



Infant and Young Child Feeding Participant's Manual

Ministry of Health & Social Welfare – Lesotho Government

2010

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Introduction to the course

Why this course is needed

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) jointly developed the Global Strategy for Infant and Young Child Feeding (IYCF) to revitalize the world's 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 (WHO and UNICEF, 2002). The Global Strategy is intended as a guide for action; it is based on accumulated evidence of the significance of the early months and years of life on growth and development.

The Government of Lesotho has adopted the Global Strategy for IYCF and recognizes the impact that feeding practices have on the nutritional status, growth, development, health, and survival of infants and young children. The IYCF guidelines recommend the protection, promotion, and support of exclusive breastfeeding for 6 months. For infants older than 6 months, the guidelines call for provision of safe and appropriate complementary foods with continued breastfeeding until 2 years of age or beyond. However, many children are not fed in the recommended way. Many mothers who initiate breastfeeding satisfactorily 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 6 months of life, do not receive adequate complementary foods, which puts them at risk of malnutrition.

Poor nutritional status is currently one of the most important health and welfare problems in Lesotho. At the national level, nearly 42% of children younger than 5 years are stunted¹. Nearly half of children are receiving liquids and solid foods prematurely at 2 months. Conversely, 30% of children aged 6 to 7 months are still consuming a liquid diet at an age when solid foods should form an important part of their diet. Results from the 2004 National Demographic and Health Survey indicate that 23.2% of adults aged 15 to 49 in Lesotho are infected with HIV. HIV prevalence among pregnant women is 27%. Suboptimal IYCF practices increase the risk of mother-to-child HIV transmission.

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 give, and good feeding practices are often a greater determinant of malnutrition than the availability of food. Hence, there is an urgent need to train all those involved in infant feeding counselling in the skills needed to support and protect breastfeeding and good complementary feeding practices.

Messages about infant feeding have become confused over recent years with the HIV pandemic. In Lesotho, the Ministry of Health and Social Welfare is finalising the *National Infant and Young Child Feeding Policy*, indicating that HIV-positive women should be counselled to make a fully informed decision about how best to feed their infants, and supported to carry out the method of their choice. This policy also emphasises the need to protect, promote, and support breastfeeding. There is an urgent need to train health workers to counsel women about infant feeding, according to this policy.

This 5-day *Infant and Young Child Feeding Curriculum for Health Workers* is based on WHO and UNICEF's *Infant and Young Child Feeding Counselling: An Integrated Course*. Given the urgency of training large numbers of health workers and counsellors, this integrated course has been adapted to respond to the specific needs in Lesotho by training those who

¹ National Nutrition Survey, 2007.

care for mothers and young children in the basics of good infant and young child feeding. Counselling is an extremely important part of this course, and the course will focus on practicing using job aids to improve counselling skills.

Course objectives

After completing this course, participants will be able to counsel and support mothers to carry out nationally recommended feeding practices for their infants and young children from birth up to 24 months of age. In addition, participants will be able to counsel and support HIV-infected mothers to choose and carry out an appropriate feeding method for the first 2 years of life. Each session of this course has a set of learning objectives.

Target audience

This course is aimed at the following groups of people:

- Dieticians and nutritionists.
- Doctors and nurses.
- Counsellors.
- Other health personnel.
- Health educators.

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

Materials

The following materials are included in this manual:

- BREASTFEEDING OBSERVATION JOB AID (Sessions 4, 6, and 7).
- Role plays (Sessions 4, 5, 9, and 18).
- COUNSELLING SKILLS CHECKLIST (Sessions 6, 9, 19, and 34).
- HOW TO HELP A MOTHER TO POSITION HER BABY (Session 7).
- Lesotho growth charts for boys and girls (Session 8).
- Growth charts with standard curves (Session 8).
- Demonstrations (Sessions 7, 9, 10, 12, 17, 18, 19, 23, 26, 32, 33, 35, and 36).
- GUIDE FOR EVALUATING INFANT FEEDING, 0–6 MONTHS (Session 10).
- Counselling stories 1–4 (Session 19).
- Five keys to safer food.
- ASSESS YOUR PRACTICES handout (Session 27).
- FEEDING RECOMMENDATIONS FOR THE FIRST 2 YEARS (Session 28).
- WHAT IS IN THE BOWL? handout (Session 29).
- Exercise: Amounts to offer (Session 30).
- QUANTITIES OF FOOD TO OFFER A YOUNG CHILD FOR A MEAL (Sessions 30 and 36).
- FOOD INTAKE REFERENCE TOOL, 6–24 MONTHS (Session 32).
- Instructions to complete the FOOD INTAKE JOB AID, 6–24 MONTHS (Session 32).
- FOOD INTAKE JOB AID, 6–24 MONTHS (Sessions 32 and 34).
- Stories for food intake practice (Session 32).
- Exercise: Preparing a young child's meal (Session 36).

Session 1: Introduction to infant and young child feeding

Learning objectives

After completing this session, participants will be able to:

- Describe the *National Infant and Young Child Feeding (IYCF) Policy*.
 - Explain how the *National IYCF Policy* applies to their work.
 - State the current recommendations for feeding children 0–24 months of age.
 - Define exclusive breastfeeding.
 - Define complementary feeding.
-

National Infant and Young Child Feeding Policy

The following are the major topics described in the *National IYCF Policy*:

1. Antenatal care practices.
2. Labour and delivery practices.
3. Optimal IYCF practices for the general population.
4. Feeding in difficult situations (including emergencies).
5. Complementary foods (timely, adequate, safe, and properly fed).
6. Training and capacity-building of service providers.
7. Community involvement and participation.
8. Creating an enabling environment for infant and young child feeding.

Exclusive breastfeeding

Exclusive breastfeeding is feeding an infant with breastmilk (including expressed breastmilk) only, without any other food or drink, not even water. However, drops of syrups consisting of vitamins, mineral supplements, or medicines can be given when medically prescribed.

Exclusive breastfeeding provides the ideal food for healthy growth and development of infants, and it is all that a child needs for the first 6 months.

Almost 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 training, you will start to develop these skills, or build on skills you are already using in your daily work.

Complementary feeding

After 6 months of age, all babies require other foods in addition to breastmilk—we call these foods **complementary foods**. When complementary foods are introduced, breastfeeding should still continue until 2 years of age or beyond.

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 or teats.

Session 2: Why breastfeeding is important

Learning objectives

After completing this session, participants will be able to:

- Explain why breastfeeding is important.
- List advantages and disadvantages of breastfeeding.
- Describe the difference between breastfeeding and replacement feeding.

The importance of breastfeeding

Understanding why breastfeeding is important can help you to support mothers who may have doubts about exclusive breastfeeding.

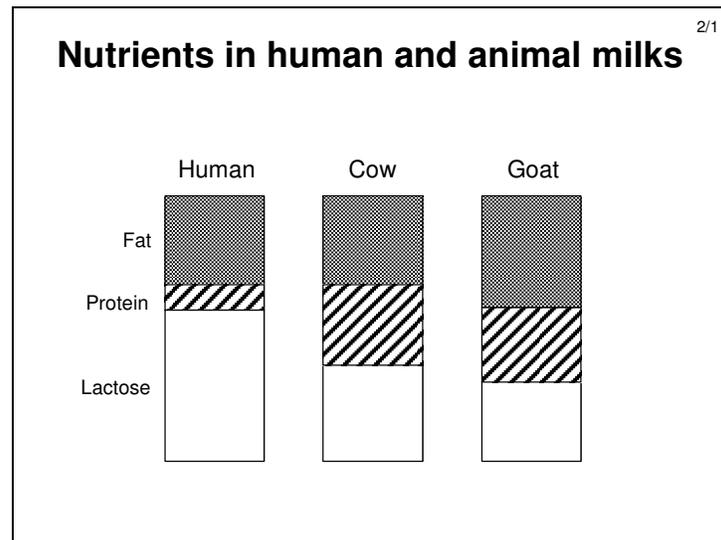
Advantages for babies	Advantages for mothers	Advantages for families and communities	Advantages for the country
<p>Colostrum</p> <ul style="list-style-type: none"> • Defends against infection • High in protein • First immunisation <p>Breastmilk</p> <ul style="list-style-type: none"> • Supplies all necessary nutrients in proper proportion • Digests easily without causing constipation • Protects against diarrhoea • Provides antibodies that protect against common illnesses • Protects against infection, including ear infections • During illness, helps keep baby well-hydrated • Reduces the risk of developing allergies • Is always ready at the right temperature • Increases mental development • Prevents hypoglycaemia (low blood sugar) • Promotes proper jaw, teeth, and speech development • Is comforting to fussy, overtired, ill, or hurt baby <p>Early skin-to-skin contact</p> <ul style="list-style-type: none"> • Stabilizes the baby's temperature • Promotes bonding 	<ul style="list-style-type: none"> • Reduces blood loss after birth (early/immediate breastfeeding) and helps expel the placenta • Saves time and money • Makes night feedings easier • Delays return of fertility • Reduces the risk of breast and ovarian cancer • Is available 24 hours a day • Ensures close physical contact • Makes mother calmer and more relaxed because of hormones 	<ul style="list-style-type: none"> • Is economical • Is accessible • Needs no preparation • Reduces cost for medicines for sick baby • Delays new pregnancy • Reduces time lost from work caring for a sick child 	<ul style="list-style-type: none"> • Reduces land pollution • Cuts down medication budget • Reduces morbidity and mortality • Improves children's IQ and reduces repeated classes (cuts down on education budget) • Intelligent and productive human resource

Disadvantage of breastfeeding

If a mother is HIV positive, her baby is exposed to HIV as long as the mother breastfeeds. This point will be discussed in greater detail in later sections.

The differences between breastfeeding and replacement feeding

Slide 2/1. Nutrients in human and animal milks.

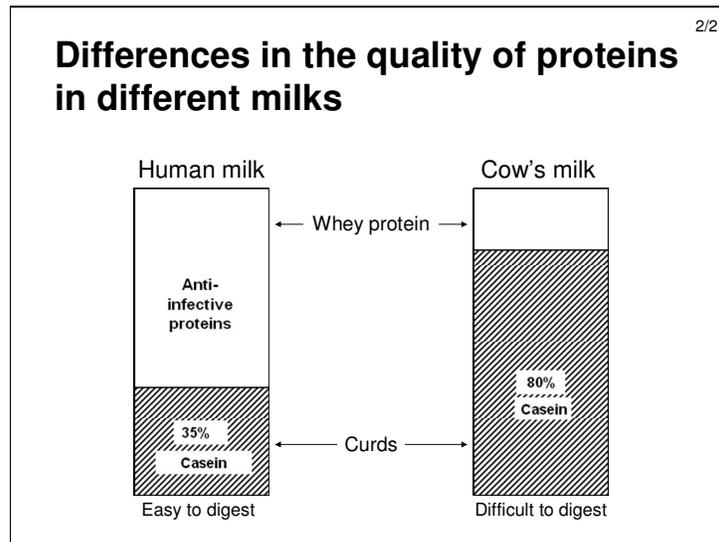


Formulas are made from a variety of products, including animal milks, soybean, and vegetable oils. Although they have been adjusted so that they are more like human milk, they are still far from perfect for babies.

In order to understand the composition of formula, we need to understand the differences between animal and human milk and how animal milks need to be modified to produce formula. This chart compares the nutrients in breastmilk 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.

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.

Slide 2/2. Differences in the quality of proteins in different milks.



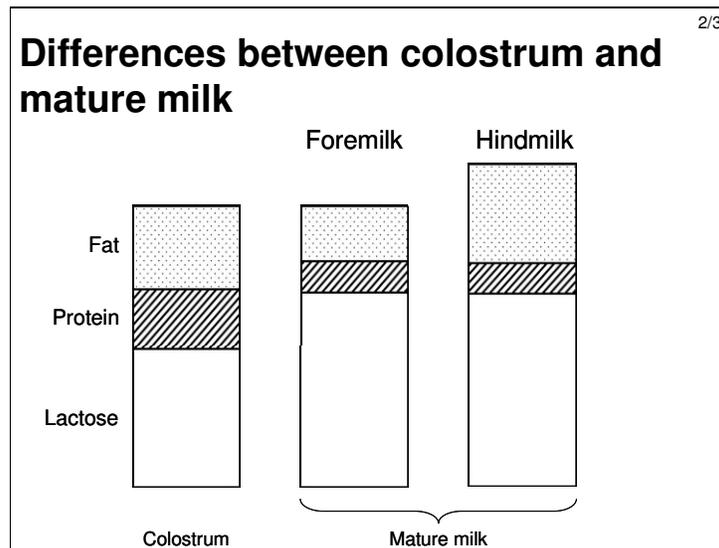
The protein in different milks varies in quality, as well as in quantity. Although the quantity of protein in cow's milk can be modified to make formula, the quality of proteins cannot be changed.

This chart shows that much of the protein in cow's milk is casein. Casein forms thick, indigestible curds in a baby's stomach.

Human milk contains more whey proteins. The whey proteins contain anti-infective proteins which help to protect a baby against infection.

Babies who are fed formula 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.

Slide 2/3. Differences between colostrum and mature milk.



Colostrum is the special breastmilk 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.

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 6 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. 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.

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 immunisation against many of the diseases that a baby meets after delivery.

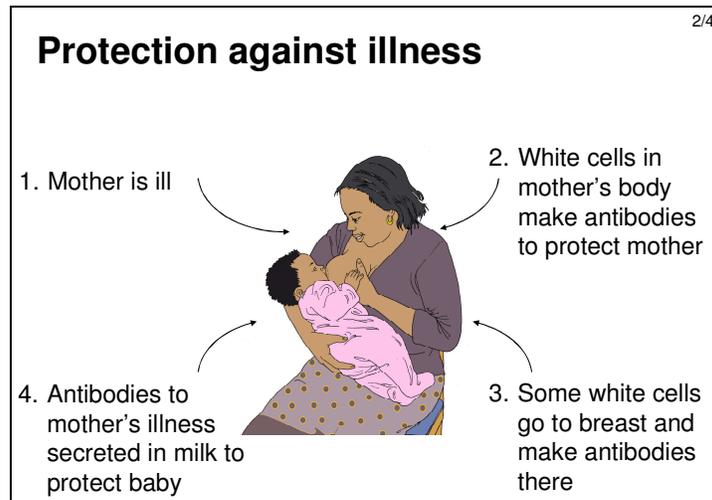
Colostrum has a mild purgative effect, which helps to clear the baby's gut of meconium (the first dark stools). This clears bilirubin from the gut, and helps to prevent jaundice from becoming severe.

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. Other feeds given before a baby has colostrum are likely to cause allergy and infection.

Slide 2/4. Protection against illness.



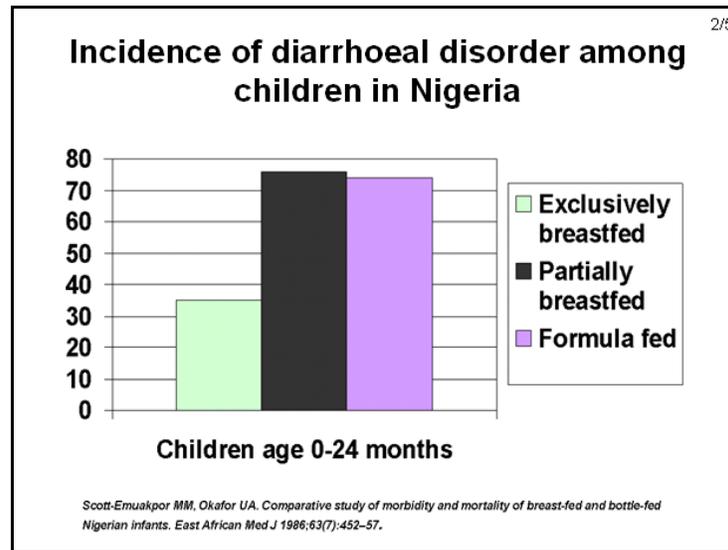
Breastmilk contains white blood cells and a number of anti-infective factors, which help to protect a baby against many infections. Breastmilk also contains antibodies against infections that the mother has had in the past.

This diagram shows that when a mother develops an illness (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). These antibodies are secreted in her breastmilk to protect her baby (4).

So a baby should not be separated from his mother when she has an infection, because her breastmilk protects him against the infection. Other studies have shown that breastfeeding also protects babies against other infections (for example, ear infections, meningitis, and urinary tract infections).

The composition of breastmilk is not always the same. It changes according to the age of the baby, and from the beginning to the end of a feed, as we saw in Slide 2/3 that shows the differences between foremilk and hindmilk.

Slide 2/5. Incidence of diarrhoeal disorder by feeding method among children in Nigeria².



This chart shows how breastfeeding protects a baby against diarrhoea. The chart shows the main findings of a study from Nigeria. It compares how babies fed in different ways get diarrhoea. The bars show what percentage of babies had diarrhoea. The bar on the left is for babies who were exclusively breastfed. The bar is smaller because exclusively breastfed babies are much less likely to get diarrhoea. The bar on the right is for babies who were fed formula and is much taller, because these babies were more likely to get diarrhoea than babies fed only on breastmilk. The bar in the middle is for babies who were given breastmilk and other feeds or fluids. These babies were as likely to get diarrhoea as were formula-fed babies.

Babies who are not exclusively breastfed get diarrhoea more often, partly because artificial feeds lack anti-infective factors, and partly because artificial feeds are often made with ingredients and utensils that are contaminated with harmful bacteria.

Psychological benefits of breastfeeding

In addition to health benefits, there are many psychological benefits of breastfeeding.

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-birthweight babies fed breastmilk 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.

² Scott-Emuakpor MM, Okafor UA. Comparative study of morbidity and mortality of breast-fed and bottle-fed Nigerian infants. *East African Med J*. 1986; 63(7):452-57.

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, as well as 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.

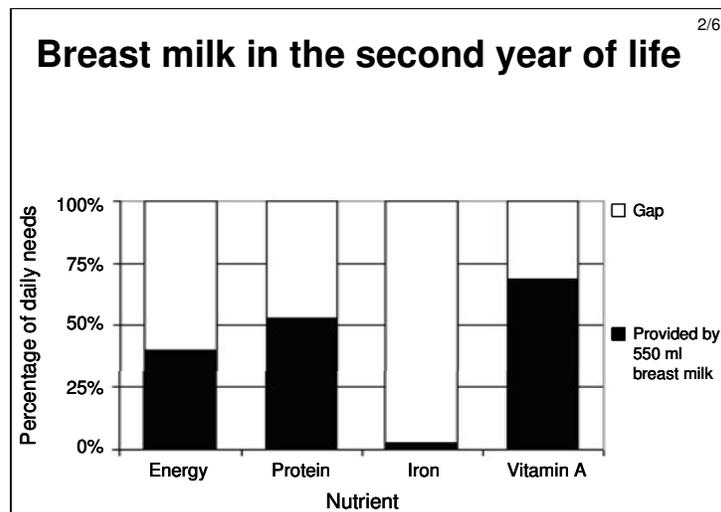
A mother who does not breastfeed may become pregnant sooner. She is more likely to become anaemic after childbirth, and later to develop cancer of the ovary and the breast.

Artificial feeding is harmful for children and their mothers.

Breastmilk in the second year of life

For the first 6 months of life, exclusive breastfeeding can provide all the nutrients and water that a baby needs. From the age of 6 months, breastmilk is no longer sufficient by itself. In Session 1, we discussed how all babies need complementary foods after completing 6 months, in addition to breastmilk. However, breastmilk continues to be an important source of energy and high-quality nutrients beyond 6 months of age. We will discuss this in more detail in the sessions on complementary feeding.

Slide 2/6. Breastmilk in the second year.



This chart shows how much of a child's daily energy and nutrient needs can be supplied by breastmilk during the second year of life.

Breastmilk can provide about one-third of the energy and half of the protein a child needs in the second year of life.

Session 3: How breastfeeding works

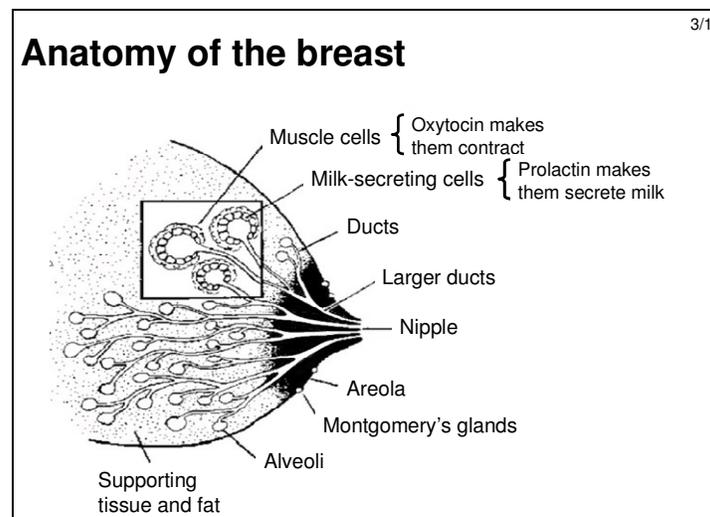
Learning objectives

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 breastmilk 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.

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.

Slide 3/1. Anatomy of the breast.



This diagram shows the anatomy of the breast.

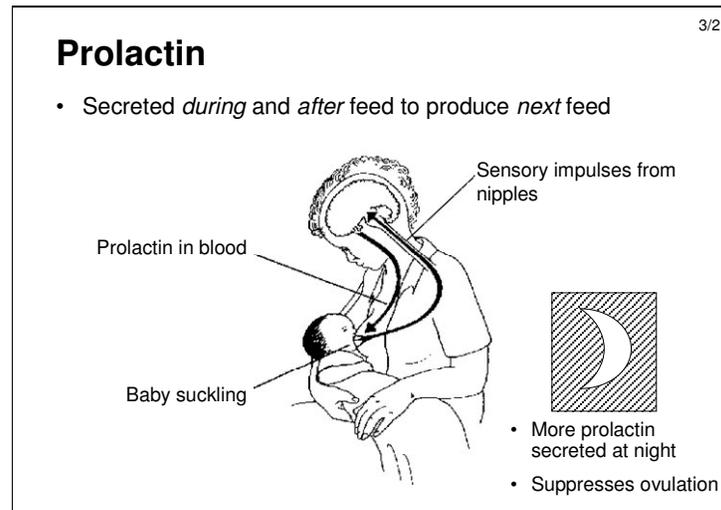
First, look at the nipple, and the dark skin called the areola which surrounds it. In the areola are small glands called Montgomery's glands which secrete an oily fluid to keep the skin healthy. Inside the breast are the alveoli, which are very small sacs made of milk-secreting cells. There are millions 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 breastmilk temporarily during the feed. The secretory alveoli and ducts are surrounded by supporting tissue and fat.

Some mothers think their breasts are too small to produce enough milk. However, 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.

Breastmilk is produced as a result of the action of hormones (which send a message to the brain) and stimulated by suckling at the breast. When a baby suckles, the tongue and the mouth stimulate the nipple. The nerves in the nipple send a message to the mother's brain that the baby wants milk. The brain responds and orders the production of two hormones, prolactin and oxytocin.

Slide 3/2. Prolactin.



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.

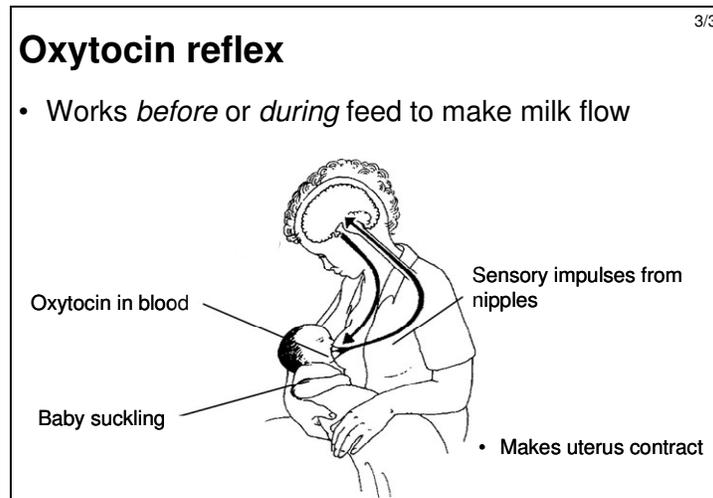
If the baby suckles more, the mother's breasts will make more milk. So, suckling makes more milk. If a mother has two babies, and they both suckle, her breasts make milk for two. If a baby stops suckling, the breasts soon stop making milk.

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.

Slide 3/3. Oxytocin reflex.



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. In this situation, it may seem as if the breasts have stopped producing milk. However, the breasts are producing milk, but it is not flowing out.

Oxytocin also 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.

The oxytocin reflex (milk flow) is easily affected by a mother's thoughts and feelings. Good feelings (for example, feeling pleased with her baby, thinking lovingly of him, 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.

