crack and peel.

Lactation: The process of producing breast milk.

Lactation Amenorrhoea Method (LAM): Using the period of amenorrhoea after childbirth as a family planning method.

Lactose: The special sugar present in all milks.

Length/height-for-age: a growth indicator that relates length or height to a child's age.

Lipase: Enzyme to digest fat.

Low-birth-weight (LBW): Weighing less than 2.5 kg at birth.

Marasmus: a form of severe undernutrition referred to alternatively as nonoedematous malnutrition. A child with marasmus is severely wasted and has the appearance of “skin and bones.”

Mastitis: Inflammation of the breast (see also infective and non-infective mastitis).

Matooke: Green banana.

Mature milk: The breast milk that is produced a few days after birth.

Median: the middle value in a rank-ordered series of values.

Median duration of breastfeeding: The age in months when 50% of children are no longer breastfed.

Micronutrients: nutrients such as vitamins and minerals present in foods in small amounts, needed by the body for growth and prevention of infections.

Micronutrient supplements: Preparations of vitamins and minerals.

Milk ejection: Milk flowing from the breast due to the oxytocin reflex, which is stimulated in response to the sight, touch or sound of the baby.

Milk stasis: Milk staying in the breast and not flowing out.

Mistaken idea: An idea that is incorrect.

Milk expression: Removing milk from the breasts manually or by using a pump.

Mixed feeding: Feeding both breast milk and other foods or liquids.

Montgomery's glands: Small glands in the areola which secrete an oily liquid.

Multiple birth: birth of more than one child at the same time, e.g. twins.

Natural (passive) immunity: Is the protection a baby inherits from his/her mother.

‘Nipple confusion’: A term sometimes used to describe the way babies who have fed from a bottle may find it difficult to suckle effectively from a breast.

Nipple sucking: When a baby takes only the nipple into his mouth, so that he cannot suckle effectively.

Non-infective mastitis: Mastitis due to milk leaking out of the alveoli and back into the breast tissues, with no bacterial infection.

Non-verbal communication: Showing your attitude through your posture and expression.

Nutrients: Substances the body needs that come from the diet. These are carbohydrates, proteins, fats, minerals and vitamins.

Nutritional needs: The amounts of nutrients needed by the body for normal function, growth and health.

Mother-to-child transmission: Transmission of HIV to a child from an HIV-infected woman during pregnancy, delivery or breastfeeding.

Mother-support group: A community-based group of women providing support for optimal breastfeeding and complementary feeding.

Obese: severely overweight; weight-for-length/height or BMI-for-age above the 3 z-score line.

Obesity: the condition of being obese.

Oedema: swelling due to excess fluid in the tissues.

Offal/organs: Liver, heart, kidneys, brain, intestines, blood.

Open questions: Questions which can only be answered by giving information, and not with just a 'yes' or a 'no'.

Overweight; weighing too much for one's length/height; weight-for-length/height or BMI-for-age above the 2 z-score line.

Oxytocin: The hormone which makes the milk flow from the breast.

Pacifier: Artificial nipple made of plastic for a baby to suck, a dummy.

Palpation: Examining by feeling with your hand.

Partially breastfed: Breastfed and given some artificial feeds.

Pasteurized: Food (usually milk) made safe by heating it to destroy disease-producing pathogens.

Pathogen: Any organism that causes disease.

Perinatal: around the time of birth.

Perpendicular: positioned at a right angle (90° angle).

Persistent diarrhoea: Diarrhoea which starts like an acute attack, but which continues for more than 14 days.

Pesticides: Substances (usually sprays) used by farmers to prevent pests from attacking crops.

Phytates: Substances present in cereals, especially in the outer layer (bran), and in peas, beans and nuts. Phytates combine with iron, zinc and calcium in food to form substances that the body cannot absorb. Eating foods containing vitamin C helps protect iron from the adverse effect of phytates.

Pneumonia: Infection of the lungs.

Poorly protractile: Used to describe a nipple which is difficult to stretch out to form a `teat'.