It is important to understand the oxytocin reflex in the way we care for mothers after delivery for several reasons. 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 breastmilk supply.

Mothers are often aware of their oxytocin reflex. There are several signs of an active reflex that they, or you, 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 breastmilk is flowing into his mouth.

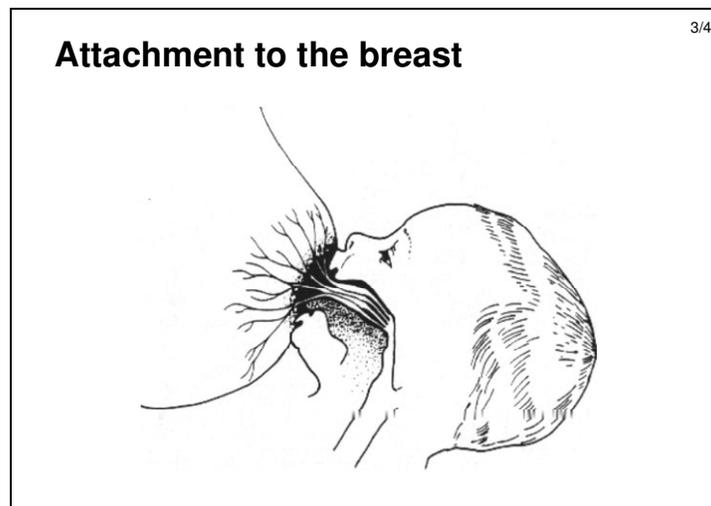
Breastmilk production is also controlled within the breast itself. Sometimes one breast stops making milk while the other breast continues to make milk, although oxytocin and prolactin go equally to both breasts.

There is a substance in breastmilk 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 breastmilk 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.
- For a breast to continue making milk, the milk must be removed.
- If a baby cannot suckle from one or both breasts, the breastmilk must be removed by expression to enable production to continue. This is an important point, which we will discuss later in the course when we talk about expressing breastmilk.

Slide 3/4. Attachment to the breast.



This drawing shows how a baby takes the breast into his mouth to suckle.

He has taken much of the areola and the underlying tissues into his mouth. The larger ducts are included in these underlying tissues.

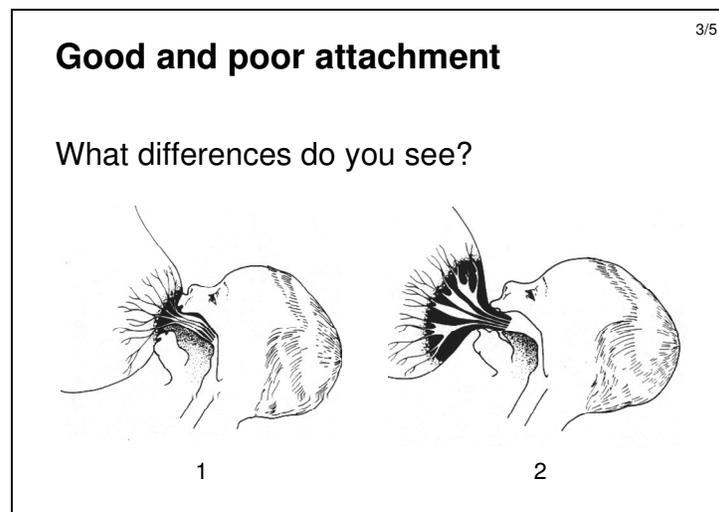
He has stretched the breast tissue out to form a long 'teat'. The nipple forms only about one-third of the 'teat'. The baby is suckling from the breast, not the nipple.

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 breastmilk 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.

Slide 3/5. Good and poor attachment.

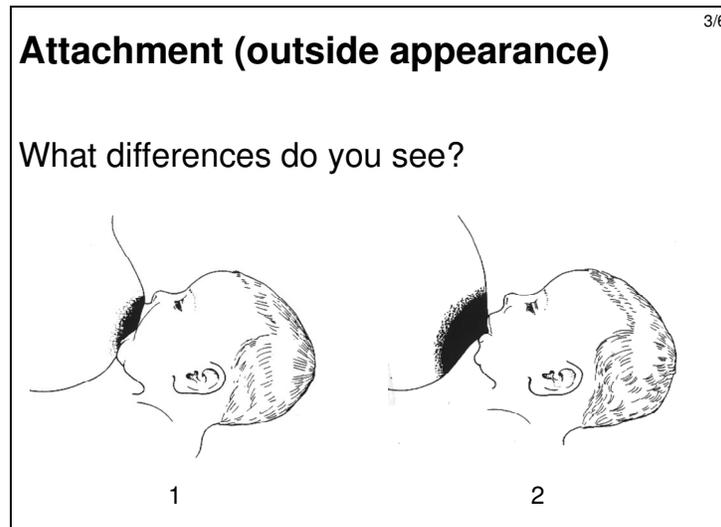


Here you see two pictures. Picture 1 is the same as in the previous slide. The baby is well attached to the breast. Picture 2 shows a baby suckling in a different way.

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'.

Slide 3/6. Attachment (outside appearance).



This picture shows the same two babies from the outside. 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 outward. In Picture 2 his lower lip is not turned outward.

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.

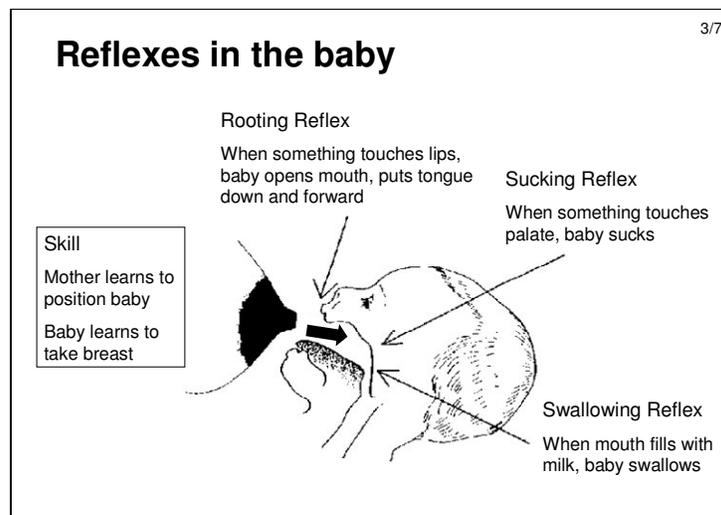
There are other differences that you can see when you look at a real baby; we will talk about these in Session 4.

Results of poor attachment

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 breastmilk effectively, the breasts may become engorged. Because he does not get enough breastmilk, 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 breastmilk 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 from 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.

Slide 3/7. Reflexes in the baby.



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 toward the breast. He is coming up to it from below the nipple. This helps him to attach well because the nipple is aiming toward 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.

Session 4: Assessing a breastfeed

Learning objectives

After completing this session, participants will be able to:

- Explain the four key points of attachment.
 - Assess a breastfeed by observing a mother and baby.
 - Identify a mother who may need help.
 - Recognise signs of good and poor attachment and positioning.
 - Explain the contents and arrangement of the BREASTFEEDING OBSERVATION JOB AID.
-

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 observe only when a baby is breastfeeding.

The BREASTFEEDING OBSERVATION JOB AID will help you to remember what to look for when you assess a breastfeed. The form is arranged in five sections: General, Breasts, Baby's Position, Baby's Attachment, and Suckling. The signs on the left all show that breastfeeding is going well. The signs on the right indicate a possible difficulty. 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 not make a 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.

BREASTFEEDING OBSERVATION JOB AID

<p>Mother's name _____</p> <p>Baby's name _____</p>	<p>Date _____</p> <p>Baby's age _____</p>
<p>Signs that breastfeeding is going well:</p> <p>GENERAL <i>Mother:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Mother looks healthy <input type="checkbox"/> Mother relaxed and comfortable <input type="checkbox"/> Signs of bonding between mother and baby <p><i>Baby:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Baby looks healthy <input type="checkbox"/> Baby calm and relaxed <input type="checkbox"/> Baby reaches or roots for breast if hungry <p>BREASTS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Breasts look healthy <input type="checkbox"/> No pain or discomfort <input type="checkbox"/> Breast well supported with fingers <p>BABY'S POSITION</p> <ul style="list-style-type: none"> <input type="checkbox"/> Baby's head and body in line <input type="checkbox"/> Baby held close to mother's body <input type="checkbox"/> Baby's whole body supported <input type="checkbox"/> Baby approaches breast, nose to nipple <p>BABY'S ATTACHMENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> More areola seen above baby's top lip <input type="checkbox"/> Baby's mouth open wide <input type="checkbox"/> Lower lip turned outward <input type="checkbox"/> Baby's chin touches breast <p>SUCKLING</p> <ul style="list-style-type: none"> <input type="checkbox"/> Slow, deep sucks with pauses <input type="checkbox"/> Cheeks round when suckling <input type="checkbox"/> Baby releases breast when finished <input type="checkbox"/> Mother notices signs of oxytocin reflex 	<p>Signs of possible difficulty:</p> <p>GENERAL <i>Mother:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Mother looks ill or depressed <input type="checkbox"/> Mother looks tense and uncomfortable <input type="checkbox"/> No mother/baby eye contact <p><i>Baby:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Baby looks sleepy or ill <input type="checkbox"/> Baby is restless or crying <input type="checkbox"/> Baby does not reach or root <p>BREASTS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Breasts look red, swollen, or sore <input type="checkbox"/> Breast or nipple painful <input type="checkbox"/> Breast held with fingers on areola away from nipple <p>BABY'S POSITION</p> <ul style="list-style-type: none"> <input type="checkbox"/> Baby's neck and head twisted to feed <input type="checkbox"/> Baby not held close <input type="checkbox"/> Baby supported by head and neck only <input type="checkbox"/> Baby approaches breast, lower lip/chin to nipple <p>BABY'S ATTACHMENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> More areola seen below bottom lip <input type="checkbox"/> Baby's mouth not open wide <input type="checkbox"/> Lips pointing forward or turned in <input type="checkbox"/> Baby's chin not touching breast <p>SUCKLING</p> <ul style="list-style-type: none"> <input type="checkbox"/> Rapid, shallow sucks <input type="checkbox"/> Cheeks pulled in when suckling <input type="checkbox"/> Mother takes baby off the breast <input type="checkbox"/> No signs of oxytocin reflex notice

Role plays

Mother A (Mampho) sits comfortably and relaxed, and acts like she is happy and pleased with her baby. She holds her baby close, facing her breast, and she supports his whole body. She looks at her baby, and 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 (Malerato) sits uncomfortably, and acts like she is sad and not interested in her baby. She holds her 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 hold' to hold her breast.

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 breastmilk 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 (for example, 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 the mother how breastfeeding feels.
- Notice how the mother is holding her breast.

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 breastmilk.
- 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' (hold the nipple and areola between her index finger above and middle finger below)? This may make it more difficult for a baby to take enough of her 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?

Baby's position

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.

Suckling

Look and listen for the baby taking slow deep sucks. This is an important sign that the baby is getting breastmilk 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, when he pauses between sucks), he may not get enough hindmilk.

Practise using the job aid to assess a breastfeed

You will now see a series of slides of babies who are breastfeeding.

You will practise recognising the signs of good and poor attachment that the slides show, and you will practise using the BREASTFEEDING 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.

Slide 4/1.



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 chin is almost touching 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.
- These signs show that the baby is well attached to the breast.

Slide 4/2.



Signs that you can see clearly are:

- His mouth points forward.
- The baby's chin is not touching the breast.
- In addition, his cheeks are pulled in when suckling.
- The mother is holding her breast with the 'scissor hold'.
- This baby is poorly attached.

Slide 4/3.



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 forward.
- His chin is not touching her breast.
- The baby's body is not close to his mother's.
- This mother's areola is very large, so it is likely that you would see a lot of it even if her baby were well attached. However, you should see more above the baby's top lip than below the bottom lip.
- This baby is poorly attached to the breast.

Slide 4/4.



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 chin is touching the breast.

- His lower lip is turned in, not outward, 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.
- This baby is not well attached.

Slide 4/5.



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, and his lips point forward.
- His chin is not touching the breast.
- In addition, the baby is twisted and is not close to the breast.
- This baby is poorly attached. He looks as though he is feeding from a bottle.

Slide 4/6.



Signs that you can see clearly 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 4/5, after the health worker helped the mother to position the baby better. In a better position, a baby can attach more easily.

Slide 4/7.



Slide 4/8.



Session 5: Listening and learning counselling skills

Learning objectives

After completing this session, participants will be able to:

- List the six 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.
-

Counselling is a way of talking with people to try to understand how they feel and help them to decide what they think is best to do in their situation. Sometimes it can mean offering advice, sometimes it means giving information, and sometimes it can just be listening and showing support.

In this training, we are talking about counselling mothers who are feeding infants and young children. They may be breastfeeding, giving complementary foods, or formula feeding. 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 with 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.

It may not be easy for a mother to talk 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 more likely to talk.

There are ways to make a mother or caregiver feel more comfortable when talking with them. We are going to talk about and practise using six different listening and learning skills to improve counselling skills.

Listening and learning skills:

1. Nonverbal communication.
2. Ask open questions.
3. Showing interest.
4. Reflect back what the mother says.
5. Empathy—Show that you understand how she feels.
6. Avoid words which sound judging.

Skill 1: Nonverbal communication

How we communicate is more than just how we talk. It also includes all the ways we communicate without speaking. This is called nonverbal communication.

Nonverbal communication means showing your attitude through how you stand or sit, how you move your body, your facial expressions, everything except through speaking.

Our nonverbal 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 (for example, religion) to be expressed in a counselling situation where it might appear as though we are judging a mother.

Skill 2: Ask open questions

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 and do not encourage discussion. 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.

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.

Role play 1: Using closed and open questions

Health worker: 'Good morning, Lerato. I am (name), the nurse. 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.'

Health worker: 'Good morning, Lerato. I am (name), the nurse. 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.'

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 9-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.

Skill 3: Showing interest

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. Common things we do to show that we are listening and interested include nodding, smiling, and simple responses such as 'Aha' or 'Mmm'.

Role play 2: Using responses and gestures to show interest

The health worker is talking to a mother who has a 1-year-old child.

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)

Skill 4: Reflect back what the mother says

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?'

Role play 3: Asking for facts versus reflecting back

The health worker is talking to a mother who has a 6-week-old baby she is breastfeeding.

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.'

The same volunteers now act out the same scenario, but in a different way:

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?'

Skill 5: Empathy—Show that you understand how she feels

Empathy or empathizing means showing that you understand someone's feelings from his/her point of view.

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 sympathise, you are sorry for a person, but you look at it from **your** point of view. If you sympathise, 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 empathise with a mother's good feelings. Empathy is not only to show that you understand her bad feelings.

Ask for two volunteers to demonstrate the skill: one will play the part of the mother, the other will play the part of the health worker. Introduce the role play by saying: The health worker is talking to a mother of a 10-month-old child. As you watch, look for empathy: Is the health worker showing she understands the mother's point of view?

Role play 4: Sympathy versus empathy

The health worker is talking to a mother who has a 6-week-old baby she is breastfeeding.

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?'

Let us hear this again with the focus on the mother and empathising with her feelings:

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.'

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?

Role play 5: Sympathy versus empathy

Round 1:

Health worker: 'Good morning, (name). You wanted to talk to me about something?'
(smiles)

Mother: 'I tested for HIV last week and am positive. I am worried about my baby.'

Health worker: 'Yes, I know how you feel. My sister has HIV.'

Round 2:

Health worker: 'Good morning, (name). You wanted to talk to me about something?'
(smiles)

Mother: 'I tested for HIV last week and am positive. I am worried about my baby.'

Health worker: 'You're really worried about what's going to happen.'

Mother: 'Yes I am. I don't know what I should do.'

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 7-month-old child who has recently started complementary feeds.

Role play 6: Asking facts versus 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: 'How old is (child's name) now?'

Mother: 'He is 7 months old.'

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

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.'

Skill 6: Avoid words which sound judging

The words we use when talking with mothers and their families are important. '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 breastmilk.

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?'

We will see a demonstration of this skill. The health worker is talking to a mother of a 5-month-old baby. As you watch, listen for judging words.

Role play 7: Using judging words versus avoiding judging words

Health worker: 'Good morning. Is (name) breastfeeding **normally**?'

Mother: 'Well, I think so.'

Health worker: 'Do you think that you have **enough** breastmilk for him?'

Mother: 'I don't know... I hope so, but maybe not...' (looks worried)

Health worker: 'Has he gained weight **well** this month?'

Mother: 'I don't know...'

Health worker: 'May I see his growth chart?'

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? May 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 breastmilk that he needs.'

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.

Avoiding judgement is important in both verbal and nonverbal communication.

Session 6: Practical Session 1—Using counselling skills to assess a breastfeed

Learning objectives

After completing this session, participants will be able to:

- Demonstrate appropriate listening and learning skills when counselling a mother on feeding her infant.
 - Assess a breastfeed using the BREASTFEEDING OBSERVATION JOB AID.
 - Demonstrate appropriate confidence and support skills when counselling a mother on feeding her infant.
 - Demonstrate how to help a mother to position and attach her baby at the breast.
-

Preparation for the practical session

- You are going to practise the following skills, which we learnt in the previous sessions:
 - Assessing a breastfeed with mothers.
 - Listening and learning skills.
 - Building confidence and giving support.
 - Positioning and attachment.
- It is important that all of you practise helping a mother to position her baby at the breast, or to overcome any other difficulty. Often you will find that the baby is 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 four 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 BREASTFEEDING OBSERVATION JOB AID, and a pencil and paper to make notes.
- You will work in groups of three or four with one trainer.

Steps to follow in the ward

- Take turns talking with a mother whilst the other members of the group observe.
- Introduce yourself to the mother and ask her permission to talk with 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.
- The other participants should stand quietly in the background. Try to be as still and quiet as possible.
- Participants observing should note general observations of the mother and baby. Notice, for example: Does she look happy? Does she have formula or a feeding bottle with her?
- Participants observing should note 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 as she speaks to the mother.
- Mark an **X** on your COUNSELLING SKILLS CHECKLIST when she uses a skill, to help you to remember for the discussion. Notice if she uses helpful nonverbal communication.
- 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 BREASTFEEDING OBSERVATION JOB AID and put ticks in the applicable 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 to you how to help the mother.
- When you have finished, thank the mother.

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'.
- **Do not give a mother help or advice.** If a mother seems to need help, you should inform your trainer and a staff member from the ward or clinic.
- **Be careful that the forms do not become a barrier.** The participant who talks to the mother should not make notes while talking. Refer to the forms to remind you what to do, but if you want to write, you should do so afterward. The participants who are observing can make notes.

Practical discussion checklist	
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: <ul style="list-style-type: none"> • What did you do well? • What difficulties did you have? • What would you do differently in the future? 	To the participants who observed: <ul style="list-style-type: none"> • 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):	
<ul style="list-style-type: none"> • 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 empathise with the mother? Give an example. 	
Confidence and support skills (give feedback on the use of these skills during practical sessions after Session 10):	
<ul style="list-style-type: none"> • 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 32):	
<ul style="list-style-type: none"> • 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?

COUNSELLING SKILLS CHECKLIST

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.
- Empathise—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.
- Recognise 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 7: Positioning and attachment

Learning objectives

After completing this session, participants will be able to:

- Explain the four 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 four key points in different positions.

We are going to learn how to position a baby at the breast. We will be using the four key points from the section on 'Baby's Position' on the BREASTFEEDING OBSERVATION JOB AID. There are several steps to follow when helping a mother to position her baby at the breast.

Always assess a mother breastfeeding before you help her, using the points from the BREASTFEEDING 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 2 months old. There is no point trying to change a baby's position if he is getting breastmilk effectively and his mother is comfortable.

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 should be 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.
- 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 how.
- 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 the mother cannot.

Demonstration 1: How to help a mother who is sitting

Step 1: 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.

Step 2: 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.

Step 3: Explain what might help and ask if she would like you to show her

- Say something encouraging like: 'He really wants your breastmilk, 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.

Step 4: Make sure that she is comfortable and relaxed

- Make sure the 'mother' is sitting in a comfortable and relaxed position.
- 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.
 - 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.

Step 5: Explain how to hold her baby, and show her if necessary

1. **Baby's head and body in line:** A baby cannot suckle or swallow easily if his head is twisted or bent.
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.
3. **Baby supported:** The baby's whole body should be 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 arm that 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.

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.

Step 6: Show her how to support her breast

- Demonstrate how to help the mother to support her 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.
 - These ways of holding the breast can 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 the thumb and fingers, and trying to push the nipple into a baby's mouth while holding the breast in the 'scissor hold'—index finger above and middle finger below the nipple.

Step 7: Explain or show her how to help the baby to attach

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

Step 8: 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.'
 - 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.

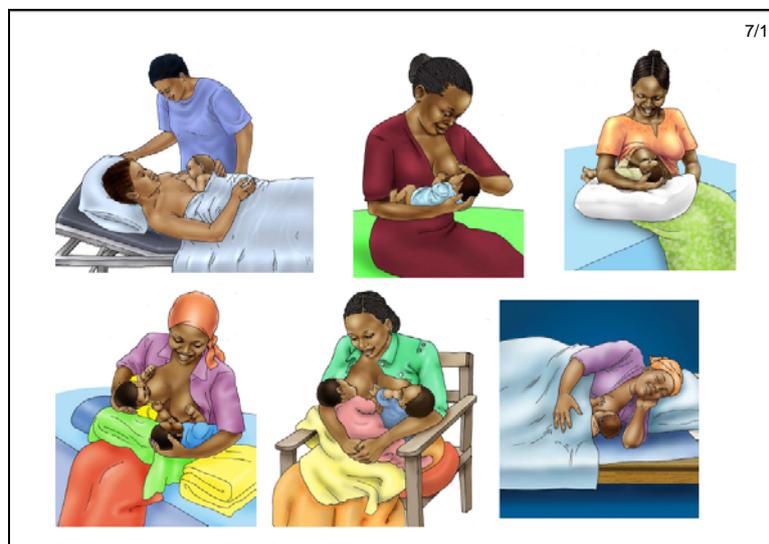
Step 9: Look for signs of good attachment. If the attachment is not good, try again

- 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 2: How to help a mother who is lying down

- 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.

Slide 7/1. How to hold and attach a baby for breastfeeding.



There are many other positions in which a mother can breastfeed. In any position, the important thing is for the baby to take enough of the breast into his mouth so that he can suckle effectively.

This counselling card can be used with mothers who have chosen to breastfeed. It shows various ways a mother can sit or lie down comfortably to breastfeed her baby.

Session 8: Growth charts

Learning objectives

After completing this session, participants will be able to:

- Explain the meaning of the standard curves.
- Plot a child's weight on a growth chart.
- Interpret individual growth curves.

Growth curves are tools to promote and monitor the growth of an infant. Monitoring the growth of an infant in a regular manner is a way to see if a child is growing properly, and, if not, to make up for a slow growth rate as rapidly as possible so as to prevent the malnutrition or death of the infant.

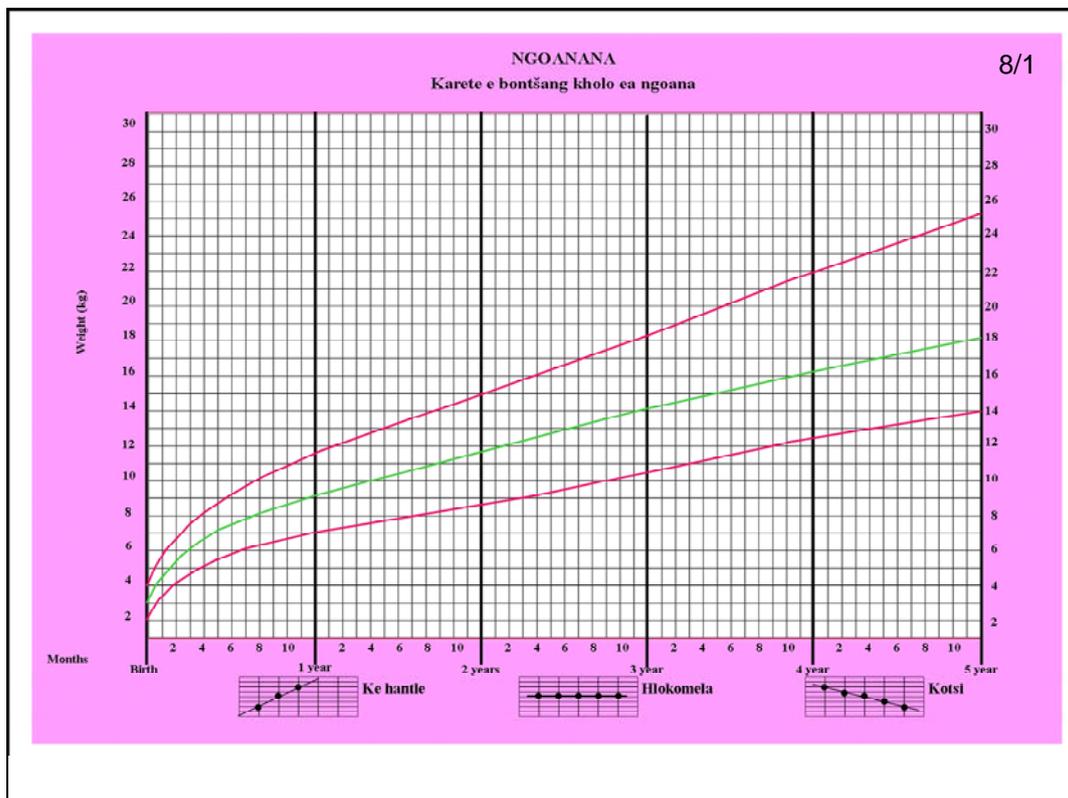
Growth curves can reflect past and present conditions regarding the feeding of an infant and its state of health. If growth curves are not correctly interpreted, incorrect information can be given to a mother, causing worry and loss of confidence.

Growth of an infant can be monitored from its weight and/or its size. Different growth curves exist for each of these measures. The simplest and most used way for monitoring an infant's growth is to compare its weight in relation to its age (weight-for-age).

A child who is undernourished for a long time will show slow growth in length or height. This is referred to as stunting or very short height for age.

Good feeding practices—both before the child is 6 months old and after complementary foods have been introduced—can help prevent growth faltering in both weight and length.

Slide 8/1.



This is a chart of ordinary growth developed by the Ministry of Health and Social Welfare (MOHSW) that indicates weight-for-age of girls from 0 to 5 years. The age of the infant in months is seen on the horizontal line on the bottom of the graph (abscissa axis). The weight of the infant is found on the vertical line on the left of the graph (ordinates axis).

There are three curves on the chart. The middle curve shows the average weight or median for infants of this age in good health. It is also called the 50th percentile because the weights of 50% of infants in good health are below this weight and 50% are above. Most infants in good health are close to the curve of the 50th percentile, either a little above or a little below.

The growth curve of a normally growing child will usually follow a track that is parallel to the median, although the track may be above or below the median.

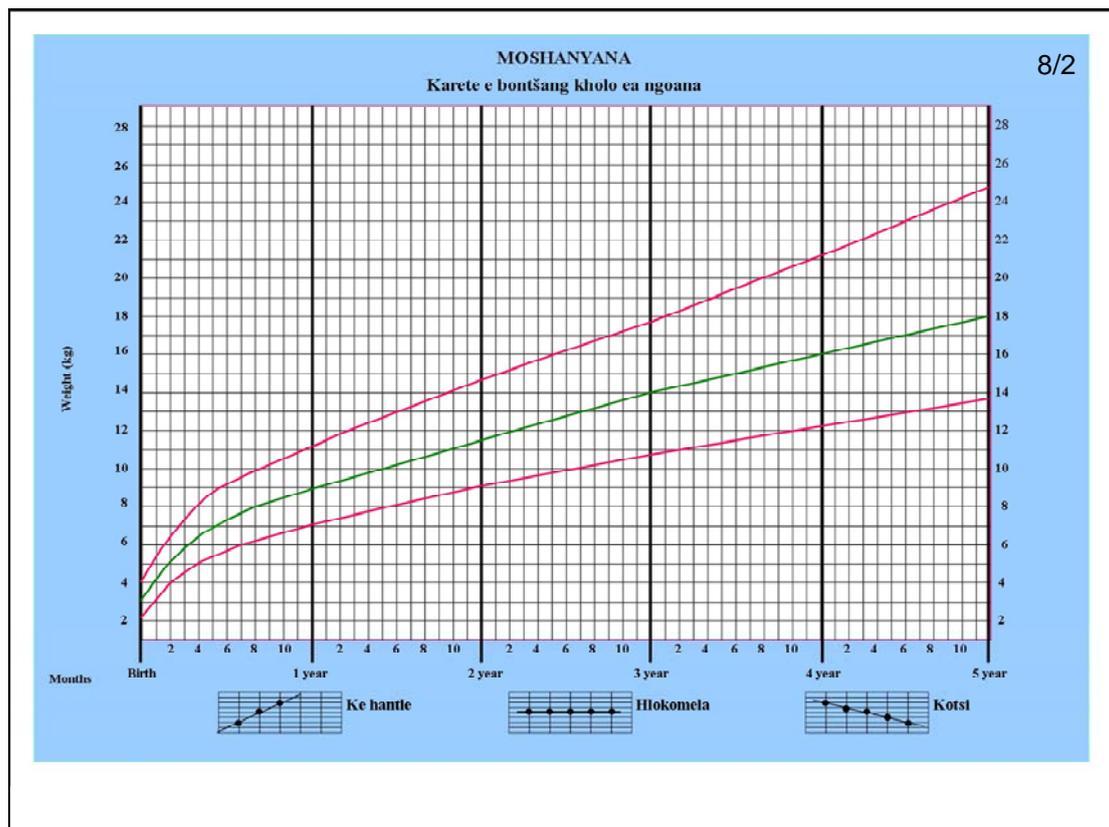
The other two lines, called 'Z-score lines', indicate distance from the average. A point or trend which is far from the median, such as +2 or -2, may indicate a growth problem (points or trends much farther from the median *usually* indicate a health problem).

The lowest line indicates a weight below the norm for the age of the infant. An infant below this line is underweight. A genetically small child may be near this curve but still be growing well. As long as the child is growing normally (curve parallel to the median or Z-score lines), all may be well. However, if the child is not growing normally, or if it is losing weight, then the child definitely is not in good health and needs attention. We can identify infants whose weight is below the lowest curve on the weight-for-age table. This has to do with infants with low weight-for-age.

When you see the growth curve for an infant, the most important matter is to determine that the curve is parallel to the median line, and especially that it is not staying level or descending.

Good feeding habits—both before the age of 6 months and after the introduction of complementary foods—can help improve size and weight and maintain both curves in the normal growth pattern.

Slide 8/2. The MOHSW's growth curve for boys.



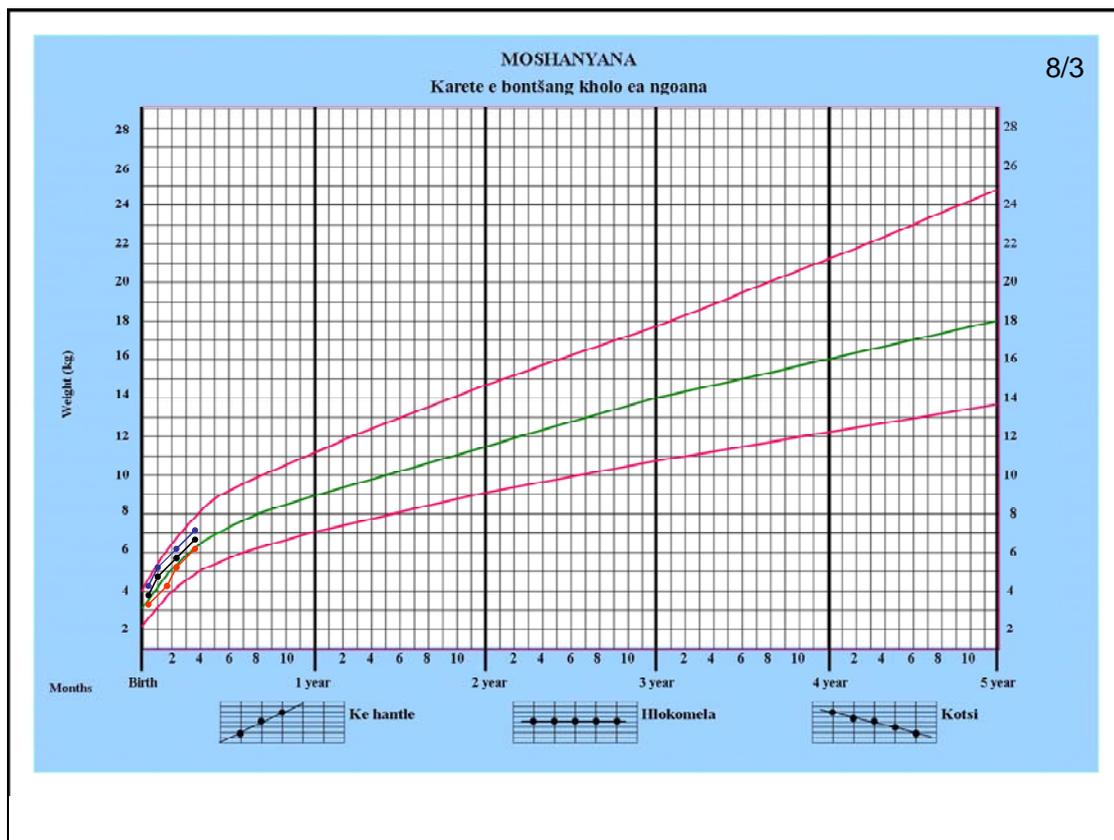
Lesotho currently uses a growth curve with two lines to determine the weight-for-age of an infant. An infant in good health will have a curve that falls somewhere between the two. These two lines are similar to the red lines (-2 standard deviation to +2 standard deviation) in the chart below.

The curve of an infant should always follow the normal growth pattern. If it is flat or goes down, there is a problem with feeding practices or with the infant's health.

If the weight-for-age is below the lower red curve, the infant's weight is below the norm for its age. If the weight-for-age is above this curve, the weight of the infant is not low for its age.

If the child's *pattern of growth* (growth curve) parallels the pattern of the median curve, the child is growing normally even if the child is low weight-for-age.

Slide 8/3.

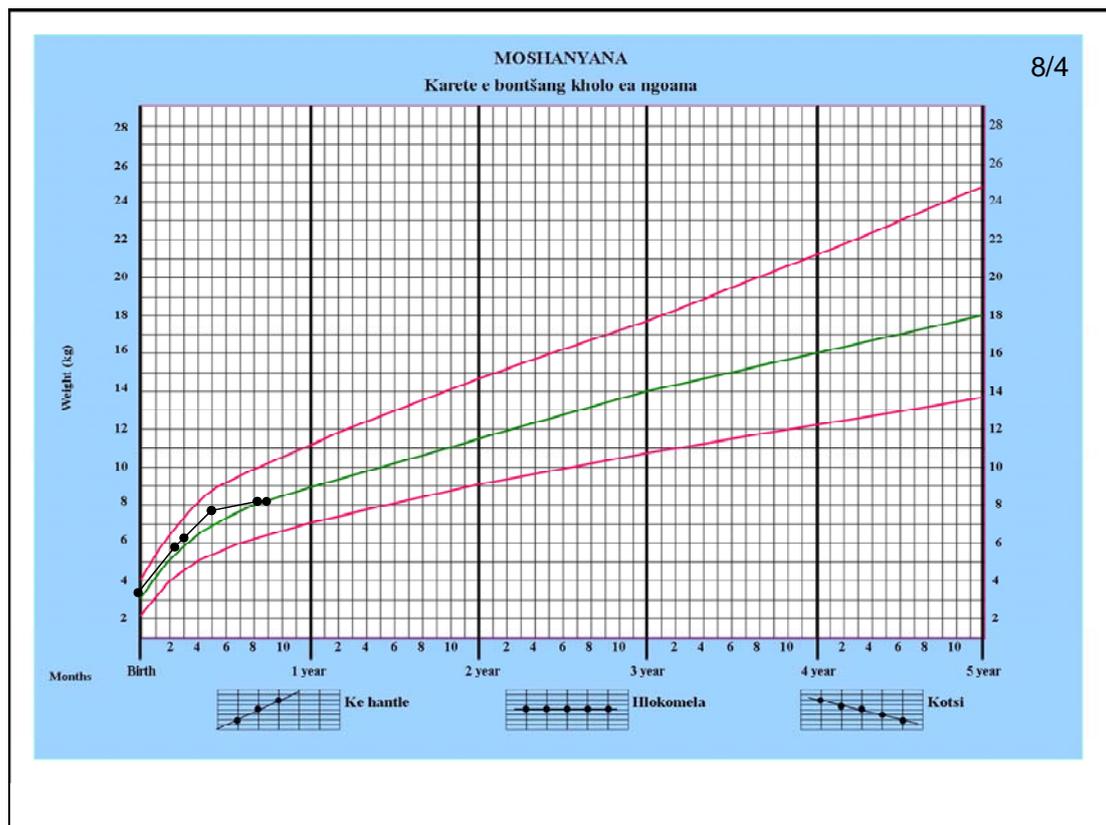


This is a growth chart for three infants who have been weighed regularly.

The growth chart of these three infants shows that all of the infants have a curve similar to the reference curve (median curve, 0). Nevertheless, each grows according to its individual curve. Notice that they all have different weights at birth. Weight alone does not give a lot of information. You need a set of indicators before interpreting the trend of the curve.

One infant can grow more at a given time than another, so that there can be highs and lows on the curve. It is therefore important to look for the general pattern. If the growth of an infant is delayed, it is important to identify the causes so that you can help the mother.

Slide 8/4. Curve of stationary growth.



Here is the growth curve for Masupha, who has been regularly weighed.

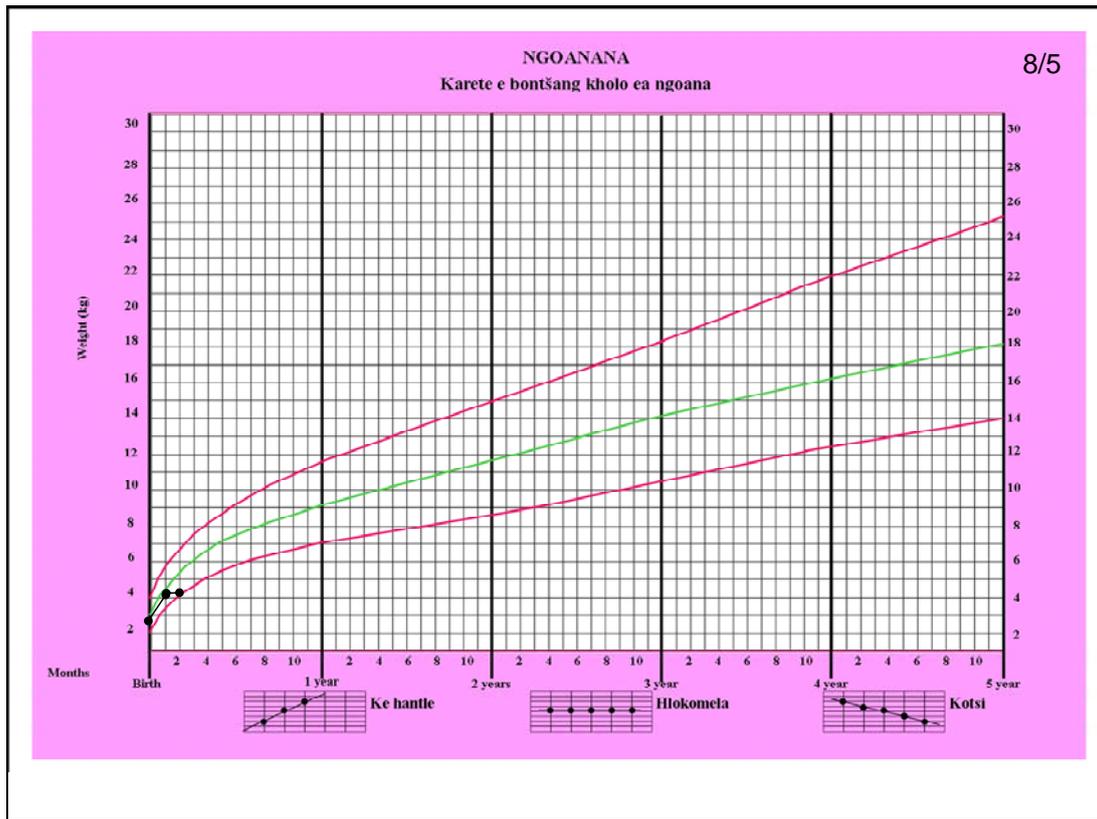
Masupha developed well during the first 6 months but not since then. His weight is currently stationary (his curve has become horizontal). You need to ask his mother some questions to know the causes for this.

Here are certain questions that you can ask about him:

- How was Masupha fed during the first 6 months of his life?
- What type of milk is Masupha consuming now?
- What meals does Masupha receive now? How many meals does he have each day?
- What amount does he eat? What types of food does he eat?
- What was the health of Masupha over the past months?

You can find out that Masupha was breastfed exclusively during the first 6 months of his life and that his mother continues to breastfeed him frequently during day and night. At 6 months, his mother began to give him a light cereal twice a day. He has not been sick since his last visit. His weight does not increase because he needs other foods that are more nourishing (an enriched porridge, for example) and he needs to eat more often every day.

Slide 8/5. Stationary growth curve.



Here is the growth curve of Thithili, who comes regularly to the health centre.

This infant is developing slowly. You may need to ask certain questions of the mother to see how Thithili is fed.

Some questions you might ask Thithili's mother:

- How is Thithili fed?
- How frequently is she fed?
- Who does Thithili sleep with?
- If the mother says that she breastfeeds: How is the breastfeeding going?

Session 9: Building confidence and giving support

Learning objectives

After completing this session, participants will be able to:

- List the six 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.

Introduction

A mother can easily lose confidence in herself. This may lead to her feeling that she is not successful and cause her to give into pressure from family and friends. You can use confidence and support 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 can easily believe that there is something wrong with herself, how she is feeding her child, or with her breastmilk 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.

Skill 1: Accept what a mother thinks and feels

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.

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.

We will now see a role play showing acceptance of what a mother thinks. This mother has a 1-week-old baby.

Role play 1: Accepting what a mother thinks

Mother: 'My milk is thin and weak, so I have to give bottle feeds.'

Health worker: 'Oh no! Milk is never thin and weak. It just looks that way' (nods, smiles)

Mother: 'My milk is thin and weak, so I have to give bottle feeds.'

Health worker: 'Yes, thin milk can be a problem.'

Mother: 'My milk is thin and weak, so I have to give bottle feeds.'

Health worker: 'I see. You are worried about your milk.'

Reflecting back and giving 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, empathising 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.

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 9-month-old baby.

Role play 2: 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.'

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.'

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?'

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

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.

If you tell a mother that she is doing something wrong or that her baby is not doing well it may make a mother feel bad, and this can reduce her confidence. As counsellors, we must look for what mothers and babies are doing right.

We must first recognise 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 recognise what a mother is doing right. But any mother whose child is living must be doing some things right, whatever her socioeconomic status or education.

Skill 3: Give practical help

Sometimes giving practical help is better than saying anything. For example:

- When a mother feels tired or dirty or uncomfortable.
- When she has had a lot of information already.
- When she has a clear practical problem.

Some ways to give practical help are these:

- Help her to feel comfortable or give her a bed to rest on, if appropriate.
- 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 breastmilk, relieving engorgement, or preparing complementary foods.

Skill 4: Give the key messages

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 important information to give at one time.

When you give a mother information, remember these points:

- Try to give information that is relevant and important to her situation now. Tell her things that she can use today, not in a few weeks' time.
- Explaining the reason for 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.

Skill 5: Use simple language

- 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.

Demonstration 1: Using technical 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 6 months old?'

Health worker: 'I'm glad that you asked. Well now, the situation is this. Most children need more nutrients than breastmilk alone when they are 6 months old because breastmilk has less than 1 milligram of absorbable iron and breastmilk has about 450 calories, so it provides less than the 700 calories that are needed. The vitamin A needs are higher than what is provided by breastmilk 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.'

Now we will see another mother receiving information in a different way. Again, listen for the skills listed.

Demonstration 2: Using simple language

Health worker: 'Good morning Me. How can I help you?'

Mother: 'Can you tell me what foods to give my baby, now that she is 6 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.'

Skill 6: Make one or two suggestions, not commands

- 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.

Review of confidence and support skills

- Accept what a mother thinks and feels.
- Recognise and praise what a mother and baby are doing right.
- Give practical help.
- Give the key information.
- Use simple language.
- Make one or two suggestions, not commands.

Session 10: Taking a feeding history

Learning objectives

After completing this session, participants will be able to:

- Take a feeding history of an infant 0–6 months old.
- Demonstrate appropriate use of the GUIDE FOR EVALUATING INFANT FEEDING, 0–6 MONTHS.

Introduction

We have discussed how to evaluate infant growth using the growth curve. When an infant is not growing well, we need to find the reason why very quickly to help the baby grow well again. If an infant is growing well, it is important to continue asking the mother questions about how the baby is eating, to reinforce the positive practices of the mother, so the baby stays healthy.

A mother should discuss feeding her baby with a health worker at least once a month when she brings her baby to be weighed.

There are several reasons why it is important to evaluate the feeding of a baby so often:

- Mothers benefit from regular, positive reinforcement of appropriate feeding practices for their babies. Problems linked to feeding practices can be identified early, before causing malnutrition, growth problems, and other illnesses. Mothers may need help to understand the amount of food their babies need and how often they should feed them.
- Breastfeeding mothers need to be reminded to breastfeed them exclusively. Mothers who breastfeed may need assistance and support to resist family or community pressure to introduce other foods besides breastmilk during the first 6 months after birth.
- HIV-positive mothers who choose to give their babies infant formula may need assistance in preparing it well. HIV-positive mothers who choose to give their babies infant formula may need support to resist community pressure to breastfeed their babies.
- Poor feeding techniques often lead to growth problems. There are a number of practices that influence the quality of an infant's feeding.

THE GUIDE FOR EVALUATING INFANT FEEDING, 0–6 MONTHS, is a tool that can help you to help a mother with all of these practices.

Review of counselling techniques

Effective nonverbal communication techniques <ul style="list-style-type: none">• Maintain visual contact.• Stay attentive.• Be confident.• Take your time.• Keep a suitable attitude.	Listening and learning techniques <ul style="list-style-type: none">• Greet the woman in a gentle and friendly manner.• Use the names of mother and baby if appropriate.• Ask open questions.• React simply when showing your interest.• Paraphrase or restate what the mother says.• Show that you understand what she feels.• Avoid judgemental words.
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There is guidance you can follow to ensure that your evaluation addresses the situation of each mother and her infant. The table below provides general ideas on how to proceed with an evaluation.

Steps for conducting an infant feeding evaluation	
GREET	The mother gently and in a friendly manner. (Call the mother and baby by their names if appropriate.)
EXPLAIN	<p>Why you want to ask her questions about the feeding of her infant.</p> <p>For example:</p> <ul style="list-style-type: none"> • <i>Your infant is here today for its regular monitoring visit or to receive its vaccines at 10 weeks. I can see from its growth curve that it is growing well. I would like to ask some questions about the baby's feeding and to talk with you a little about how you plan to feed it in the coming months.</i> • <i>Your baby is here today because she has diarrhoea. I can see on the basis of her growth curve that she has not gained sufficient weight the past month. I would like to ask you some questions about how you are feeding her. I hope that together we will be able to help your daughter start to grow well again.</i> • <i>Your baby is here today because he has a fever. Part of my exam will be to ask you some questions about his feeding. What I learn about how he is eating will help me better counsel you regarding his health.</i>
ASK	Try to ask questions that will give you the most information. Use the guide for choosing questions to ask.
BE CAREFUL	Not to appear too critical and not to pass judgement.
TAKE	<p>The time to discuss the most difficult and sensitive questions.</p> <p>For example:</p> <ul style="list-style-type: none"> • <i>What does the father say about the infant? Its mother? The mother-in-law?</i> • <i>Is the mother happy to have a baby now?</i> • <i>Is she pleased with the sex of the infant?</i> <p>Certain mothers say things spontaneously. Others speak when you emphasise things and show that you understand them. Yet others take some time. If a mother does not speak easily, wait a bit and ask the question later or on another day, perhaps in a more private place.</p>
PRAISE	The mother that she has done well.
SUGGEST	One or two things that the mother can do to resolve the problems at hand.
PLAN	The next meeting with the mother and baby, or refer the mother to other services if they are needed.

GUIDE FOR EVALUATING INFANT FEEDING, 0–6 MONTHS

Each time a mother visits, ask these questions about infant feeding:

- Do you have any concerns about feeding the infant? If so, what are they?
- What does the infant eat or drink? (Answers include breastmilk, infant formula, other foods, and milks and liquids, including water.)