Porridge: Is made by cooking cereal flour with water until it is smooth and soft. Grated cassava or other root, or grated starchy fruit can also be used to make porridge.

Positioning: How a mother holds her baby at her breast; the term usually refers to the position of the baby's whole body.

Postnatal check: Routine visit to a health facility after a baby is born.

Precision: the smallest exact unit that an instrument can measure. For example, the UNISCALE measures with precision to the nearest 0.1 kg.

Predominantly breastfed: Breastfed as the main source of nourishment, but also given small amounts of non-nutritious drinks such as tea, water and water-based drinks.

Prelacteal feeds: Artificial feeds given before breastfeeding is established.

Premature, preterm: Born before 37 weeks gestation.

Prolactin: The hormone which makes the breasts produce milk.

Protein: Nutrient necessary for growth and repair of the body tissues.

Protractile: Used to describe a nipple which is easy to stretch out.

Psychological: Mental and emotional.

Pulses: Peas, lentils, beans and groundnuts.

Puree: Food that has been made smooth by passing through a sieve or mashing with a fork, pestle or other utensil.

Quinoa: A cereal grown at high altitude in the Andes in South America.

Recumbent: lying down.

Reflect back: Repeat back what a person says to you, in a slightly different way.

Reflex: An automatic response through the body's nervous system.

Rejection of baby: The mother not wanting to care for her baby.

Relactation: Re-establishing breastfeeding after a mother has stopped, whether in the recent or distant past.

Replacement feeding: The process of feeding a child who is not receiving any breast milk with a diet that provides all the nutrients the child needs until the child is fully fed on family foods. During the first six months this should be with a suitable breast-milk substitute. After six months it should be with a suitable breast-milk substitute, as well as complementary foods made from appropriately prepared and nutrient-enriched family foods.

Responsive feeding: Feeding infants directly and assisting older children when they feed themselves, being sensitive to their hunger and satiety cues.

Restricted breastfeeds: When the frequency or length of breastfeeds is limited in any way.

Retained placenta: A small piece of the placenta remaining in the uterus after delivery.

Rooming-in: A baby staying in the same room as his mother.

Rooting: A baby searching for the breast with his mouth.

Rooting reflex: A baby opening his mouth and turning to find the nipple.

Rubber teat: The part of a feeding bottle from which a baby sucks.

Scissor hold: Holding the breast between the index and middle fingers while the baby is feeding.

SD score: standard deviation score. See *z-score*.

Symmetrical: the same (mirror images) on opposite sides separated by a straight line.

Secrete: Produce a fluid in the body.

Self-weaning: A baby more than one year old deciding by himself to stop breastfeeding.

Sensory impulses: Messages in nerves which are responsible for feeling.

Silver nitrate drops: Drops put into a baby's eyes to prevent infection with gonococcus or chlamydia.

Skin-to-skin contact: A mother holding her naked baby against her own skin.

Sore nipples: Pain in the nipple and areola when the baby feeds.

'Spillover': A term used to designate the feeding behaviour of new mothers who either know that they are HIV-negative or are unaware of their HIV status – they do not breastfeed, or they breastfeed for a short time only, or they mix-feed, because of unfounded fears about HIV or of misinformation or of the ready availability of breast-milk substitutes.

Stadiometer: a board for measuring the standing height of children age 2 years or older.

Stagnation: staying the same. A flat growth line indicates stagnation of growth.

Stunted: short for one's age; length/height-for-age below the -2 z-score line. **Severely stunted** is below the -3 z-score line.

Sucking: Using negative pressure to take something into the mouth.

Sucking reflex: The baby automatically sucks something that touches his palate.

Suckling: The action by which a baby removes milk from the breast.

Supplements: Drinks or artificial feeds given in addition to breast milk

Support: Help.

Sustaining: Continuing to breastfeed up to 2 years or beyond; helping breastfeeding mothers to continue to breastfeed.

Swallowing reflex: The baby automatically swallows when his mouth fills with fluid.

Sympathize: Show that you are sorry for a person, from your point of view.