If the answer is breastmilk, then ask:	If the answer is formula, then ask:	If the answer is other foods, then ask:
<ul style="list-style-type: none"> • How many times during the day does the infant breastfeed? • How many times during the night does the infant breastfeed? • How long does each breastfeed last? • Does the infant eat or drink anything other than breastmilk? • Does the infant take water? • Are there other persons besides you who feed the baby? If so, what do they give the baby? • Do they use a baby bottle or a cup? 	<ul style="list-style-type: none"> • What formula does the infant drink? • What do you use to feed the infant—a baby bottle or a cup? • How many times does the infant drink during the day? • How many times does the infant drink during the night? • How much does the infant drink at each meal? • Does the infant eat or drink anything other than formula? • Does the infant take water? • Does anyone else feed the baby? 	<ul style="list-style-type: none"> • Why do you give this food? • Do you continue to breastfeed? (Can you change and exclusively breastfeed?) • Have you chosen this food for a particular reason? (Can you change and use commercial replacement milk?) • Does the infant take water? • Do you give other liquids (tea, juice, other) to your infant? • When did you start giving other liquids to your infant? • Do you give other foods to your infant? • When did you start giving other foods to your infant? • Why do you give liquid or foods to your infant besides breastmilk or commercial replacement milk? • Can you nurse the infant more often or increase the amount of milk and not give other liquids or foods before the age of 6 months?

Ask the mother questions about her situation:

- How old are you?
- What is the status of your health?
- How did your pregnancy go?
- How did your delivery go?
- Are you feeding your infant the way you planned before its birth?
- If you breastfeed, do you have problems with your breasts?
- Have you received help in feeding your infant?
- Is this your first infant? If no, how many children do you have?
- How did you feed your other children? Is this way agreeable to you?
- What do other persons in your household think of the way that you feed your infant?
- Do you use family planning, or do you plan to use it?

Ask questions about any infant growth or health problems:

- During a whole day, how many times does the infant urinate (day or night)?
- During a whole day, how many times does the infant have a bowel movement (day or night)? What is the consistency of its stools?
- Has the infant had a recent illness? (Examples are malaria, diarrhoea, and respiratory infection.) Has the infant seen a doctor or taken medicines?
- How did you feed your infant during and after his illness?

Demonstration: Evaluating the feeding of Mampho

- Nurse:* 'Good morning, I am the nurse, Limpho. May I ask your name and your baby's name?'
- Mother:* 'Good morning, Nurse. I am Mathabo and this is my daughter Mampho.'
- Nurse:* 'She is cute—how old is she?'
- Mother:* 'She is three and a half months now.'
- Nurse:* 'Okay—and she's interested in what's going on, right? Tell me, what milk have you been giving her up to now?'
- Mother:* 'Well, I started by breastfeeding, but she was so hungry that I never seemed to have enough milk, so I had to add milk from a baby bottle, too.'
- Nurse:* 'My dear, that can be really disturbing when an infant is always hungry. So did you start feeding with a baby bottle? What did you give her?'
- Mother:* 'Well, I put some milk in the bottle.'
- Nurse:* 'When did she start to eat these meals?'
- Mother:* 'When she was about 2 months old.'
- Nurse:* 'About 2 months old. How many bottles do you give her a day?'
- Mother:* 'Oh, usually two—I prepare one in the morning and one in the evening, and she drinks each time she wants to—each bottle lasts a long time.'
- Nurse:* 'So she drinks from the bottle gradually? What sort of milk do you use?'
- Mother:* 'Yes. Well, if I have formula, I use it. If not, I simply use cow's milk, adding some water or milk with sugar because it's less expensive. She really likes milk with sugar!'
- Nurse:* 'Formula is very expensive, isn't it? Tell me more about breastfeeding. How often does she take the breast now?'
- Mother:* 'Oh, she eats when she wants to. Very often at night, four or five times. During the day, I don't count. She likes being comfortable.'
- Nurse:* 'She nurses at night?'
- Mother:* 'Yes, she sleeps with me.'
- Nurse:* 'Oh, it's easier that way, right? Have you had any other difficulties with breastfeeding besides the fear that you don't have enough milk?'
- Mother:* 'No, it hasn't been difficult at all.'
- Nurse:* 'Have you given her anything else? Food or drinks?'
- Mother:* 'No—I am not going to breastfeed her much longer. She is perfectly happy to take bottles.'
- Nurse:* 'Can you tell me how you clean the bottles?'
- Mother:* 'I just rinse them with hot water. If I have soap, I use it. Otherwise, just water.'
- Nurse:* 'Okay, now can you tell me how Mampho is doing? Does she have a growth curve? May I see it? (The mother gives her the health card.) Thanks, I'll look at it... She weighed 3.5 kg when born, 5.5 kg when she was 2 months, and now she weighs 6.0 kg. You can see that she gained weight quickly during the first 2 months but a bit more slowly since then. Can you tell me what illnesses she has had?'
- Mother:* 'Yes, she had diarrhoea twice last month, but she seems better. Her stools have become normal now.'
- Nurse:* 'How old are you?'
- Mother:* 'I'm 22.'
- Nurse:* 'How is your health? How are your breasts?'

Mother: 'I am well—my breasts have no problems.'

Nurse: 'May I ask if you think that you are pregnant right now? Have you thought about family planning?'

Mother: 'No—I have not thought about it—I was thinking that I could not get pregnant if I was breastfeeding.'

Nurse: 'In fact, it's possible to become pregnant if you also give other foods. We will talk about that later if you want. Is Mampho your first baby?'

Mother: 'Yes. I don't want another right now.'

Nurse: 'Tell me, how are things going at home now? Are you working outside of the home?'

Mother: 'No—right now I am at home with Mampho. I could look for work later when Mampho is bigger.'

Nurse: 'Who else at home helps you?'

Mother: 'My husband works as a taxi driver, so he is not home very much. Mampho's grandmother is with me during the day. She loves Mampho very much, and thinks that she is very thirsty and needs to be given water. Sometimes when she is watching her, she gives her water and the milk from the bottle.'

Session 11: Breastfeeding difficulties

Learning 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.
-

Introduction

There are many reasons why mothers stop breastfeeding or start to give other foods and liquids before a child completes 6 months, even if they decided during pregnancy to breastfeed exclusively. When helping mothers with difficulties, you will need to use all the skills you have learnt so far. Infant and young child feeding counsellors and community health workers have an important role to play in supporting mothers through these difficulties, as mothers may not visit a health facility to seek help.

We are going to look at three common difficulties women face:

1. 'Not enough milk'.
2. A crying baby.
3. Breast refusal.

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 1 month of age. Then the mother needs help to maintain breastmilk production. She should be counselled to breastfeed more often.

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.

Unreliable signs of 'not enough milk'

The following signs that may make a mother think that she does not have enough milk 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.
- Breastmilk not dripping out.
- Not feeling her oxytocin reflex.
- Family members ask if she has enough milk.
- Health worker said that she does not have enough milk.
- She was told that she is too young or too old to breastfeed.
- She was told that the baby is too small or too big to breastfeed.
- Poor previous experience with breastfeeding.
- Breastmilk looks thin.

Guidelines, not rules

Using weight gain and urine output as reliable signs as to whether or not a baby is getting enough breastmilk 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 2 weeks. If babies demand feeding from the first day, they start gaining weight more quickly than babies who delay. A baby who weighs less than his birth weight at 2 weeks of age is not gaining enough weight.

Reasons why a baby may not get enough breastmilk

Breastfeeding factors

Delayed start: If a baby does not start to breastfeed on the first day, his mother's breastmilk may take longer to 'come in', and he may take longer to start gaining weight.

Infrequent feeds: Breastfeeding less than eight times a day in the first 4 weeks, or less than five to six 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 a feed, but should wake him to breastfeed every 3 to 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 blankets.

Poor attachment: If a baby suckles ineffectively, he may not get enough milk.

Bottles and pacifiers (dummies): A baby who feeds from a bottle or who sucks on a pacifier may suckle less at the breast, so the breastmilk supply decreases.

Complementary foods: A baby who has complementary foods (artificial milks, solids, or drinks, including plain water) before 6 months suckles less at the breast, so the breastmilk supply decreases.

Psychological factors of the mother

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 or 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 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 (dummy) when he cries instead of breastfeeding him.

Physical condition of the mother

Contraceptive pill: Contraceptive pills, which contain estrogens, may reduce the secretion of breastmilk. However, progesterone-only pills and Depo-Provera should not reduce the breastmilk supply.

Diuretics: Diuretics may reduce the breastmilk supply. Diuretics increase the amount of urine that is excreted. They include caffeine (coffee, tea) and alcohol.

Pregnancy: If a mother becomes pregnant again, she may notice a decrease in her breastmilk supply because of hormonal changes associated with pregnancy.

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: Drinking alcohol and smoking cigarettes can reduce the amount of breastmilk that is produced by a mother. Drinking alcohol decreases prolactin yield, blocks release of oxytocin, and can result in a reduction in milk. Drinking large amounts of alcohol can also affect the infant and is associated with deep sleep, drowsiness, decrease in linear growth, and abnormal weight gain. Studies have shown that smoking can reduce the prolactin levels in breastfeeding mothers and interfere with the 'let-down' (or oxytocin) reflex. If a mother smokes, she should not do so when feeding the baby. Smoking also significantly increases the infant's risk of respiratory illness³.

Other very rare conditions

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 breastmilk. If this continues, his mother's milk supply will decrease.

³ La Leche League International. The Womanly Art of Breastfeeding. Schaumburg, IL: Penguin; 1991. Riordan J, Auerbach K (eds). Breastfeeding and Human Lactation. Sudbury, MA: Jones and Bartlett Publishers; 1999.

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 breastmilk, 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 6 months of age should be RARE. A woman should be tested for HIV before suggesting a complement. If she is positive, giving breastmilk and a complement should be strongly discouraged as this can significantly increase the risk of transmission to the baby.

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' responses to crying are different in different societies. So also are the ways 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 that a mother takes: Caffeine in coffee, tea, and colas can pass into breastmilk 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.

Reasons why a baby may refuse the breast

Is the baby ill, in pain, or sedated?

- **Illness:** The baby may attach to the breast, but suckle 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, thrush (Candida infection), teething of an older baby. 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 or 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 coordinating 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 most common when a baby is aged 3 to 12 months. He suddenly refuses several breastfeeds. This behaviour is sometimes called a 'nursing strike'. Possible causes include:

- Separation from his mother (for example, when she starts a job).
- A new caregiver or too many caregivers.
- 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).

It may look like refusal but is not 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.

Step 1: Treat or remove the cause if possible

- *For 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 breastmilk to feed to him by cup or by tube, until he is able to breastfeed again.
- *For 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.
- *For 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 the mother stop 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 quieter 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.

Step 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 or 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.
- Offer her breast whenever her baby is willing to suckle.
 - She should not hurry to breastfeed again, but offer the breast if her baby does show an interest.
 - He may be more willing to suckle when he is sleepy or after a cup feed than when he is very hungry. She can offer her breast in different positions.
 - If she feels her ejection reflex working, she can offer her breast then.
- Help her baby to breastfeed in these ways:
 - Express a little milk into her baby's mouth.
 - Position him well, so it is easy for him to attach to the breast.
 - She should avoid pressing the back of his head, or shaking her breast.
- Feed her baby by cup until he is breastfeeding again.
 - She can express her breastmilk and feed it to her baby from a cup (or cup and spoon). If necessary, use artificial feeds, and feed them by cup.
 - She should avoid using bottles, teats, and pacifiers (dummies) of any sort.

Session 12: Expressing breastmilk

Learning objectives

After completing this session, participants will be able to:

- List the situations when expressing breastmilk is useful.
 - Explain how to stimulate the oxytocin reflex and demonstrate by rubbing a mother's back.
 - Demonstrate how to select and prepare a container for expressed breastmilk.
 - Describe how to store breastmilk.
 - Explain to a mother the steps of expressing breastmilk by hand.
-

There are many situations in which expressing breastmilk is useful and important to enable a mother to initiate or to continue breastfeeding.

Expressing milk is useful to:

- Leave breastmilk for a baby when his mother goes out or goes to work.
- Feed a low-birthweight baby who cannot breastfeed.
- Feed a sick baby who cannot suckle enough.
- Keep up the supply of breastmilk when a mother or a 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 (for example, engorgement) (see Session 14).
- Facilitate the transition to another method of feeding or to heat-treat breastmilk (see sessions on HIV and infant feeding).

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.

Breastmilk can be stored for about 8 hours at room temperature or up to 24 hours in a refrigerator. Store expressed breastmilk in the coolest part of the home and away from any heat source.

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.

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.

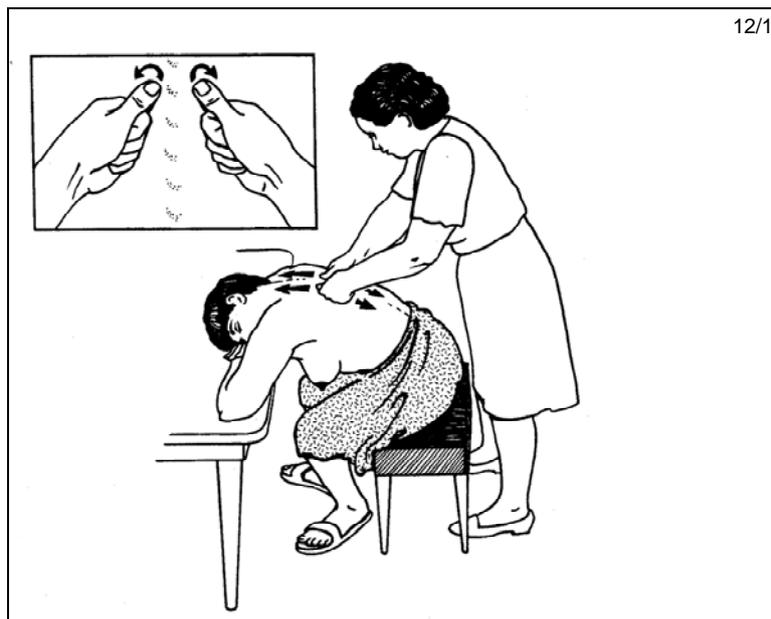
Help the mother practically. Help or advise her to:

- Sit quietly and privately or with a supportive friend. Some mothers cannot 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. Some women find that it helps to gently roll their closed fist over the breast toward the nipple.
- Ask a helper to rub her back.

Demonstration 1: How to rub a mother's back to stimulate the oxytocin reflex

Slide 12/1. A helper rubbing a mother's back.



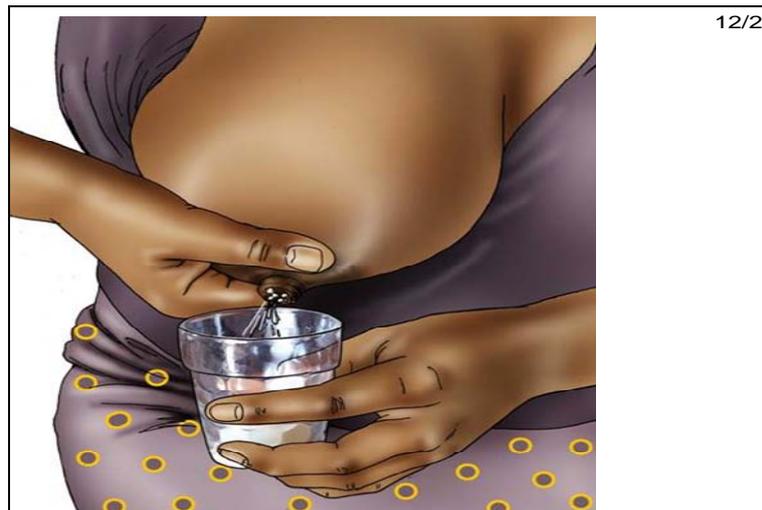
- She should sit at the table, resting her head on her arms, as relaxed as possible.
- She should remain clothed, but you should explain to the mother that it is important for her breasts and her back to be naked.
- Make sure that the chair is far enough away from the table for her breasts to hang free.
- Explain what you will do, and ask her permission to do it.
- Rub both sides of her spine with your thumbs, making small circular movements, from her neck to her shoulder blades.

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 breastmilk. 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.

Slide 12/2. How to express breastmilk.



- Place finger and thumb on each side of the areola and press inward toward the chest wall.
- Press behind the nipple and areola between your finger and thumb.
- Press from the sides to empty all segments.

Demonstration 2: How to express breastmilk

How to prepare a container for expressed breastmilk

- 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.

Health workers should 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.

Steps for a mother expressing breastmilk:

- 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 Slide 12/2).
- Press her thumb and first finger slightly inward toward 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 breastmilk 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.

How often a mother should express milk depends on the reason for expressing the milk, but usually as often as the baby would breastfeed.

She should express as much as she can as often as her baby would breastfeed. This should be at least every 3 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 establish lactation, to feed a low-birthweight or sick newborn: She should start to express milk on the first day, as soon as possible after delivery. She may express only a few drops of colostrum at first, but it helps breastmilk production to begin, in the same way that a baby suckling soon after delivery helps breastmilk production to begin.

To keep up her milk supply to feed a sick baby: She should express at least every 3 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 3 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.

Hand expression is the most useful way to express breastmilk. 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.

Session 13: Cup feeding

Learning objectives

After completing this session, participants will be able to:

- List the advantages of cup feeding.
 - Estimate the amount of milk to give to a baby according to weight.
 - Demonstrate how to cup feed safely.
-

Why cups are safer and better than bottles for feeding a baby

- 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. Bottles that are carried around give 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.

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-birthweight 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.

Session 14: Breast conditions

Learning objectives

After completing this session, participants will be able to recognise and manage these common breast conditions:

- Flat and inverted nipples.
- Engorgement.
- Blocked duct and mastitis.
- Sore nipples and nipple fissure.

Slide 14/1.



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.

Differences in the sizes of breasts are mostly due to the amount of fat, 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.

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.

Slide 14/2.



A doctor told the mother in Picture 1 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 to see 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 (if the nipple can be stretched or lengthened) 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.

Slide 14/3.



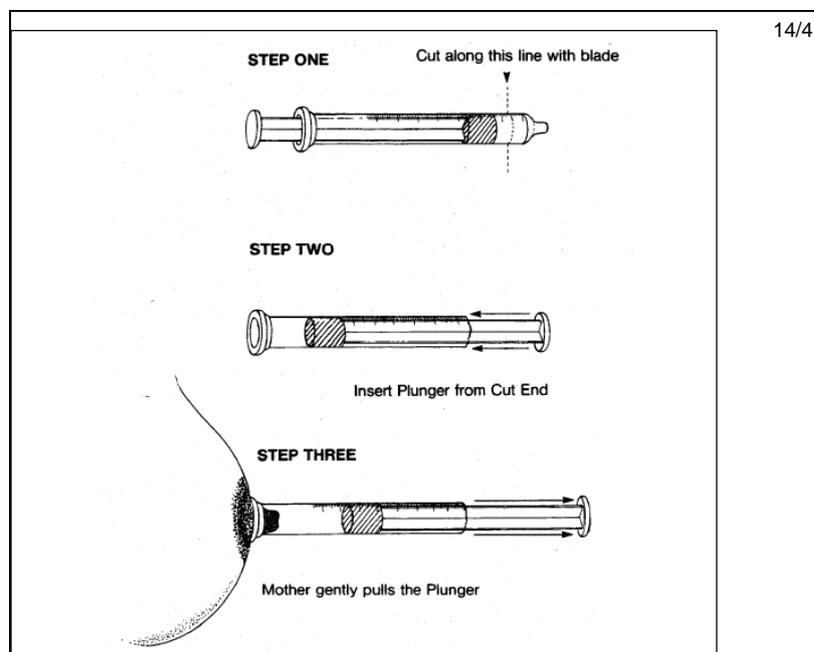
This nipple is **inverted**. If this woman tests her breast for protractility, her nipple will go in instead of coming out.

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.

How to help a woman with inverted nipples

- Antenatal treatment is probably not helpful. 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 (we will be discussing this further later in this training).
- 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 breastmilk 'comes in' and her breasts are full. Sometimes putting a baby to the breast in a different position (for example, the underarm position) makes it easier for him to attach.
- 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.

Slide 14/4.



The syringe method for treating inverted nipples can be used after a woman gives birth to help a baby to attach to the breast. It is not certain whether it is helpful during antenatal care.

Slide 14/5.



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, 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.

The nipple 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 as easy to treat.

Slide 14/6.

DIFFERENCES BETWEEN FULL AND ENGORGED BREASTS	
Full Breasts Hot Heavy Hard Milk flowing No fever	Engorged Breasts Painful Oedematous Tight, especially nipple Shiny May look red Milk NOT flowing May be fever for 24 hours

Breasts may become engorged if:

- There has been a delay in starting breastfeeding after birth.
- There is poor attachment to the breast so breastmilk is not removed effectively.
- There is infrequent removal of milk; for example, if breastfeeding is not on demand.
- The length of breastfeeds is restricted.

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 so that milk does not then build up in the breast.

Slide 14/7.

14/7
TREATMENT OF BREAST ENGORGEMENT
<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">• 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.

We have just discussed the management of engorgement in a woman who wishes to continue breastfeeding.

Engorgement may occur in an HIV-positive woman who stops breastfeeding; for example, if replacement feeding becomes acceptable, feasible, affordable, sustainable, and safe when her baby is 6 months or older and she decides to stop breastfeeding. When an HIV-positive mother is trying to stop breastfeeding, she should only express enough milk to relieve the discomfort and not to increase the milk production. Milk may be expressed a few times per day when the breasts are overfull to make the mother comfortable. You may have heard of pharmacological treatments to reduce the milk supply. These are not recommended. However, a simple analgesic (for example, ibuprofen) may be used to reduce inflammation and help the discomfort whilst the mother's milk supply is decreasing. If ibuprofen is not available, then paracetamol may be used.

Slide 14/8.



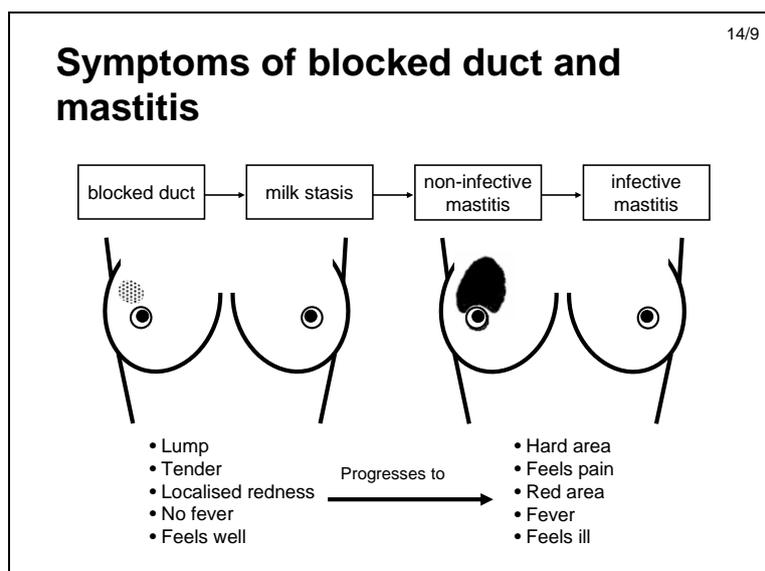
This is mastitis.

A woman with **mastitis** 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.

Slide 14/9.



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.

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.

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 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 this situation, 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.
- A fissure through which bacteria may enter.

- No improvement after 24 hours of improved drainage

Treatment of mastitis in an HIV-infected woman

In a woman who is HIV infected, mastitis or nipple fissure (especially if bleeding or oozing) may increase the risk of HIV transmission. Therefore, the recommendation to increase the frequency and duration of feeds for mastitis is not appropriate for these women.

If an HIV-infected woman develops mastitis or a fissure, she should avoid breastfeeding from the affected side while the condition persists. It is the same if she develops an abscess.

She must express milk from the affected breast, to ensure adequate removal of milk. This is essential to prevent the condition from becoming worse, to help the breast recover, and to maintain milk production. The health worker should help her to ensure that she is able to express milk effectively.

If only one breast is affected, the infant can feed from the unaffected side, feeding more often and for a longer time to increase milk production. Most infants get enough milk from one breast. The infant can feed from the affected breast again after it has recovered.

If both breasts are affected, she will not be able to feed from either side. The mother will need to express her milk from both breasts. Breastfeeding can resume after the breasts have recovered.

The health worker will need to discuss other feeding options for her to give meanwhile. The mother may decide to heat-treat her expressed milk, or to give commercial formula. The infant should be fed by cup.

Give antibiotics for 10–14 days to avoid relapse. Give pain relief and suggest rest as in the HIV-uninfected woman.

Sometimes a woman may decide to stop breastfeeding at this time, if she is able to give another form of milk safely. She should continue to express enough milk to allow her breasts to recover and to keep them healthy, until milk production ceases.

Slide 14/10.



Picture 1 shows a mother's breast, and Picture 2 shows the same mother feeding her baby on the breast.

There is a fissure, or crack, around the base of the nipple. You may be able to see that the breast is also engorged.

Also, 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 the baby's top lip.
- His mouth is closed, and his lips are pointing forward.
- 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 rub a little expressed breastmilk over the nipple and areola with her finger. This promotes healing.

Slide 14/11.



The mother in Slide 14/11 has very sore, itchy nipples. 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.

In women who are HIV infected, it is particularly important to treat breast thrush and oral thrush in the infant promptly.

Session 15: Overview of HIV and infant feeding

Learning objectives

After completing this session, participants will be able to:

- Explain the risk of mother-to-child transmission (MTCT) of HIV at each stage.
 - Describe factors that influence MTCT.
 - List approaches that can reduce the risk of MTCT during breastfeeding through safer infant feeding practices.
 - State infant feeding recommendations for women who are HIV positive, for women who are HIV negative, or women who do not know their status.
 - Describe the current situation of HIV and prevention of mother-to-child transmission (PMTCT) in Lesotho.
 - Use Counselling Card 1: Risk of mother-to-child-transmission of HIV during a counselling session.
-

Most HIV-infected children become infected through their mothers. MTCT can take place during pregnancy, during labour and delivery, and through breastfeeding.

The best way to prevent infection of children is to help their fathers and mothers to avoid becoming infected in the first place. Men's responsibility for protecting their families must be emphasised.

However, many women are already infected, and it is important to try to reduce the risk to their babies. This chapter will focus on reducing the risk during the postpartum period. You as a health worker can help an HIV-positive woman decide on the best way to feed her baby in her particular circumstances.

- HIV, or human immunodeficiency virus, is the virus that causes AIDS.
- AIDS, or acquired immunodeficiency syndrome, is the active pathological condition that follows the earlier, non-symptomatic state of being HIV positive.
- People infected with HIV feel well at first and usually do not know they are infected. They may remain healthy for many years as the body produces antibodies to fight HIV.
- But the antibodies are not very effective. The virus lives inside the immune cells and slowly destroys them. When these cells are destroyed, the body becomes less able to fight infections. The person becomes ill and after a time develops AIDS. Eventually he or she dies, unless there are interventions.
- A blood test can be done to determine 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 bodies, they can pass 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.
 - HIV can also pass from an infected woman to her child. This is called MTCT.

Most children who get HIV are usually infected through their mother:

- During pregnancy across the placenta.
- During labour and delivery through blood and secretions.
- Through breastfeeding.

About 27%⁴ of pregnant women in Lesotho are HIV positive. This means that out of 100 women who come in for antenatal care services, 27 test positive for HIV. Not all babies born to HIV-infected mothers become infected with HIV.

Slide 15/1. Estimated risk and timing of MTCT without interventions.

15/1	
Estimated risk and timing of mother-to-child transmission of HIV without interventions	
Timing of MTCT of HIV	Transmission Rate
• During pregnancy	5-10%
• During labour and delivery	10-15%
• During breastfeeding	5-20%

*World Health Organization/United Nations Children's Fund
International Technical Working Group; 2006 Guidelines.*

About two-thirds of infants born to HIV-infected mothers will not be infected with HIV, even without interventions such as antiretroviral (ARV) prophylaxis or caesarean section. About 15–25% will be infected during pregnancy and birth. About 5–20% of infants born to HIV-infected mothers will get the virus through breastfeeding. The risk continues as long as the mother breastfeeds, and is more or less constant over time. Exclusive breastfeeding during the first 6 months of life carries a lower risk of HIV transmission than mixed feeding. Research has shown that the transmission risk at 6 months in exclusively breastfed babies is lower than in mixed-fed babies.

The factors that influence the risk of MTCT relate to the virus itself, to the mother herself, to obstetrics, to the foetus, and to the newborn.

⁴ Government of Lesotho Ministry of Health and Social Welfare. PMTCT and Paediatric HIV Scale Up Plan 2007–2011.

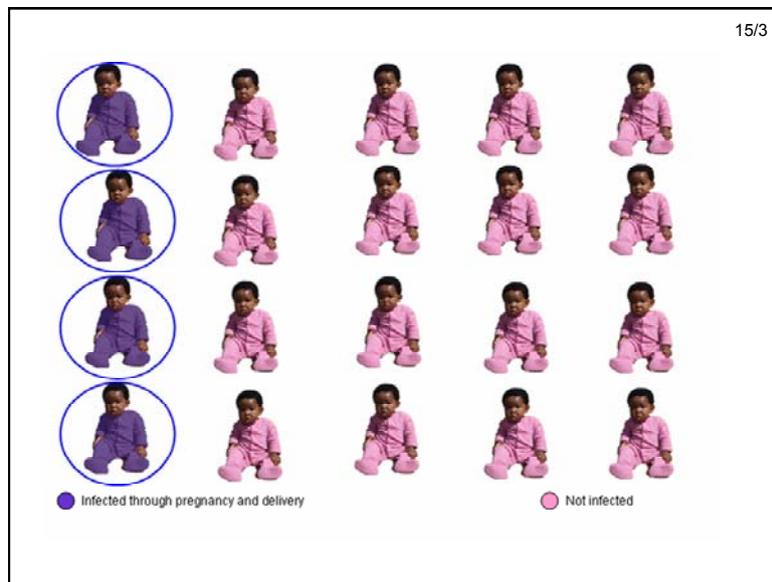
Slide 15/2. Estimated rates of MTCT.



In this slide, you see 20 babies. All of them were born to mothers who were tested for HIV and had a positive result.

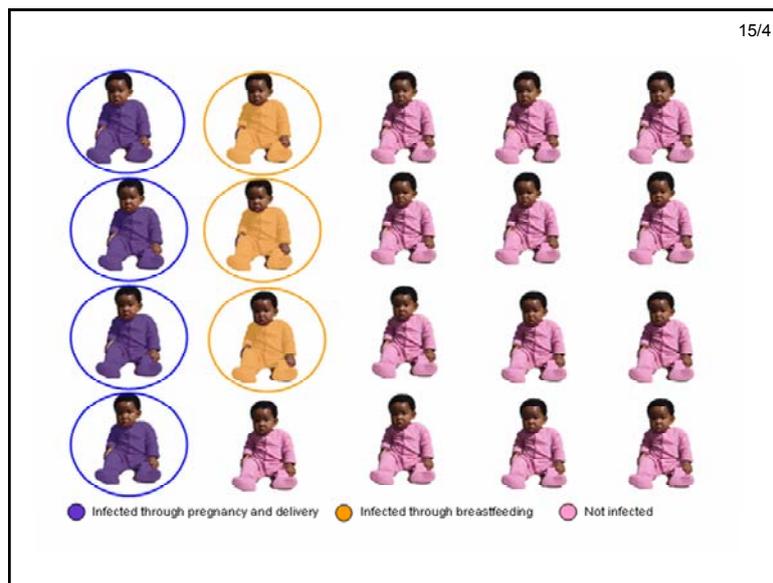
The rate of transmission during pregnancy and delivery is around 20% without intervention.

Slide 15/3.



The rate of transmission during breastfeeding can vary from 5 to 20% depending on how long a mother breastfeeds and whether or not she breastfeeds exclusively. We will use 15% for this example.

Slide 15/4.



If all HIV-positive mothers exclusively breastfed, the number of infected infants would be less.

65% of the 20 babies, or 13 infants, who receive no PMTCT intervention will **not** be infected during pregnancy, labour, delivery, or breastfeeding.

Slide 15/5.

15/5

Factors that affect MTCT

- Recent infection with HIV
- Severity of disease
- Sexually transmitted infections
- Obstetric procedures
- Duration of breastfeeding
- Exclusive breastfeeding or mixed feeding
- Condition of the breasts
- Condition of the baby's mouth

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 HIV transmission through breastfeeding.

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 babies too will be at high risk, if the infection occurs during pregnancy or while breastfeeding. For women who are already infected it is important to protect against re-infection as this can also cause a high viral load, increasing the risk of HIV transmission to the baby.

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.

Mixed feeding versus exclusive breastfeeding: There is evidence that the risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding in the first 6 months. 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.

Condition of the baby's mouth: Mouth sores or thrush in the infant may make it easier for the virus to get into the baby through the damaged skin.

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.

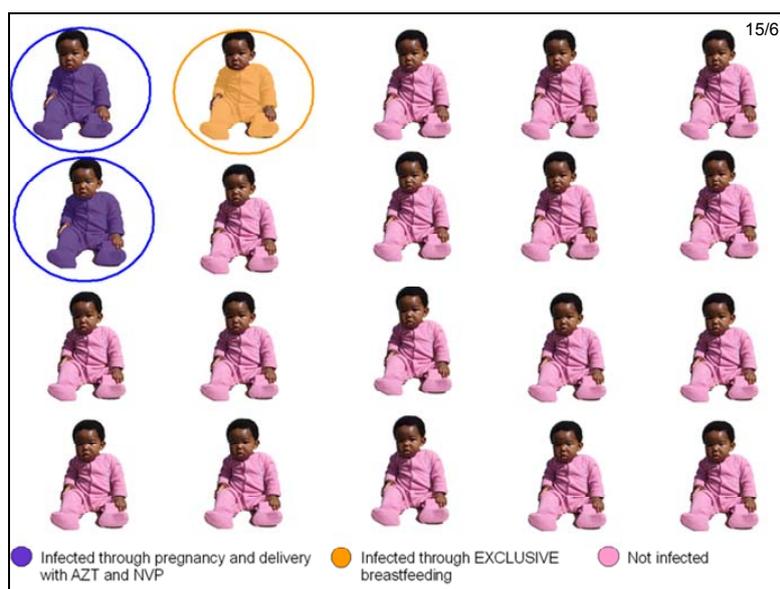
ARV drugs are used to reduce the amount of HIV in the body. Some ARVs you may have heard of are AZT, 3TC (lamivudine), Combivir (3TC + AZT), and Nevirapine (NVP).

HIV-positive pregnant women in Lesotho are given AZT, 3TC, and NVP at different times during pregnancy and labour and after delivery depending on when they access services to prevent MTCT. Infants receive single-dose NVP and AZT for 1 or 4 weeks, depending on the duration of AZT during pregnancy.

It has been shown that if a short course of ARV is given to the mother at the end of pregnancy and at the time of delivery, the risk of transmission at that time can be reduced by about half. There are several short ARV regimens, which can be used in different ways. The baby is also given one or more of the ARVs for a short time.

There are indications that maternal highly active antiretroviral therapy (HAART) for treatment-eligible women may reduce postnatal HIV transmission, based on program data from Botswana, Mozambique, and Uganda; follow-up trial data on the safety and efficacy of this approach, and on infant prophylaxis trials are awaited. However, there are currently no recommendations related to how effective or safe ARVs are in preventing transmission through breastfeeding when given to either the baby or mother over a longer time period.

Slide 15/6.



This slide shows the risk of transmission is much lower when mothers and infants receive ARV prophylaxis (represented by the babies dressed in purple) and when women breastfeed exclusively for the first 6 months (represented by the baby dressed in yellow).

Approaches to prevent mother-to-child transmission through breastfeeding

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.

The *National Infant and Young Child Feeding (IYCF) Policy* addresses 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 consider the need to promote breastfeeding in the general population.

Women who are HIV negative should be encouraged and supported to exclusively breastfeed and remain negative.

Women of unknown status should be encouraged to be tested. If they are not tested, they should be counselled to exclusively breastfeed.

We will now look at the situation where a woman has been tested and knows she is HIV positive.

An HIV-positive mother has two options for feeding her baby during the first 6 months of life: exclusive breastfeeding or exclusive replacement feeding with commercial infant formula.

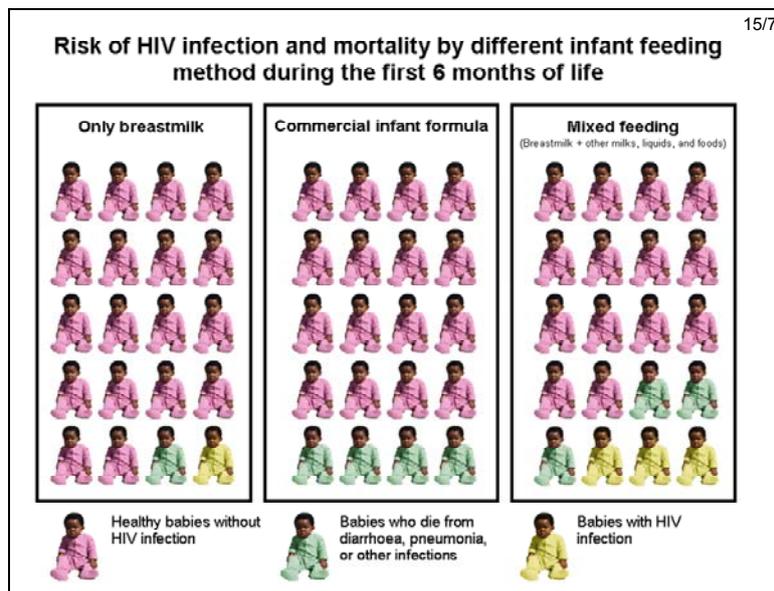
Counsellors should help each mother decide the appropriate feeding option for her individual situation by taking into account the advantages and disadvantages of the two options:

- There is risk of HIV transmission during breastfeeding, but exclusive breastfeeding increases a baby's chance of survival.

- There is less risk of HIV transmission if the infant does not breastfeed, but the risk of morbidity (especially from diarrhoea) and mortality is much higher among non-breastfed infants.
- If the mother mix-feeds—breastfeeds and gives other foods or liquids, including water—during the first 6 months, this increases the risk of MTCT of HIV.
- Exclusive breastfeeding for up to 6 months decreased the risk of HIV transmission by three to four times compared to non-exclusive breastfeeding in studies in Côte d'Ivoire, South Africa, and Zimbabwe.

Counsellors should help each mother to evaluate her options and her situation thoroughly and to choose the appropriate feeding option for her situation by taking into account the risks and benefits of each available option.

Slide 15/7.



This slide shows the risks of HIV infection and death to children born to HIV-positive mothers during the first 6 months of life by different feeding methods. This slide does not consider PMTCT services. In our country, PMTCT services are available, so the number of babies infected would be even less.

Even among women who know they are HIV positive, most of their infants will not be infected through breastfeeding. There are risks of HIV transmission if a mother who is HIV positive decides to breastfeed her infant. However, there are also risks if a mother decides not to breastfeed. In some situations, the risk of illness and death from not breastfeeding may be greater than the risk of HIV infection through breastfeeding.

Infants who are not breastfed are at increased risk of gastroenteritis, respiratory infections, and other infections.

We used the figures of 20% for transmission rates of HIV during pregnancy and delivery and 15% for the rate during breastfeeding for the purposes of the exercise. These sound like very exact figures, but they are only averages from several research studies. Rates vary because of differences in population characteristics, such as how ill the mothers are, how much virus is in their blood, and how long the mothers breastfeed.

Since several factors affect these rates, understanding them may help us to find ways to reduce transmission.

Slide 15/8. Recommendations for feeding an infant exposed to HIV.

15/8

Recommendations for feeding an infant exposed to HIV

The most appropriate infant-feeding option for an HIV-positive mother should continue to depend on her individual circumstances, health status, and local situation, including health services and counselling and support available.

Exclusive breastfeeding is recommended for HIV-positive women for the first 6 months of life unless replacement feeding with commercial infant formula is acceptable, feasible, affordable, sustainable, and safe (AFASS) for them and their infants.

When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-positive women is recommended.

At 6 months, if replacement feeding is still not AFASS, continuation of breastfeeding with additional complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate and safe diet without breastmilk can be provided.

The recommendations on the slide reflect the *National IYCF Policy* and the most recent recommendations from the World Health Organization—based on the HIV and Infant Feeding Update from October 2006.

For an HIV-positive woman, there are now only two recommended options for feeding her baby during the first 6 months: exclusive breastfeeding and exclusive replacement feeding with commercial infant formula.

The individual infant's risk of HIV infection and death can vary according to the mother/family's circumstances, the health of the mother, and the counselling and support she is able to receive.

The best feeding choice for a baby and a young child is the one that maximises health, nutrition, growth, and development.

All HIV-infected mothers should receive counselling, which includes provision of general information about the risks and benefits of various infant feeding options, and specific guidance in selecting the option most likely to be suitable for their situation. Exclusive breastfeeding during the first 6 months is recommended unless replacement feeding (with infant formula) is acceptable, feasible, affordable, sustainable, and safe (AFASS). If replacement feeding is not AFASS at 6 months, continued breastfeeding with complementary foods is recommended.

Between 6 and 24 months, if replacement feeding becomes AFASS, cessation of breastfeeding is recommended.

Whatever a mother decides, health personnel should monitor all babies exposed to HIV and continue to offer infant feeding counselling and support, particularly at key moments, and up to 24 months.

A baby who tests positive in the first 6 months should be exclusively breastfed for the first 6 months. HIV-positive children should continue breastfeeding for as long as possible.

Among infected infants, studies have shown that continued breastfeeding slows the progression of HIV and decreases the risk of mortality.

Each of the options—exclusive breastfeeding or exclusive replacement feeding—has its own risks. A mother who breastfeeds risks transmitting HIV to her child. Meanwhile, a mother who replacement feeds risks having a child who dies from illness or malnutrition.

The most dangerous way to feed an infant is mixed feeding (breastmilk plus other foods and liquids) during the first 6 months of life. Mixed feeding during the first 6 months can irritate the mucosal membrane of the intestines, creating entry points for HIV into the infant's body. It can also cause diarrhoea. It is very important for mothers who choose breastfeeding to follow exclusive breastfeeding for the first 6 months, and for those who choose replacement feeding to follow exclusive replacement feeding for the first 6 months.

In this course, we will learn how to help a mother decide the best way to feed her baby from birth to 2 years—both to reduce the risk of HIV transmission and better guarantee the baby's survival. In the upcoming sessions, we will discuss how to counsel a mother on the two infant feeding options for babies exposed to HIV during the first 6 months of life: exclusive breastfeeding and exclusive replacement feeding. Later, we will also discuss feeding options for infants 6–24 months of age.

Session 16: Counselling for infant feeding decisions— Part 1

Learning objectives

After completing this session, participants will be able to:

- Describe the elements to be considered for counselling on infant feeding in relation to HIV.
- List the different feeding options available to HIV-positive mothers.
- Demonstrate effective listening and learning skills within the context of infant feeding counselling for women who are HIV positive.

Counselling for infant feeding in relation to HIV

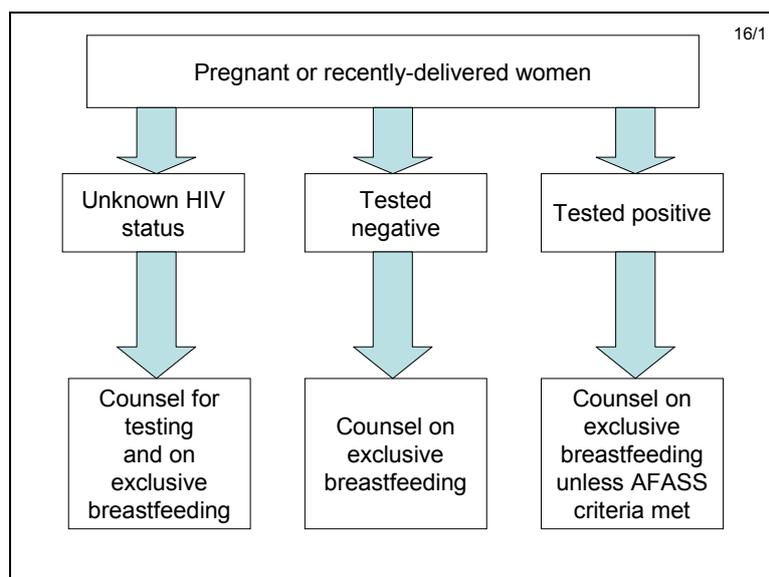
As infant feeding counsellors, you will explain the different feeding options available to HIV-positive mothers.

You will not be expected to give general counselling for HIV unless you have special training to do this. If you have not been trained, you need to know where to refer women for this service, and you should refer mothers to counselling rather than try to counsel them without training.

Although ideally most women in the country will have been tested for HIV during pregnancy, it is possible that you may be giving infant feeding counselling to women who may or may not know their HIV status.

Slide 16/1.

Women need different information about feeding their children during the first 6 months, depending on their HIV status, their individual situation, and the age (and HIV status) of their baby.



<p>For women who have not been tested or do not know their status:</p>	<ul style="list-style-type: none"> • Talk with them about the advantages of HIV testing for them and their families. • Refer them to a convenient HIV testing and counselling centre if they would like a test or for Know Your Status (KYS) testing in their community. Pregnant women can be tested in their own homes by KYS counsellors. If they test positive, they are referred to health facilities for services. For women who do not want to be tested at home, KYS counsellors can give information and refer them to the facility for testing and further management. • Recommend the systematic use of condoms and explain how to use them. • Explain why it is important that partners be involved and be tested. • In the absence of a test result, provide counselling about their concerns, and encourage them to feed their babies as if they were HIV negative—to breastfeed exclusively for 6 months and to continue breastfeeding with adequate complementary feeding until 2 years or beyond. • If a woman does not know her HIV status, it is usually safer for her baby if she breastfeeds exclusively. Babies who do not breastfeed are at greater risk of illness. • When you counsel women who do not know their HIV status about infant feeding, they may need reassurance that breastfeeding is the safest option for their babies. • Talk with each woman about the risks of becoming infected during pregnancy or while breastfeeding and review ways to stay negative. It is important that women remain negative (through condom use, abstaining from sex, or a mutually faithful relationship with a negative partner).
<p>For women who have been tested and are HIV negative:</p>	<ul style="list-style-type: none"> • Talk with them about the risks of becoming infected during pregnancy or while breastfeeding, and review ways to stay negative. It is important that women remain negative (through condom use, abstaining from sex, or a mutually faithful relationship with a negative partner). • Explain why it is important that partners be involved and be tested. • Some women may believe they are HIV positive despite a negative test. They need counselling to discuss their worries, and generally should be encouraged to exclusively breastfeed. • Suggest that they have a repeat test if they think they have been exposed to HIV since the last test. • Encourage exclusive breastfeeding for the first 6 months (as per the general population recommendation), since this is the best for babies' health and development. • From the age of 6 months, introduce a variety of complementary foods that are safely prepared and continue breastfeeding until the age of 2 years and beyond. • Avoid mixed feeding during the first 6 months. Mixed feeding increases the risk of diarrhoea, infections, and malnutrition of all infants.
<p>For women who have been tested and are HIV positive:</p>	<ul style="list-style-type: none"> • Recommend the consistent use of condoms to avoid re-infection and explain how to use them. • Explain why it is important that partners be involved and be tested. • Make sure that mothers meet with personnel and receive the services appropriate for their care.

	<ul style="list-style-type: none"> • Discuss infant feeding options from birth to 6 months. Exclusive breastfeeding is recommended for HIV-positive mothers for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable, and safe (AFASS) for them and their infants before that time. • The choice of the best feeding option for infants born to HIV-positive mothers depends on each mother's situation. This choice ought to take into account the availability of health services and the counselling and support each is likely to obtain. • You will need to counsel mothers again as their children approach 6 months of age, to discuss feeding options from 6 months onward. • At 6 months, introduce complementary foods, and if breastfeeding, continue until replacement feeding becomes AFASS. • After 6 months, if and when replacement feeding is AFASS, HIV-positive mothers ought to avoid any breastfeeding of their infants. • All HIV-positive mothers should receive advice that includes general information on the risks and advantages of different feeding options for the baby, as well as assistance in choosing the most appropriate option in their case. • Whatever her choice, each mother ought to be supported.
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If the infant has tested positive, the mother should be encouraged to continue breastfeeding. In this way, the infant can benefit from the good effects of breastmilk.

Slide 16/2.

16/2

<p>HOW TO USE THE FLOW CHART</p> <p>1. IF THIS IS THE FIRST INFANT FEEDING COUNSELLING SESSION:</p> <p>And she is pregnant:</p> <ul style="list-style-type: none"> • Follow steps 1-4. If she needs time to decide which feeding option to choose, follow steps 1-3 and ask her to return to discuss step 4 • If she is early in her pregnancy ask her to return again closer to her delivery date to review how to feed her baby. <p>If she already has a child:</p> <ul style="list-style-type: none"> • Follow steps 1-3. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding. • Continue with steps 5. <p>2. IF THE MOTHER HAS ALREADY BEEN COUNSELLED AND CHOSEN A FEEDING METHOD, BUT SHE HAS NOT YET LEARNED HOW TO PRACTICE IT:</p> <p>And she is pregnant</p> <ul style="list-style-type: none"> • Do step 4 only. <p>And she already has a child:</p> <ul style="list-style-type: none"> • Begin with step 4 and continue with step 5 <p>3. IF THIS IS A FOLLOW-UP VISIT:</p> <ul style="list-style-type: none"> • Begin with step 5 • Review how to practice the feeding method. <p>REMEMBER:</p> <ul style="list-style-type: none"> • Use "listening and learning skills" and skills for building confidence and giving support. • Check to ensure that the mother understands what you have discussed • Arrange for follow up or referral as needed. 	<p>COUNSELLING FLOW CHART</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> <p>STEP 1</p> <p>Explain the risks of mother-to-child transmission</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> <p>STEP 2</p> <p>Explain the advantages and disadvantages of different feeding options starting with the mother's initial preference</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> <p>STEP 3</p> <p>Explore with the mother her home and family situation and help the mother choose an appropriate feeding option</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> <p>STEP 4</p> <p>Explain how to practice the chosen feeding option and give her the appropriate take-home pamphlet</p> <table style="width: 100%; font-size: small;"> <tr> <td style="width: 50%;">How to practice exclusive breastfeeding for the first 6 months</td> <td style="width: 50%;">How to give only formula Remind the mother that she can never breastfeed if chooses formula</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>STEP 5</p> <p>Follow-up with the mother and baby</p> <ul style="list-style-type: none"> • Monitor growth • Check feeding practices • Check for signs of illness • Discuss feeding for infants 6 to 24 months </div>	How to practice exclusive breastfeeding for the first 6 months	How to give only formula Remind the mother that she can never breastfeed if chooses formula
How to practice exclusive breastfeeding for the first 6 months	How to give only formula Remind the mother that she can never breastfeed if chooses formula		

Most HIV-positive women are not ready to discuss infant feeding options at their first post-test counselling session. They will need to be referred specifically for that later. The infant feeding counsellor may be a different person from the person who gives general post-test counselling.