Tare: as used in these modules, to store a weight in the memory of a scale so that an additional weight can be registered independently. In **tared weighing**, the scale is re-set to zero while an adult is still standing on it; when the adult is then given a child to hold, only the child's weight appears.

Taring scale: a scale that can be re-set to zero while someone (who has just been weighed) is still standing on it. When she then holds a child on the scale, only the child's weight appears.

Tarwi: A bean grown in the Andes in South America.

'Teat': Stretched out breast tissue from which a baby suckles.

Term: a birth occurring at 37–41 completed weeks of pregnancy. A **pre-term** birth is early (i.e. before 37 weeks). A post-term birth is late (i.e. at or after 42 weeks).

Thrush: Infection caused by the yeast *Candida*; in the baby's mouth, thrush forms white spots

Tortilla: A flat breads made by mixing maize flour and water and then making the dough into a thin round shape. It is cooked on a hot metal griddle. Traditionally eaten in Central America. Wheat flour can also be used.

Toxin: A poisonous substance.

Undernourished: any of the following:

- underweight or severely underweight (below the -2 or -3 z-score line in weight-for-age)
- wasted or severely wasted (below the -2 or -3 z-score line in weight-for-length/height or BMI-for-age)
- stunted or severely stunted (below -2 or -3 z-score line in length/height for age). But if overweight or trending toward overweight, the child is no longer considered as primarily undernourished.

PRACTICAL DISCUSSION CHECKLIST

Practical skills are best developed by introducing and demonstrating the skills, observing participants as they practise the skills, and giving feedback to participants on how well they performed. Feedback should include praising participants for things done well, and giving gentle suggestions for how to overcome difficulties. Use the checklist below to help guide your feedback discussions.

Questions to ask after each participant completes his/her turn practising (either in the clinic or using counselling stories)

To the participant who practised:

- What did you do well?
- What difficulties did you have?
- What would you do differently in the future?

To the participants who observed:

- What did the participant do well?
- What difficulties did you observe?

Listening and learning skills (give feedback on the use of these skills in all practical sessions)³¹

- Which listening and learning skills did you use?
- Was the mother willing to talk?
- Did the mother ask any questions? How did you respond?
- Did you empathize with the mother? Give an example.

Confidence and support skills (give feedback on the use of these skills during practical sessions after Session 12)

- Which confidence and support skills were used?
(check especially for praise and for two relevant suggestions)
- Which skills were most difficult to use?
- What was the mother's response to your suggestions?

Key messages for complementary feeding (give feedback on the use of these skills in practical Session 35)³²

- Which messages for complementary feeding did you use?
(check especially for "only a few relevant messages")
- What was the mother's response to your suggestions?

General questions to ask at the end of each practical session (in the clinic or using counselling stories)

- What special difficulties or situations helped you to learn?
- What was the most interesting thing that you learned from this practical session?

³¹ See list of skills on the following page

³² See list of key messages on the following page

COUNSELLING SKILLS

Listening and learning skills:

- Use helpful non-verbal communication.
- Ask open questions.
- Use responses and gestures that show interest.
- Reflect back what the mother/caregiver says.
- Empathize - show that you understand how she/he feels.
- Avoid words that sound judging.

Building confidence and giving support skills:

- Accept what the caregiver thinks and feels.
- Recognize and praise what a mother/caregiver and child are doing right.
- Give practical help
- Give relevant information.
- Use simple language.
- Make one or two suggestions, not commands

KEY MESSAGES FOR COMPLEMENTARY FEEDING

1. Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.
2. Starting other foods in addition to breast milk at 6 months helps a child to grow well.
3. Foods that are thick enough to stay in the spoon give more energy to the child.
4. Animal-source foods are especially good for children to help them grow strong and lively.
5. Peas, beans, lentils, nuts and seeds are good for children.
6. Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections.
7. A growing child needs 2-4 meals a day plus 1-2 snacks if hungry: give a variety of foods.
8. A growing child needs increasing amounts of food.
9. A young child needs to learn to eat: encourage and give help... with lots of patience.
10. Encourage the child to drink and to eat during illness and provide extra food after illness to help the child recover quickly.

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