In order to help the woman without telling her what to do, you will need to follow a step-by-step process for providing information and support. We will look at the basic steps that should be followed. In further sessions, you will learn the relevant information required and how to apply your counselling skills during the process.

The flow chart included in the flip chart helps you to work through options with a woman in a logical way. It is important that a woman is not overwhelmed with many choices and is given time to express her own feelings.

Infant feeding counselling for HIV-positive women may be needed:

- Before a woman is pregnant.
- During her pregnancy.
- Soon after her baby is born.
- Soon after receiving the first and final results of her baby's HIV test.
- Before her baby completes 6 months and she introduces complementary foods.

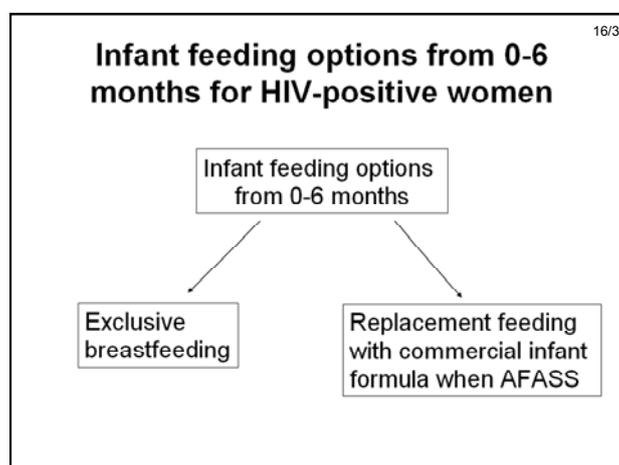
Infant feeding counselling is needed at every contact with a facility until a baby is 24 months old. As her baby gets older, an HIV-positive mother needs ongoing infant feeding counselling to support her chosen method during the first 6 months and to re-evaluate her situation at 6 months before introducing complementary foods. If her situation has changed, she may want to change her method of feeding and to discuss this with the infant feeding counsellor. Each woman's situation is different, so health workers need to be able to discuss all the various feeding options.

It is important for breastfeeding mothers to continue breastfeeding exclusively until their children complete 6 months. If a woman comes in with a 5-month-old, she may be counselled on introducing complementary foods, but it is important to emphasise that just because they discuss introducing new foods, it does not mean she should start before her child completes 6 months.

Infant feeding options should be discussed with women who are HIV positive. The Government of Lesotho now recommends two infant feeding options for HIV-positive women during the first 6 months: exclusive breastfeeding and exclusive replacement feeding with commercial infant formula. Remember we learnt in Session 2 that cow's milk is not appropriate for infants less than 6 months of age.

Slide 16/3.

This slide shows an HIV-positive woman's options for feeding her baby in the first 6 months. When counselling a woman, the advantages and disadvantages of both options should be discussed.



The World Health Organization has criteria to recommend when an HIV-positive mother should replacement feed. These criteria are called AFASS for acceptable, feasible, affordable, sustainable, and safe.

A counsellor needs to know about the family and economic circumstances to appropriately counsel women on how to feed their children.

Determining AFASS

Slide 16/4. Definitions of acceptable, feasible, and affordable.

16/4

**DEFINITIONS OF ACCEPTABLE, FEASIBLE,
AFFORDABLE, SUSTAINABLE AND SAFE
(AFASS)**

- **Acceptable:** The mother perceives no barrier to replacement feeding. Barriers may have cultural or social reasons, or be due to fear of stigma or discrimination.
- **Feasible:** The mother (or family) has adequate time, knowledge, skills and other resources to prepare the replacement food and feed the infant up to 12 times in 24 hours.
- **Affordable:** The mother and family, with community or health-system support if necessary, can pay for the cost of purchasing/producing, preparing and using replacement feeding, including all ingredients, fuel, clean water, soap and equipment, without compromising the health and nutrition of the family.

Slide 16/5. Definitions of sustainable and safe.

16/5

**DEFINITIONS OF ACCEPTABLE, FEASIBLE,
AFFORDABLE, SUSTAINABLE AND SAFE
(AFASS)**

- **Sustainable:** Availability of a continuous and uninterrupted supply, and dependable system of distribution for all ingredients and products needed for safe replacement feeding, for as long as the infant needs it, up to one year of age or longer.
- **Safe:** Replacement foods are correctly and hygienically prepared and stored and fed in nutritionally adequate quantities with clean hands and using clean utensils, preferably by cup.

When counselling an HIV-positive woman on infant feeding, it is important to:

- Talk about her individual circumstances to determine if she meets AFASS criteria.
- Explain to her the two infant feeding options and the advantages and disadvantages of each.
- Help her make the best decision on how to feed her infant.

Counselling job aids overview

The first tool we will look at is a counselling card flip chart that includes the flow chart illustrating the counselling process (that we discussed earlier in this session). The counselling cards are to be used during one-to-one sessions with pregnant women and/or mothers. The flow chart shows the recommended steps to follow for HIV and infant feeding counselling. On the left-hand side, there are some simple instructions for how to use the flow chart, depending on the type of session (first session, follow-up) and whether the woman is pregnant or her baby has already been born.

The second tool is a set of take-home flyers for mothers on how to safely practise the chosen feeding option.

Each of the cards we will now look at has a step number which fits in with the steps on the flow chart.

- Card 1 is called 'The risk of mother-to-child transmission'. Use this card to help you to explain to a woman the chances of her child being infected. Remember from Session 15, if all the mothers of the babies shown are HIV positive, three of the babies are likely to get HIV through breastfeeding.
- Card 2 lists the infant feeding options for the first 6 months for women who are HIV positive.
- Card 3 is called 'Benefits of exclusive breastfeeding'. Exclusive breastfeeding until a baby completes 6 months is recommended unless replacement feeding is AFASS.
- Card 4 is called 'Advantages and disadvantages of commercial infant formula'.
- Card 5 is called 'Helping a mother decide how best to feed her baby'. The table shown on this card should be used with mothers who are pregnant or have infants less than 6 months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation.
 - The first step is to ask the woman about all of the things in the first column. For example: *Where do you get your drinking water?*
 - Remember the woman's responses to each question. You will use this information to help her choose a feeding option. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose the method herself after learning the advantages and disadvantages of each method.
 - When you use the card, it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman, and to support her in the choice she makes.
 - It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.
- Card 6 is called 'Understanding exclusive breastfeeding'. It is important to remember that during the first 6 months, a woman should be encouraged and supported to use the same infant feeding method she chose for the entire time.

Note that each card has several sections:

- 'Use with': This specifies the group of people with whom you should use this specific card. For example, Card 1 is to be used with 'All HIV-positive women who are being counselled for the first time'.
- 'Ask': This section gives a very specific question or questions that a counsellor can ask to start the conversation.

- 'Key Messages': This main section of the card provides the key messages that a counsellor should review with a mother.
- 'Ask': This second 'Ask' section provides questions for a counsellor to use in order to check for understanding.
- The table shown in Card 5 should be used with mothers who are pregnant or have infants under 6 months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation.
- The first step is to ask the woman about all of the things in the first column. For example: *Where do you get your drinking water?*
- Remember the woman's responses to each question. You will use this information to help her choose a feeding option. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose the method herself after learning the advantages and disadvantages of each method.
- When you use the cards it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman, and to support her in the choice she makes.
- It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.

Session 17: Feeding options for HIV-positive mothers— Advantages of exclusive breastfeeding

Learning objectives

After completing this session, participants will be able to:

- List the advantages and the disadvantages of exclusive breastfeeding for HIV-positive women.
- Describe the factors that increase the risk of mother-to-child transmission (MTCT) of HIV during breastfeeding.
- Explain how to reduce the risk of MTCT of HIV during breastfeeding.
- Counsel a mother on the advantages and disadvantages of exclusive breastfeeding.
- Use Counselling Card 3: Benefits of exclusive breastfeeding during a counselling session.

According to the *National Infant and Young Child Feeding Policy*, there are two recommendations for how HIV-positive mothers should feed their babies during the first 6 months of life: exclusive breastfeeding and exclusive replacement feeding with infant formula.

In this session, we will discuss exclusive breastfeeding and the ways to reduce the risk of MTCT of HIV during breastfeeding.

All health workers who care for mothers and infants need to know how breastfeeding works, and how to help mothers to breastfeed. They need this competence to help both HIV-negative and HIV-positive mothers. Health workers are responsible for protecting, promoting, and supporting the feeding choice made by the mother.

In addition to helping mothers to breastfeed their infants properly, the health worker should refer the mother to other health services that support the growth and development of her baby during the first 2 years.

Advantages and disadvantages of breastfeeding for an HIV-infected mother

An HIV-positive mother needs to understand the advantages and disadvantages of exclusive breastfeeding before deciding if it is the best option for her specific situation.

The benefits of exclusive breastfeeding for women who are HIV positive include:

- Breastmilk is the ideal food for babies and protects them from many diseases, especially diarrhoea, malnutrition, and pneumonia, and the risk of dying from these diseases.
- Breastmilk gives babies all the nutrients and water they need in adequate amounts. Breastfed babies do not need any other liquid or food.
- Breastmilk is free, always available, and does not need any special preparation.
- Exclusive breastfeeding for the first 6 months lowers the risk of passing HIV, compared to mixed feeding.
- Many women breastfeed, so people will not ask why mothers are breastfeeding.
- Exclusive breastfeeding helps mothers to recover from childbirth and protects them from getting pregnant again too soon.

Disadvantages of breastfeeding for women who are HIV positive include:

- As long as the mother breastfeeds, her baby is exposed to HIV.
- People may pressure the mother to give water, other liquids, or foods to the baby while she is breastfeeding. This practice, known as mixed feeding, increases the risk of diarrhoea and other infections, and increases the risk of HIV transmission.
- It may be difficult (and potentially dangerous) to do if the mother gets very sick.

If a woman does breastfeed, it is important for her to breastfeed exclusively. This gives protection for the infant against common childhood infections and also reduces the risk of HIV transmission.

Counselling on infant feeding may need to take into account her disease progression. Recent evidence suggests a very high rate of postnatal transmission in women with advanced disease.

An HIV-positive mother who chooses to breastfeed needs to use a good technique to prevent nipple fissure and mastitis, both of which may increase the risk of HIV transmission. We have already learned how to manage these breast conditions.

Demonstration: Use of Counselling Card 3

Counselling cards can be used by health workers to explain advantages and disadvantages of exclusive breastfeeding by HIV-positive mothers.

Slide 17/1. Counselling Card 3: Benefits of exclusive breastfeeding.



Counsellor: ‘Good morning, Me (name). How are you doing today? What can I do to help you?’

Mother: ‘Oh, I am doing well, thank you. I am here today because I just tested positive for HIV, and I am pregnant. I want to get some information about how to feed my baby.’

Counsellor: ‘That is good that you have come to talk about how to feed your baby.’
(Pulls out counselling cards and shows the mother Counselling Card 3. The photo faces the mother and the text faces the counsellor.) ‘What do you think of breastfeeding?’

Mother: ‘I think it’s good.’

Counsellor: ‘What do you understand by exclusive breastfeeding?’

Mother: ‘Well, I know that it means giving my baby only breastmilk for the first 6 months.’

Counsellor: ‘That’s right. This means that you cannot give your baby other foods, liquids, or even water.’

Mother: ‘Oh really? Even when it is very hot outside?’

Counsellor: ‘Even then, you should only give breastmilk. Breastmilk has all of the water that your baby needs. Let’s talk more about exclusively breastfeeding. What are the advantages?’

Mother: ‘I was told that if I breastfeed exclusively, then it is safer for my baby, since I have HIV. And also, breastmilk is free and always available when I need it.’

Counsellor: ‘That’s very true. Also, breastmilk is the ideal food for babies. It has everything that your baby needs to grow healthy and strong. Exclusive breastfeeding for the first 6 months also protects you from getting pregnant again too soon after this baby. What do you think of these advantages? Are they important for you?’

Mother: ‘Yes. I am very worried about giving HIV to my baby, but I know that I cannot afford to buy formula for my baby. Breastfeeding seems like the best option.’

Counsellor: ‘What are the possible disadvantages of exclusive breastfeeding?’

Mother: ‘I know that there is still a chance that my baby might get HIV.’

Counsellor: ‘Do you have questions about the disadvantages? Do you think that these disadvantages apply to your situation?’

Mother: ‘I am worried about making sure that other people do not feed my baby other foods. I would like to talk more about how to express my breastmilk so I can leave milk with my mother for the baby when I go back to work.’

Counsellor: ‘Talking with your mother is a good idea. Remember to come back if you have any questions or problems feeding your baby after he or she is born. Also, be sure to come back when your baby is 6 months old so we can talk about how best to feed your baby when he or she starts to need other foods.’

Session 18: Feeding options for HIV-positive mothers— Advantages and disadvantages of exclusive replacement feeding with commercial infant formula

Learning objectives

After completing this session, participants will be able to:

- Explain to a mother the advantages and disadvantages of replacement feeding.
- List breastmilk substitutes that can be used for replacement feeding.
- Describe the approaches to minimise risk of infection and malnutrition of babies using replacement feeding.
- Use Counselling Card 4: Advantages and disadvantages of commercial infant formula during a counselling session.

Advantages and disadvantages of replacement feeding

HIV-positive women who have been counselled about infant feeding options may decide to replacement feed if they meet the AFASS (acceptable, feasible, affordable, sustainable, and safe) criteria.

Replacement feeding is the process of feeding an infant who is not breastfed with a food that provides all nutritional elements needed by the infant until the infant can begin a variety of foods at 6 months. Commercial infant formula is now the only recommended replacement feeding option for the first 6 months.

Replacement feeding must be AFASS. Adequate replacement feeding is needed until the infant is at least 2 years old, which is the time the infant is at the greatest risk of malnutrition.

If a mother chooses to replacement feed, commercial infant formula is needed **exclusively** for at least the first 6 months. After the first 6 months, it is also useful if some kind of milk is part of the diet for until 2 years of age or more.

Formula has a good proportion of nutritional elements and added micronutrients. Giving infant formula to the non-breastfed baby until the age of 24 months is encouraged.

Exclusive replacement feeding from birth protects the baby from the risk of mother to child transmission of HIV. However, there are important risks that must be considered when the mother chooses to give her infant formula. Replacement feeding should be given to the infant in a healthy and hygienic manner to avoid infections and malnutrition.

Since the risk of mother-to-child transmission is the highest when feeding other milk or solid foods, it is equally or even more important for mothers who use replacement milk during the first 6 months to be counselled about the dangers of mixed feeding, as should mothers who exclusively breastfeed.

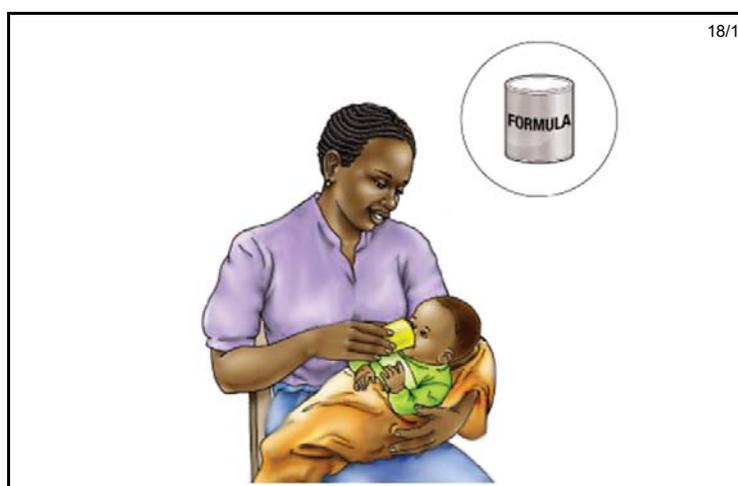
Replacement feeding	
<p style="text-align: center;"><u>Advantages</u></p> <ul style="list-style-type: none"> • Giving only replacement milk carries no risk of HIV transmission to the baby. • Other responsible family members can assist in feeding the baby. If the mother falls ill, other persons can nourish the baby while she recovers. 	<p style="text-align: center;"><u>Disadvantages</u></p> <ul style="list-style-type: none"> • Replacement feeding does not have the antibodies that protect the baby from infections. • A replacement-fed baby is at an increased risk of falling seriously ill from diarrhoea, pulmonary infections, and malnutrition. • A mother should never breastfeed once she begins replacement feeding; otherwise, the risk of transmitting HIV will continue. • A mother needs fuel and clean water (for boiling vigorously for 5 minutes) to prepare replacement milk, as well as soap to wash the baby's cup. • Infant formula requires preparation time and must be freshly prepared for each feeding (unless the mother has a refrigerator). • Infant formula is costly and you must always have it available. A baby needs 40 tins of 500 grams each for the first 6 months. • The family needs to have enough infant formula for at least the first 2 years of the infant's life. • Babies will need a cup for drinking. Babies can learn to hold the cup themselves when they are bigger, but that can take time. • People may wonder why a mother is giving formula instead of breastfeeding, and may suspect that the mother is HIV infected. • A mother can become pregnant sooner.

Demonstration: Use of Counselling Card 4

Turn to Counselling Card 4. This counselling card can be used by health workers to explain the advantages and disadvantages of replacement feeding to HIV-positive mothers.

There will first be a demonstration of the card's use, followed by time to practise using it during a role play.

Slide 18/1. Counselling Card 4: Advantages and disadvantages of commercial infant formula.



Counsellor: ‘Good morning, Me (name). How are you doing today?’

Mother: ‘I am doing well, but I am really worried about my baby. I just found out that I am HIV positive, and I need to find out about how to feed my baby. I would like to feed formula.’

Counsellor: ‘That is good that you have come to talk about how to feed your baby.’
(Pulls out counselling cards and shows the mother Counselling Card 4. The photo faces the mother and the text faces the counsellor.) ‘What do you think of infant formula?’

Mother: ‘I think formula can be used to feed my baby.’

Counsellor: ‘What does exclusive formula feeding mean to you?’

Mother: ‘Well, I know that I can give my baby only infant formula for the first 6 months.’

Counsellor: ‘That’s right. This means that you cannot give your baby other foods, liquids, or even water or breastmilk. Exclusive replacement feeding means giving commercial infant formula that is made especially for babies from birth until the age of 6 months. This also means that you cannot ever give breastmilk to your baby.’

Counsellor: ‘What are the advantages of exclusive replacement feeding?’

Mother: ‘I know that if I do this, then my baby will not be at risk at all for HIV. This is very important to me.’

Counsellor: ‘That’s true. It is important that you only use infant formula, as it is specially formulated for infants. Also, other family members can help you feed your baby. What are the possible disadvantages of exclusive replacement feeding?’

Mother: ‘It can be difficult to make, and I know that I need to make a fresh feed each time the baby needs to eat. I also know that it is expensive, but my husband has a steady job.’

Counsellor: ‘Those are both true, and it’s good that you are prepared for them. Also, remember that infant formula lacks the antibodies that are present in breastmilk, so your baby will be at a higher risk of diarrhoea, pneumonia, and even malnutrition. In addition, when preparing those feeds, it is very important that they be prepared hygienically, using boiled water and clean cups and utensils.’

Mother: ‘Okay, I will make sure that I do that.’

Counsellor: ‘Also, in some settings, feeding using infant formula may not be socially acceptable. May I ask if you have told your family?’

Mother: ‘Yes, I have. My husband and mother know about my status.’

Counsellor: ‘That’s good. That will be very helpful for you. Do you have any questions about any of the disadvantages? Do you think that certain disadvantages could apply to your situation?’

Mother: ‘Maybe, I’m not very sure. I think that I can do this, but I’d like to talk more about how to make sure that I’m preparing the formula properly. I don’t want my child to get sick.’

Counsellor: ‘I’d be happy to show you how to prepare infant formula properly. It is important to remember that if your baby falls ill, you should bring him to a health facility immediately. And remember, be sure to come back when your baby is 6 months old so we can talk about how to start giving other foods in addition to formula.’

Practise using Counselling Card 4

You will now do a role play similar to the one demonstrated using the counselling cards, based on the scenario below.

A pregnant woman named Lerato has tested positive for HIV, and is starting to be counselled on how to feed her baby. Practise using this card, which focuses only on the advantages and disadvantages of replacement feeding. Lerato is worried about passing HIV to her baby and wants to feed her baby with formula. She has no regular employment, but her husband is a taxi driver, and she has an aunt who gives her money from time to time.

Session 19: Counselling for infant feeding decisions— Part 2

Learning objectives

After completing this session, participants will be able to:

- Conduct an AFASS (acceptable, feasible, affordable, sustainable, and safe) evaluation with an HIV-positive woman using the counselling cards.
 - Describe all the conditions to fulfil before counselling the HIV-infected mother to avoid breastfeeding her infant when the conditions are AFASS.
 - Counsel HIV-positive women on infant feeding options, using the cards, flow chart, and take-home flyers.
 - Use Counselling Card 5: Helping a mother decide how best to feed her baby during a counselling session.
-

Understanding AFASS

In this session, we will discuss how to assist an HIV-positive mother to choose the safest option for feeding her baby during the first 6 months of life: exclusive breastfeeding or exclusive replacement feeding.

Understanding a woman's individual situation is important because it can help a mother and her family to:

- Choose the best infant feeding option for their circumstances.
- Prevent malnutrition.
- Prevent HIV transmission to the infant.
- Reduce the risk of infant mortality.

Later in this course, other aspects of the World Health Organization (WHO) Consensus for giving guidance about stopping breastfeeding after the first 6 months will be discussed. Criteria will now be examined that are used to assist a mother in deciding which feeding option is best for her baby from birth to when he or she completes 6 months.

Remember that the *National Infant and Young Child Feeding Policy* and WHO suggest that women who are HIV positive breastfeed their infants for the first 6 months unless AFASS criteria are met.

AFASS stands for:

- Acceptable
- Feasible
- Affordable
- Sustainable
- Safe

When talking with women, there are other questions that can be asked to help her and you understand her situation, rather than asking if replacement feeding is acceptable, feasible, affordable, sustainable, and safe.

Slide 19/1. Counselling Card 5: Helping a mother decide how best to feed her baby.



The answers a woman gives to these questions can help determine if she meets the AFASS criteria. In order for replacement feeding to be safe, **she must meet all of the criteria. Only meeting one or some of the criteria is not enough.**

Demonstration: A counselling session on infant feeding choices

We will now see a demonstration of how to use these tools. Imagine that a pregnant woman has recently tested positive for HIV. She has come to see the counsellor to discuss her options for feeding her baby.

Follow along with your counselling cards.

Step 1: Explain the risks of mother-to-child transmission

Counsellor: 'Hello, (woman's name). Thank you for coming to talk to me about ways you could feed your baby. We want to help you to make a choice which is best for you, in your situation, and which gives the best chance for your baby to remain healthy.'

Counsellor: 'What have you heard about the ways in which HIV can be transmitted from a mother to her baby?'

Woman: 'Well, I know that the baby can be infected during birth, and if I choose to breastfeed.'

Counsellor: 'It is true that babies may get HIV in these ways. Let me show you a picture which may help you to understand.' (Show Card 1 to the woman.)

Counsellor: 'What do you see in this picture?'

Woman: 'I see some babies, and some of them have different coloured shirts on.'

Counsellor: 'This card shows 20 babies born to HIV-positive women. As you mentioned, HIV can be passed to the baby at three stages: during pregnancy, during delivery, and during breastfeeding. The babies with pink shirts are the babies that will NOT be infected at all. The babies with blue shirts were already infected with HIV through pregnancy and delivery. The babies with orange shirts are the ones who may be infected with HIV through breastfeeding.'

Woman: 'So don't all babies get HIV through breastfeeding?'

Counsellor: ‘No—as you can see, most of them will not be infected. Some things can increase the risk of passing HIV through breastfeeding. For example, there is a higher chance if you have been recently infected with HIV or if you breastfeed for a long time. There are ways of reducing the risk of transmission by practising a feeding option that is appropriate for your situation. What other questions do you have about what I have just told you?’

Woman: ‘I think I understand. I am relieved to hear that not all babies are infected through breastfeeding.’

Step 2: Explain the advantages and disadvantages of different feeding options, starting with the mother’s initial preference

Counsellor: ‘There are various ways you could feed your baby. Is there any particular way you have thought of?’

Woman: ‘Well, now that I know not all babies are infected through breastfeeding, can we talk about that first, as I breastfed my other children?’

Counsellor: ‘Yes, what do you see in this picture?’ (Show Card 3 to the woman.)

Woman: ‘I see a mother breastfeeding her baby, and someone trying to give her baby a cup. The mother seems to be refusing.’

Counsellor: ‘Yes, this is about exclusive breastfeeding. What do you think exclusive breastfeeding means?’

Woman: ‘Well, I’m not sure, but I saw something about it on a poster once.’

Counsellor: ‘Yes, there are a lot of posters about exclusive breastfeeding these days. Exclusive breastfeeding means giving only breastmilk and no other drinks or foods, not even water.’

‘Exclusive breastfeeding for the first 6 months will lower the risk of passing HIV, compared to mixed feeding. Breastfeeding is an ideal food because it protects against many illnesses. Also, it prevents a new pregnancy. On the other hand, as long as you breastfeed, there is some chance that your baby might get HIV.’

Counsellor: ‘How do you feel about breastfeeding now?’

Woman: ‘Oh, well, I could think about it. I’d still be worried about the baby getting HIV, though. Could you tell me about formula feeding?’

Counsellor: ‘How do you feel about infant formula?’

Woman: ‘I’m not sure. My husband really wants me to breastfeed, but I think I would like to try formula. If I start formula could I change back later?’

Counsellor: ‘It can be difficult to do. It can be very dangerous for the health of your baby and can increase the risk of transmission.’

Step 3: Explore with the woman her home and family situation and help the mother choose an appropriate feeding option

Counsellor: ‘We have just discussed the advantages and disadvantages of different feeding methods. After hearing all of this information, which method are you most interested in trying?’

Woman: ‘I would like to use formula; I am worried about passing HIV to my baby.’

Counsellor: ‘Let’s think together about the things you will need in order for you to decide if formula is the best choice for you.’

Woman: ‘Yes, OK.’

Counsellor: ‘Where do you get your drinking water from?’

Woman: 'We have a tap in our kitchen with clean water.'

Counsellor: 'That's good—you need clean water to make formula. Can you prepare each feed with boiled water and clean utensils?'

Woman: 'That seems like too much work. Do I need to boil the water each time if we have clean water from the tap?'

Counsellor: 'Yes, it's recommended.'

Woman: 'OK, well then... I guess I could manage. I could ask my niece to help me.'

Counsellor: 'That's a good idea. What about preparing formula at night? Would you be able to do this two or three times each night?'

Woman: 'Can't I just prepare it before I go to bed and then just keep the bottle near the bed and use it all night?'

Counsellor: 'I understand why this might seem easier, but it's best to prepare the formula fresh for each feed. This will prevent your baby from getting sick... Perhaps we could talk about the cost of formula now?'

Woman: 'Oh, is it very expensive?'

Counsellor: 'Formula costs about 192 maloti per tin. For the first 6 months, you would need to buy around 40 tins, which would cost in total 8,000 maloti. Could you afford do to this?'

Woman: 'Yes, my husband has steady work. We could find the money.'

Counsellor: 'That's good that your husband is working. The cost of formula is likely to increase, so it is good to talk with your husband about how you plan to pay for the cost over the next 2 years. Does your husband know that you are HIV positive?'

Woman: 'Yes, he does. He's HIV positive, too.'

Counsellor: 'It must be difficult for you, but it can be helpful that you both know. What about the rest of your family?'

Woman: 'We haven't told anybody else. We are afraid of what they might say.'

Counsellor: 'Oh, that must be a worry. In this case, how will your family feel if you don't breastfeed?'

Woman: 'My mother-in-law might get upset, since she breastfed all her children. She really thinks it's the best thing to do.'

Counsellor: 'What reason do you think that you could give her for why you don't want to breastfeed?'

Woman: 'Maybe I could tell her that I am taking some medicine which will affect the breastmilk. That happened to our neighbour last year.'

Counsellor: 'Do you think that your mother-in-law would accept this explanation? Or would she insist that you breastfeed?'

Woman: 'I think that she would accept it. That neighbour is a friend of hers, and her baby is doing OK.'

Counsellor: 'Remember once you begin to give infant formula, you can never give your baby breastmilk. Giving both formula and breastmilk at the same time can increase the risk of passing HIV to your baby.'

Step 4: Explain how to practise the chosen feeding option and give her the appropriate take-home pamphlet

<i>Counsellor:</i>	'We have talked about many things today. After all we have discussed, what are your thoughts about how you might like to feed your new baby?'
<i>Woman:</i>	'I am so confused. There seem to be good things and bad things about each feeding option for me. What would you suggest that I do?'
<i>Counsellor:</i>	'Well, let's think through the different ways, looking at your situation. You have breastfed your other children and your mother-in-law wants you to breastfeed.'
<i>Woman:</i>	'Yes, she does.'
<i>Counsellor:</i>	'Also, your husband knows that you are HIV positive, so perhaps he could support you to exclusively breastfeed... On the other hand, you do have all the things needed for you to be able to prepare formula feeds safely. You have clean water, fuel, and money to buy the formula (1,400 maloti each month).'
<i>Woman:</i>	'That's right.'
<i>Counsellor:</i>	'As your husband knows your status, he could help to support and to formula feed and perhaps talk to his mother.'
<i>Woman:</i>	'Mmm. I would like to think more about this and discuss it with my husband. But I think I would like to give formula to this baby. I could explain to my husband about what you have said. I think he'll understand.'

Practise counselling skills

You will now use role plays to practise counselling women on feeding choices. You will work in groups of three or four, taking turns to be a 'mother' or a 'counsellor' or 'observer'.

When you are the 'mother', use the story on your card. The 'counsellor' counsels you about your situation. The other participants in the group observe.

When you are the 'counsellor': Greet the 'mother' and introduce yourself. Ask for her name and use it. Ask one or two open questions to start the conversation and to find out why she is consulting you. Use each of the counselling skills to encourage her to talk to you. Use the counselling cards to help you counsel the mother. Especially, use the table to help her make her feeding choice based on her circumstances. If you feel comfortable, also use the relevant cards and take-home flyers on how to practise the chosen feeding option. When you use a card, do not just read it. Use your skills to summarise the information without being prescriptive.

When you are the 'mother': Give yourself a name and tell it to your 'counsellor'. Answer the counsellor's questions from your story. Do not give all the information at once. If your counsellor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the observer: Use your COUNSELLING SKILLS CHECKLIST. Observe which skills the counsellor uses, which she does not use, and which she uses incorrectly. Mark your observations on your list in pencil. After the role play, praise what the counsellor does right, and suggest what she could do better.

Counselling story 1:

- You are 28-weeks pregnant with your first baby. You are a teacher, married to a lawyer. You live in your own house which has running water and electricity.
- You were tested and found to be HIV positive. You have not told your husband yet, as you are worried about what he might think if you avoid breastfeeding. You are confused about what to do, as you think you could manage to formula feed.
- You will take 3 months maternity leave when the baby is born and then go back to work. You will employ a nanny to look after the baby.

Counselling story 2:

- You are 35-weeks pregnant with your second baby. You have been tested and found to be HIV positive. You have not told anyone else at home that you are HIV positive. You live with your partner, your sister, and your mother.
- You breastfed your first baby—giving him breastmilk and glucose water for the first 2 months of life. Then, at the suggestion of your mother, you introduced solids when he was 3 months of age, as he started to cry a lot.
- You have to walk half a kilometre to collect water from a well. You have a parafin stove, but sometimes use wood for fuel if you run out of money.
- Your mother receives a small pension. Your sister works part-time as a domestic worker. Neither you nor your partner is working.
- You are not sure how to feed this baby, but you are frightened to disclose your status to your family.

Counselling story 3:

- You are 39-weeks pregnant with your third baby. You found out you were HIV positive when you were 28 weeks pregnant.
- You work as a clerk in an office. You will be off work after you deliver for 6 weeks, and then you will return to your job. When you are working, you are away from the house for 10 hours each day, and your mother-in-law will look after the baby.
- You breastfed your other two children, giving them breastmilk only for the first 4 weeks and then giving them breastmilk and formula milk when you went back to work. You introduced solids at 3 months, whilst continuing to breastfeed at night until they were about 1 year of age.
- You are married and live with your in-laws. Everyone in the family will expect you to breastfeed this baby. Only your husband knows your status. You are worried about anyone else suspecting that you are HIV positive.
- Your husband works as a mechanic. You have piped water to your kitchen and electricity to your home.

Counselling story 4:

- You are 34-weeks pregnant. You have not been tested for HIV. This is your first visit to the antenatal clinic. Your husband has been very sick for a few months. You think that he may have AIDS, and you are worried that you may be infected, too. You have received information about preventing HIV infection and were encouraged to breastfeed.
- You have come to the infant feeding counsellor because you want to know how to get formula for your baby, as you think that it will be safer than breastfeeding.
- Statements that you might use:
 - 'My baby is due soon, and I want to find out about getting infant formula for him.'
 - 'I am really worried because my husband is ill—he has been sick for a long time now. I don't know what the illness is, but it might be HIV so I think that I had better give my baby formula.'
 - 'I think it would be better if I didn't breastfeed at all—then the baby would be protected.'

Session 21: Exclusive replacement feeding for the first 6 months

Learning objectives

After completing this session, participants will be able to:

- Describe breastmilk substitutes that can be used for replacement feeding.
 - List foods that are unsuitable in the first 6 months.
 - Describe how milks can be modified for infant feeding.
-

A mother who is HIV positive, and who has been counselled on infant feeding options, may decide to use replacement feeding. So, we need to discuss what this mother could use to feed her baby.

According to the new World Health Organization (WHO) recommendations and the *National Infant and Young Child Feeding (IYCF) Policy*, **only** commercial infant formula is recommended for replacement feeding during the first 6 months. Commercial infant formula is usually made from cow's milk that has had the fat removed and is dried to a powder. Another form of fat (often vegetable fat), sugar, and micronutrients are added. It needs only water added before use.

In this session, when we talk about replacement feeding, we are talking about commercial infant formula **ONLY**.

The following are **NEVER** suitable for infants during the first 6 months:

- **Skimmed milk** has the fat (cream) removed and therefore the energy level is low. Most of the vitamins A and D are also removed because they are in the milk fat.
- **Semi-skimmed milk**, which contains 2% fat, is sometimes available. Milk normally contains more fat than this—about 3.5–4%. A baby may need additional energy if semi-skimmed milk is used.
- **Condensed milk** has some of the water removed but a lot of sugar has been added. This extra sugar makes bacteria grow more slowly when the tin is opened. Also, the fat level may be reduced. This balance of fat and sugar in condensed milk make it very different from evaporated milk.
- **Dried skimmed milk** has the fat and fat soluble vitamins removed.
- **Most modified powdered milks**, such as 'creamers' used for 'whitening' tea or coffee or various filled milks, may have the animal fat removed and replaced with vegetable fat. Sugar may also be added, as well as ingredients to make it dissolve easily.
- **Other foods and drinks** are sometimes used to feed infants less than 6 months of age (for example, juices, tea, sugary drinks). These fill a child's stomach and may reduce his appetite for nutritious foods. They are not suitable as an alternative to food for any young child.

Around the world, WHO studies have shown that infants fed with replacement milk have six times greater chance of dying in the first month of life, and two times greater chance of dying between 4 and 6 months, compared with infants fed breastmilk. This risk continues until the second year of life (WHO HIV and Infant Feeding Technical Consultation, October 2006).

How to reduce the risk of infection, malnutrition, and death for infants who are fed with infant formula during the first 6 months

Ensure good personal and domestic hygiene (at home and in the kitchen)

This means washing all utensils and bowls with boiling water and soap. In addition, the kitchen must be kept clean. Always wash the hands with clean water and soap before preparing meals, serving meals, and after having been to the toilet or after changing bedding.

Avoid baby bottles and pacifiers (dummies)

Always use a cup and never use a baby bottle to feed the infant. Baby bottles are difficult to clean and tend to propagate bacteria more easily.

Plan in advance the purchase of infant formula

Always have at least one box of additional replacement milk at your house, and plan in advance the means to buy other boxes that will be needed.

Visit the health facility at least once a month (and immediately when the infant falls ill)

To ensure the baby's best health and its protection against HIV, regular monitoring of its growth, health, and feeding is needed. Mothers/caregivers should visit the health centre to receive assistance with questions or concerns. It is also necessary to ensure that the baby receives its vaccinations, cotrimoxazole, and other care, and to ensure that the seropositive mother receives appropriate treatment and care for her health. It is important also to check with the mother when she visits the clinic to ensure the correct preparation of infant formula.

Request community support

Mothers should be supported in their decisions for infant feeding, and one way that this can happen is if the community is involved. If there are IYCF (or other) support groups, mothers can be referred to them. They can also be referred to community health workers in order to ensure follow-up and continuous support.

Give only appropriate replacement milk (exclusive infant formula)—never breastmilk

If an infant is fed infant formula and also receives even a small amount of breastmilk, the baby will have a much higher risk of being infected with HIV (greater than if breastfed exclusively).

Request family support

Try to ensure that there will be at least one other person at the home who will support the decision to feed the baby infant formula exclusively. This will help you avoid family pressure to breastfeed the baby in front of other family members, in public, and during the night. The family should support the mother with food for her baby during the first 6 months.

Session 22: Hygienic preparation of feeds

Learning objectives

After completing this session, participants will be able to:

- Explain the requirements for clean and safe feeding of young children.
 - Demonstrate how to prepare a cup hygienically for feeding.
-

A baby who is not breastfed is at increased risk of illness for two reasons:

- Replacement feeds may be contaminated with organisms that can cause infection.
- The baby lacks the protection provided by the breastmilk.

After 6 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.

Slide 22/1. Clean Hands.



We should always wash our 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.
- 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.

Slide 22/2. Clean utensils.



When preparing feeds, it is important to keep both the utensils used and the preparation surface 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.

Safe water and food

Safe water and food are especially important for babies.

Slide 22/3.



Water can be made safe for feeding babies by bringing 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 minute 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.

Slide 22/4. Safe storage.



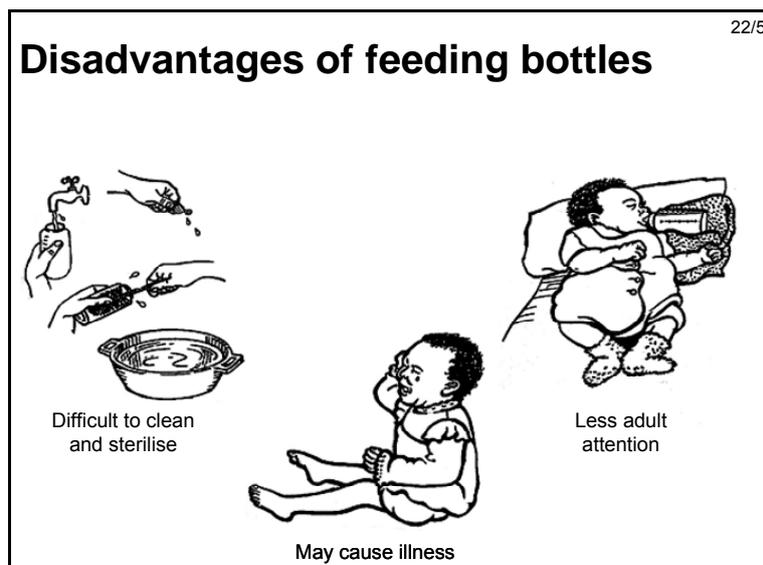
- Food should be kept tightly covered to keep insects and dirt from getting into it.
- Food can be kept longer when it is in a dry form, such as milk powder, sugar, bread, and biscuits, than when it is in liquid or semi-liquid form.

- Fresh fruits and vegetables keep for several days if they are covered, especially if they have a thick peel, like bananas.
- Fresh milk can be kept 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. However, for an infant, **a prepared formula feed must be used within an hour.**
- If a mother does not have a refrigerator, she must make feeds freshly each time. When a feed has been prepared with formula or dried milk, it should be used within an hour, like fresh milk. If a baby does not finish the feed, the mother should give it to an older child or use it in cooking.
- Some families keep water hot in a thermos flask. This is safe for water. But it is not safe to keep prepared formula in a thermos flask. Bacteria grow when milk is kept warm.

When talking with a mother or other caregiver, ask about 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 manner.

Using cups to give feeds

Slide 22/5. Disadvantages of feeding bottles.



Earlier 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.

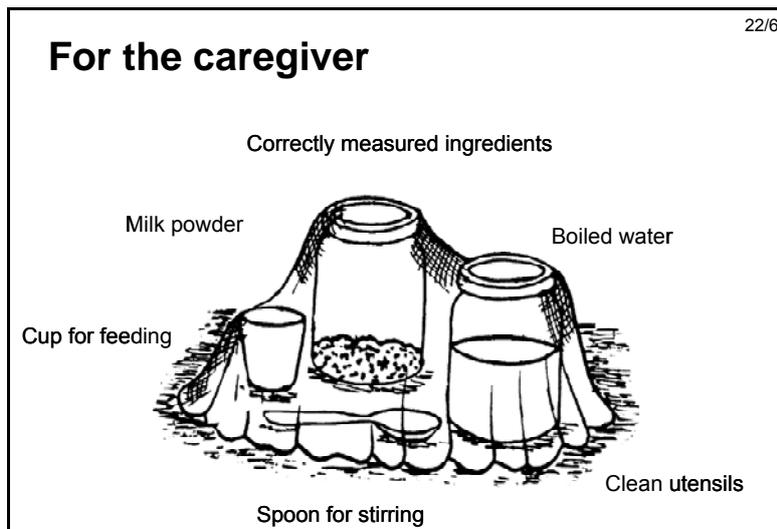
A bottle may be propped for a baby to feed itself, or given to a young sibling to feed the baby, so the baby has less adult attention and social contact. If a mother decides to use a feeding bottle, help her to do it in a way that ensures good contact with the baby, holding him close and making eye contact.

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.

Slide 22/6.



A baby may be cared for by someone other than the mother for all or part of the time. A mother may feel it is safer to do as much of the preparation as possible herself, especially if the caregiver is young, inexperienced, or has difficulty measuring.

This picture shows what a mother has to prepare if she is going to leave feeds ready for a caregiver. She cannot mix up a feed, because it will not be safe to feed the baby after an hour. She will have to leave the ingredients for the caregiver to mix.

The mother still needs to leave clean utensils. She will have to boil and measure the water and the infant formula. She needs to cover them all and leave them in a cool, safe place, away from animals and insects. The mother must teach the caregiver to mix the ingredients just before she gives the feed, and to feed it from a cup.

Session 23: Preparation of commercial infant formula— Measuring amounts

Learning objectives

After completing this session, participants will be able to:

- Specify amounts of formula needed for an infant who is not breastfed.
- Make measuring utensils for liquids.

HIV-positive mothers who choose not to give breastmilk, and other caregivers, need to know how to prepare replacement feeds for their infants. Replacement feeds must be prepared in the safest possible way, to reduce the risk of illness. Mothers need to practise this skill with a health worker present, either in the health facility or at home, so they can do it easily and the same way every time.

When a mother makes replacement feeds, it is very important that the formula and water are mixed in the correct amounts.

Wrongly prepared feeds may make a baby ill, or he may be underfed. Repeated mistakes in measuring water or formula may have serious long-term consequences.

Amounts of formula needed

- In Session 13, we discussed cup feeding a baby. Remember that a baby who is cup fed can control how much he takes by refusing to take any more when he has had enough.
- The amount that a baby takes at each feed varies. But the caregiver must decide how much to put in a cup to offer the baby.

A term baby, weighing 2.5 kg or more, needs an average of 150 ml/kg body weight/day. This is divided into six, seven, or eight feeds according to the baby's age. The exact amount at one feed varies.

Slide 23/1. Approximate amount of formula needed to feed a baby each day.

Baby's age	Number of feeds per day	Amount of formula per feed	Total formula per day
Birth to 1 month	8	60 ml	480 ml
1 to 2 months	7	90 ml	630 ml
2 to 4 months	6	120 ml	720 ml
4 to 6 months	6	150 ml	900 ml

As you can see on the table, a newborn infant is fed small amounts frequently. The amount gradually increases as the infant grows.

If a baby takes a very small feed, offer extra at the next feed, or give the next feed earlier, especially if the baby shows signs of hunger.

Remember, if a baby is not gaining enough weight, he may need to be fed more often, or given larger amounts at each feed, according to his expected weight at that age.

Slide 23/2. Approximate amounts of commercial infant formula needed by month.

23/2

Approximate amount of infant formula needed per month

Month	Number of 500 g tins per month	Number of 450 g tins per month	Number of 400 g tins per month
First month	4	5	5
Second month	6	6	8
Third month	7	8	9
Fourth month	7	8	9
Fifth month	8	8	10
Sixth month	8	9	10
Total for 6 months	40	44	51

This table shows approximately how much commercial infant formula a baby needs in the first 6 months. The numbers are rounded rather than exact. An individual baby may need more or less than the amount listed. You will see that this table is also found on Counselling Card 12.

From the table, you can see that you need about 2 kg or four 500-gram tins of formula to feed an infant for the first month.

If you add up all these months, you will find that a baby needs about 20 kg (40 x 500-gram tins) to feed an infant for the first 6 months. (See the figures at the bottom of the table.)

A baby who is not breastfed needs a regular supply of commercial infant formula. A child continues to need infant formula after complementary foods are introduced, up to at least 1 year of age, and if possible, 2 years. So, the mother needs to consider how she can provide infant formula for all this time.

Demonstration: Making measures

Commercial infant formula comes with a special measure (called a scoop) in the tin of powder. This should be used only for that brand of infant formula. Different brands may have different size measures.

Scoops always have to be levelled. Use a clean knife or the handle of a spoon. Do not use heaped scoops.

You will have to show the mother how to measure water. If a mother does not have a measuring jug or other container marked with amounts, ask her to bring a container from home that you can mark for her as a measure. The container should be:

- Easily available.
- Easy to clean and sterilise.
- See-through.
- Able to be marked with paint, permanent marker, or by scratching a line on it.

Alternatively, the container could be used as a measure simply by filling it to the top.

Before a mother can use a container as a measure, you need to mark the amount on the container, or show her how full it needs to be to measure the amount that she has to use. You can measure the correct amount of water or milk in your own measure, put it into the mother's measure, and make a mark at the level it reaches. If you have a measuring jug, you can use that as your measure.

Step 1: Decide what volume you are going to measure. This will depend on the type of milk you are preparing and the volume of the feed. For this example, we will use 100 ml for a commercial infant formula feed for a baby during the first 2 weeks of life (the amount will continue to increase as the baby gets older).

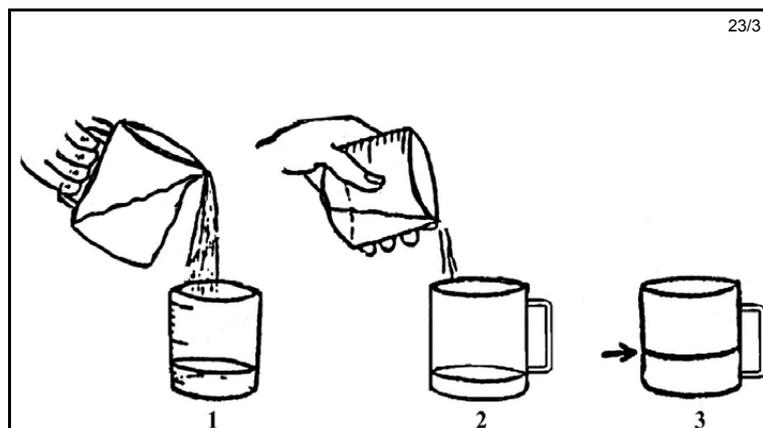
Step 2: Put water into your measure, to reach the 100 ml mark.

Step 3: Pour the 100 ml water from your measure into the mother's container.

Step 4: Help the mother to mark the level that the water reaches. For the measure to be accurate, the line should be thin and straight, not thick or sloped.

Explain to the mother that to make up a feed of 100 ml from commercial formula, she needs to measure this amount of water and add 4 scoops of commercial formula.

Slide 23/3. Making measures.



Session 24: Practical Session 2—Preparation of commercial infant formula

Learning objective

After completing this session, participants will be able to:

- Demonstrate how to prepare replacement milk to a mother or caregiver.
-

Helping mothers to prepare feeds is easier if you have done it yourself using equipment similar to what the mothers have at home.

When counselling mothers on replacement feeding, knowing what is needed and how long these different options take to prepare is part of the information that you will need to give them.

In this session, each participant in a small group will:

- Prepare one type of commercial infant formula that is available locally.
- Prepare a specific volume of feed.
- Use one kind of fuel appropriate locally.
- Give a clear demonstration to others in your group of what you do, as if you are demonstrating to a 'mother', and check the 'mother' understands by helping her to practise making the feeds.

You will also observe others preparing feeds, noticing what they do correctly (and praising them). If they do anything incorrectly, help them to improve their technique using your counselling skills.

Consider the following as you observe others preparing feeds:

- Are they preparing the feed in a clean and safe manner?
- Are they mixing the correct amounts?
- Are they heating and mixing the feeds correctly?
- Are they explaining what they are doing in a clear way?

Until now when we have talked about replacement feeding, we have talked about using only commercial infant formula. Animal milk, even if modified at home, is no longer recommended for replacement feeding during the first 6 months. This recommendation is based on studies and programs that have found that it is very difficult to prepare home-modified animal milk in a safe and nutritionally adequate way, and it can cause bleeding in the baby's gut that cannot be seen. Therefore, home-modified animal milk should not be recommended as a feasible and safe long-term replacement feeding option for infants younger than the age of 6 months.

The only time home-modified animal milk should be considered is when there is a temporary interruption (stock-out) in the supply of commercial infant formula; in addition, it should only be used for short-term feeding of non-breastfed infants younger than the age of 6 months. Messages about animal milk should only be given to women who have decided to give infant formula, and they should be encouraged to come in for additional counselling when their supply of formula is running low—before it runs out. At this time, they can be counselled on modifying animal milk for a short time until they have infant formula. Home-modified animal milk is not a replacement feeding option during the first 6 months.

If a family comes in with an infant whose mother has died, commercial infant formula is recommended. Refer the family to social welfare if they cannot afford to purchase infant

formula. In an emergency, home-modified animal milk can be considered, taking into account that it is very nutritionally challenged.

Home-modified animal milk is not recommended as a safe option. However, in an emergency (for example, if there is a brief stock-out of commercial infant formula), it can be used if no safe options are available. Normally, micronutrients must be added to animal milk to be safe for human infants. If a baby is fed home-modified animal milk for a few days while waiting for commercial infant formula to be available, it would be acceptable (though not ideal) for it to be prepared without micronutrients. However, it is important to remember that home-modified animal milk should never be used as a long-term strategy.

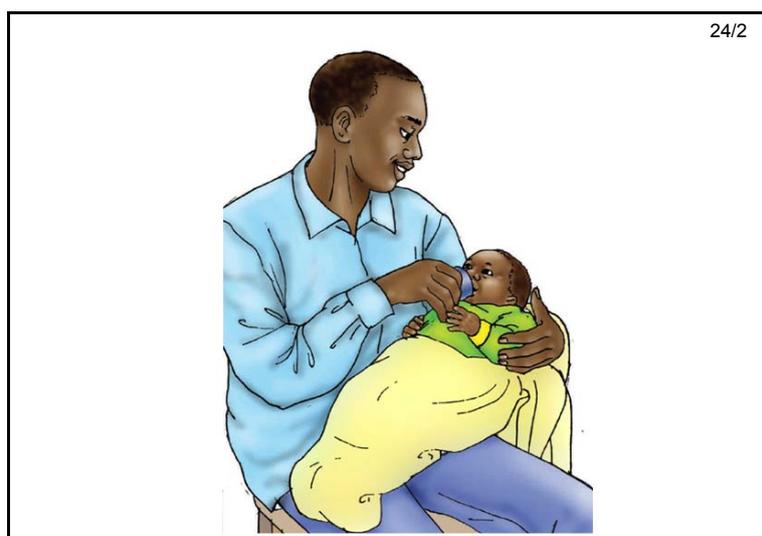
There are several counselling cards that can be used when talking with mothers who have decided to replacement feed.

Slide 24/1. Counselling Card 10: How to prepare formula in a hygienic way.



- Wash your hands with soap and water before preparing formula or before feeding your child and also after going to the toilet.
- Wash your child's cup thoroughly with soap and clean, warm water.
- Keep food preparation surfaces clean using water and soap or detergent to clean them every day.
- The baby's dishes and utensils should only be used for feeding the baby.
- Always use water that has been boiled for mixing formula. Boiled water can be stored in a thermos and used for other feeds later in the day.

Slide 24/2. Counselling Card 11: How to feed your baby formula with a cup.



If a mother decides to feed her baby only formula for the first 6 months, it is best to feed from a cup. This is better than bottle feeding because:

- It is harder to clean bottles and keep them clean, so they can have many germs that can make your baby sick.
- Other members of the family can help feed the baby.

How to feed a baby with a cup:

- Clean the cup with soap and water before filling it with formula.
- Make sure your baby is awake. Sit in an upright position holding your baby. Put a cloth underneath his/her chin to catch any spills.
- Hold the cup to the baby's lips and pour it carefully so that the milk touches the lips and the baby swallows.
- Do not pour the milk quickly or push on the baby's lower lip. Let the baby take the milk at his/her own speed.
- When the baby closes the mouth and turns away, she/he has had enough.
- If your baby does not drink very much, offer him/her more at the next feed or feed him/her earlier than usual.
- Talk to your baby and look into your baby's eyes to show your love.

Infants who receive home-prepared infant formula need to be given extra micronutrients. Be aware of the locally recommended micronutrient formulations, which will provide all the micronutrients needed for an infant aged 0 to 6 months. The recommended amounts of micronutrients are listed in this guide.

Some families keep water cool in a pottery jar, which allows evaporation of water from the surface. This method is not safe for milk storage.

If a mother is giving complementary foods, she should prepare them freshly each time she feeds the baby, especially if they are semi-liquid.

Recipes for modifying milk in emergencies

Note: Micronutrient supplements should be given with all kinds of home-prepared milks.

Fresh cow's or goat's milk

40 ml milk + 20 ml water + 1 tsp sugar = 60 ml prepared formula
60 ml milk + 30 ml water + 1½ tsp sugar = 90 ml prepared formula
80 ml milk + 40 ml water + 2 tsp sugar = 120 ml prepared formula
100 ml milk + 50 ml water + 2½ tsp sugar = 150 ml prepared formula

Sheep's milk

30 ml milk + 30 ml water + ¾ tsp sugar = 60 ml prepared formula
45 ml milk + 45 ml water + 1¼ tsp sugar = 90 ml prepared formula
60 ml milk + 60 ml water + 1½ tsp sugar = 120 ml prepared formula
75 ml milk + 75 ml water + 2 tsp sugar = 150 ml prepared formula

Micronutrients to give with home-modified animal milk per day

Minerals

Manganese	7.5 µg
Iron	1.5 mg
Copper	100 µg
Zinc	205 µg
Iodine	5.6 µg

Vitamins

Vitamin A	300 IU
Vitamin D	50 IU
Vitamin E	1 IU
Vitamin C	10 mg
Vitamin B ₁	50 µg
Vitamin B ₂	80 µg
Niacin	300 µg
Vitamin B ₆	40 µg
Folic acid	5 µg
Pantothenic acid	400 µg
Vitamin B ₁₂	0.2 µg
Vitamin K	5 µg
Biotin	2 µg

Session 25: Health care practices to support optimal infant feeding

Learning objectives

After completing this session, participants will be able to:

- List and describe the health care practices summarised by The Ten Steps to Successful Breastfeeding.
- Explain why the Baby-Friendly Hospital Initiative (BFHI) is important in areas with high HIV prevalence.

The Ten Steps to Successful Breastfeeding and the Baby-Friendly Hospital Initiative

Health care practices can have a major effect on breastfeeding. Poor practices interfere with breastfeeding, and contribute to the spread of artificial feeding. Good practices support breastfeeding, and make it more likely that mothers will breastfeed successfully, and will continue for a longer time.

In 1989, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) issued a Joint Statement called *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services*. This describes how maternity facilities can support breastfeeding. The Ten Steps to Successful Breastfeeding is a summary of the main recommendations of the Joint Statement. It is the basis of the BFHI, a worldwide effort launched in 1991 by WHO and UNICEF. If a maternity facility wishes to be designated 'baby-friendly', it must follow all of the Ten Steps. There is clear evidence that where a combination of all of the Ten Steps are followed, the outcome is better than if only a few steps are followed.

Since the launch of the BFHI in 1991, the growing HIV/AIDS pandemic, especially in sub-Saharan Africa and parts of Asia, has raised concerns and questions about promoting, protecting, and supporting breastfeeding where HIV is prevalent. These concerns arise because breastfeeding is known to be one of the routes for infecting infants with HIV. However, baby-friendly practices improve conditions for all mothers and babies, including those who are not breastfeeding. It is especially important to support breastfeeding for women who are HIV negative or of unknown status.

The Ten Steps to Successful Breastfeeding

- Step 1:** Have a written breastfeeding policy that is routinely communicated to all health staff.
- Step 2:** Train all health care staff in skills necessary to implement this policy.
- Step 3:** Inform all pregnant women about the benefits and management of breastfeeding.
- Step 4:** Help mothers initiate breastfeeding within an hour of birth.
- Step 5:** Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
- Step 6:** Give newborn infants no food or drink other than breastmilk, unless medically indicated.
- Step 7:** Practise rooming-in: allow mothers and infants to remain together 24 hours a day.
- Step 8:** Encourage breastfeeding on demand.
- Step 9:** Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.
- Step 10:** Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.

Step 1: Have a written breastfeeding policy that is routinely communicated to all health staff

Slide 25/1. Step 1.

Having a breastfeeding policy helps establish consistent care for mothers and babies. It also provides a standard that can be evaluated.

The policy should cover:

- The Ten Steps to Successful Breastfeeding.
- An institutional ban on acceptance of free or low-cost supplies of breastmilk substitutes.
- A framework for assisting HIV-positive mothers to make informed infant feeding decisions that meet their individual circumstances and then support for their decisions.

Step 2: Train all health care staff in skills necessary to implement this policy

Slide 25/2. Step 2.

It is important that all staff members are trained to implement the breastfeeding policy. In hospitals where training is inadequate, health care practices do not improve.

Step 3: Inform all pregnant women about the benefits and management of breastfeeding

Slide 25/3. Step 3.

It is important to talk to all women about breastfeeding when they come to an antenatal clinic. Show that you support breastfeeding, and that you want to help them.

It is especially important to talk to young mothers who are having their first baby. They are the ones who are most likely to need help.

There are some things that you can discuss with a group of mothers together, in an antenatal class. There are other things that it is usually better to discuss with mothers individually.

Talking with pregnant women about breastfeeding

With mothers in groups:

- Explain the benefits of breastfeeding, especially exclusive breastfeeding.
- Most mothers decide how they are going to feed their babies a long time before they have the child—often before they become pregnant. If a mother has decided to use formula milk, she may not change her mind. But you may help mothers who are undecided, and give confidence to others who intend to breastfeed. You may encourage a mother to breastfeed exclusively instead of partially.
- Talk about early initiation of breastfeeding and what happens after delivery; explain about the first breastfeeds and the practices in hospital so that they know what to expect.
- Give simple, relevant information on how to breastfeed (for example, demand feeding and positioning a baby).
- Discuss mothers' questions.
- Let the mothers decide what they would like to know more about. For example, some of them may worry about the effect that breastfeeding may have on their figures. It may help them to discuss these worries together.

With each mother individually:

- Ask about previous breastfeeding experience. If she breastfed successfully, she is likely to do so again. If she had difficulties, or if she formula fed, explain how she could succeed with breastfeeding this time. Reassure her that you will help her.
- Ask if she has any questions or worries.
- She may be worried about the size of her breasts or the shape of her nipples. It is not essential to examine breasts as a routine if she is not worried about them.
- Build her confidence, and explain that you will help her.
- Mostly you will be able to reassure her that her breasts are all right, and that her baby will be able to breastfeed. Explain that you or another counsellor will help her.

Note: Antenatal education should not include group education on formula preparation.

Step 4: Help mothers initiate breastfeeding within an hour of birth

Slide 25/4. Step 4, and Slide 25/5. Early initiation.



This mother is holding her baby immediately after delivery. They are both naked, so they have skin-to-skin contact. Help mothers initiate breastfeeding within an hour of birth. A mother should hold her baby like this as much as possible in the first two hours after delivery.

To prevent a baby from getting cold:

- Dry the baby, and cover both him and his mother with the same blanket.
- The mother should let the baby suckle when he shows that he is ready. Babies are normally very alert and responsive in the first 1 to 2 hours after delivery. They are ready to suckle, and easily attach well to the breast.
- Most babies want to feed between 30 minutes and 1 hour after delivery, but there is no exact fixed time. Try to delay non-urgent medical routines for at least 1 hour.

If the first feed is delayed for longer than about an hour, breastfeeding is less likely to be successful. A mother is more likely to stop breastfeeding early.

Slide 25/6. Separation of mother and baby.



This baby was born about half an hour ago. He has been separated from his mother while she is resting and being bathed. He is opening his mouth and rooting for the breast. This shows that he is now ready to breastfeed, but he is separated from his mother so she is not there to respond to him.

Separating a mother and her baby in this way, and delaying starting to breastfeed, should be avoided. These practices interfere with bonding, and make it less likely that breastfeeding will be successful.

Remember, mothers who have chosen not to breastfeed (for example, mothers who are HIV positive) and have decided to formula feed need encouragement to hold, cuddle, and have physical contact with their babies from birth onward. This helps a mother to feel close and affectionate toward her baby. There is no reason that the baby of an HIV-positive mother should not have skin-to-skin contact after birth, even if the mother is not going to breastfeed.

Mothers who are HIV positive and who have decided to breastfeed should be assisted to put the baby to the breast soon after delivery in the usual way.

Step 5: Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants

Slide 25/7. Step 5.

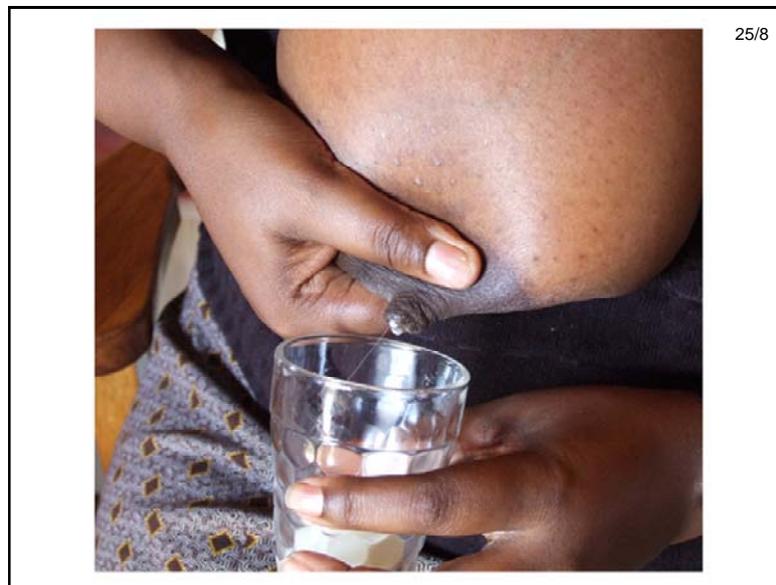
Imagine a woman who has just delivered and the baby is having an early breastfeed. It is the first day of life. A midwife who has been trained in breastfeeding counselling has come to help the mother. Anyone competent at helping a mother to initiate breastfeeds could help a mother and baby with their first feeds.

This midwife could help the mother by observing a breastfeed, helping the mother to position the baby, and giving her praise and relevant information. Keep a baby with his mother, and let him breastfeed when he shows that he is ready.

Help his mother to recognize rooting and other signs that he is ready to breastfeed.

It is a good idea for someone skilled in breastfeeding counselling to spend time with each mother during an early breastfeed to make sure that everything is going well. This should be routine in maternity wards before a mother is discharged. It need not take a long time.

Slide 25/8. Expressing breastmilk.



Sometimes a baby has to be separated from his mother, because he is ill or of low-birthweight, and he needs special care. While they are separated, a mother needs a lot of help and support. She needs help to express her milk as you see a mother doing here. This is necessary both to establish and maintain lactation, and to provide breastmilk for her baby.

A mother may need help to believe that her breastmilk is important, and that giving it will really help her baby. She needs help to get her baby to suckle from her breast as soon as he is able.

A common reason for babies to be separated from their mothers in some hospitals is after a caesarean section. It is usually possible for a mother to breastfeed within about 4 hours of a caesarean section—as soon as she has regained consciousness. Exactly how soon depends partly on how ill the mother is, and partly on the type of anaesthetic used. After epidural anaesthesia, babies can often breastfeed within 30 minutes to 1 hour.

A healthy, term baby usually needs no food or drink before his mother can feed him.

Step 6: Give newborn infants no food or drink other than breastmilk, unless medically indicated

Slide 25/9. Step 6.

Any artificial feed given before breastfeeding is established is called a **prelacteal feed**. Prelacteal feeds replace colostrum as the baby's earliest feed. The baby is more likely to develop infections such as diarrhoea.

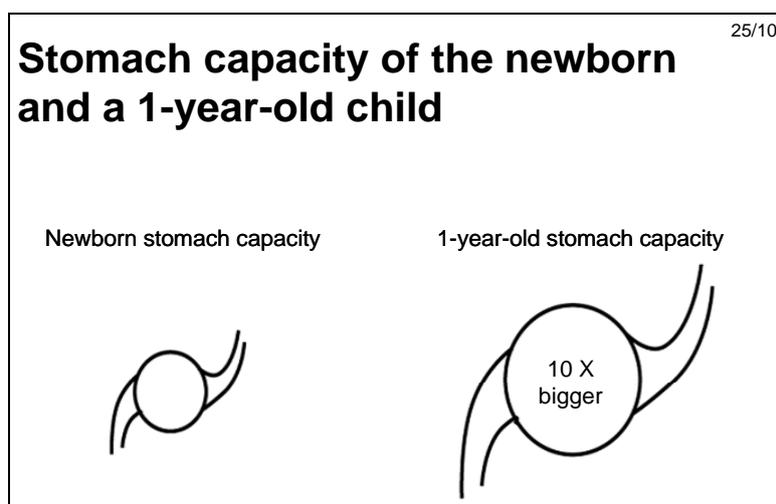
If milk other than human milk is given to the baby, he is more likely to develop intolerance to the proteins in the feed.

A baby's hunger may be satisfied by prelacteal feeds so that he wants to breastfeed less.

If a baby has even a few prelacteal feeds, his mother is more likely to have difficulties such as engorgement. Breastfeeding is more likely to stop early than when a baby is exclusively breastfed from birth.

Many people think that colostrum is not enough to feed a baby until the mature milk 'comes in'. However, the volume of an infant's stomach is perfectly matched to the amount of colostrum produced by the mother.

Slide 25/10. Stomach capacity of the newborn and a 1-year-old child.



This slide shows that the volume of a newborn's stomach is approximately 10 times smaller than that of a 1-year-old child. The newborn does not need large quantities of milk in the first few days. Colostrum is sufficient.

Step 6 says that no food or drink should be given to newborn infants unless medically indicated.

If a mother has been counselled, tested, and found to be HIV positive and has decided not to breastfeed, this is an acceptable medical reason for giving her newborn infant formula in place of breastmilk.

Even if many HIV-positive mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly, if those mothers have all been counselled and offered testing, and have made a genuine choice.

Step 7: Practise rooming-in: allow mothers and infants to remain together 24 hours a day

Slide 25/11. Step 7.

The advantages of rooming-in are:

- It enables a mother to respond to her baby and feed him whenever he is hungry.
- This helps both bonding and breastfeeding.
- Babies cry less so there is less temptation to give bottle feeds.
- Mothers become confident about breastfeeding.
- Breastfeeding continues longer after the mother leaves hospital.
- All healthy babies benefit from being near their mother, rooming-in or bedding-in.
- Mothers who are HIV positive do not need to be separated from their babies. General mother-to-child contact does not transmit HIV.

Step 8: Encourage breastfeeding on demand

Slide 25/12. Step 8.

Breastfeeding on demand means breastfeeding whenever the baby wants, with no restriction on the length or frequency of feeds.

The advantages of breastfeeding on demand are:

- There is earlier passage of meconium.
- The baby gains weight faster.
- Breastmilk 'comes in' sooner and there is a larger volume of milk intake on day 3.
- There are fewer difficulties such as engorgement.
- There is less incidence of jaundice.

A mother does not have to wait until her baby is upset and crying to offer him her breast. She should learn to respond to the signs that her baby gives, for example rooting, which show that he is ready for a feed.

Let a baby suckle as long as he wants, provided he is well attached. Some babies take all the breastmilk they want in a few minutes; other babies take half an hour to get the same amount of milk, especially in the first week or two. They are all behaving normally.

Let her baby finish feeding on the first breast, to get the fat-rich hindmilk. Then offer the second breast, which he may or may not want. It is not necessary to feed from both breasts at each feed. If a baby does not want the second breast, his mother can offer that side first next time, so that both breasts get the same amount of stimulation.

This step is still important for babies who are receiving infant formula. Their individual needs should be respected and responded to for both breastfed and artificially fed infants. For example, rooting shows that he is ready for a feed.

Step 9: Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants

Slide 25/13. Step 9, and Slide 25/14. Nipples, teats, and dummies.



Teats, bottles, and pacifiers (dummies) can carry infection and are not needed, even for the non-breastfeeding infant. Cup feeding is recommended, as a cup is easier to clean and also ensures that the baby is held and looked at while feeding. It takes no longer than bottle feeding. You will remember that we learnt about cup feeding in Session 13.

If a hungry baby is given a pacifier instead of a feed, he may not grow well.

In this picture, you see a low-birthweight baby being fed from a cup. We will discuss more about low-birthweight babies later in the course.

Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic

Slide 25/15. Step 10, and Slide 25/16. Breastfeeding counselling and support.

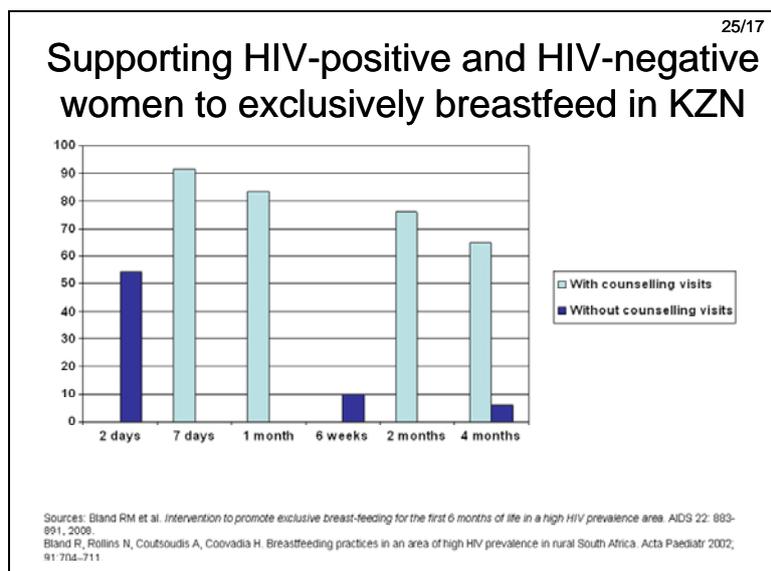


The key to best breastfeeding practices is continued day-to-day support for the breastfeeding mother within her home and community.

Those who support breastfeeding mothers in the community do not have to be medically trained personnel.

There is a lot of research which shows the effect of trained peer or lay counsellors on the duration of exclusive breastfeeding. These counsellors visit the mothers in their homes after discharge from the clinic or hospital, and support them to continue breastfeeding.

Slide 25/17. Supporting HIV-positive and HIV-negative women to exclusively breastfeed in Kwa Zulu Natal, South Africa.



This graph shows how trained lay counsellors in Kwa Zulu Natal, South Africa—an area with high HIV prevalence (roughly 40% among pregnant women) and low rates of exclusive breastfeeding—increased the proportion of infants of HIV-positive and HIV-negative mothers who were still exclusively breastfeeding at 4 months of age. The studied intervention significantly increased the likelihood of exclusive breastfeeding. At 4 months after birth, women who had received all of their scheduled counselling visits were more than twice as likely to be exclusively breastfeeding than those who had not.

The light-green bars show the exclusive breastfeeding rates among study participants, and the blue bars show the exclusive breastfeeding rates among participants in another study to assess breastfeeding practices that did not include an intervention.

The study with the intervention using trained lay counsellors demonstrated high rates of exclusive breastfeeding in both HIV-positive and HIV-negative women in a high HIV prevalence area. This study shows that it is feasible to promote and sustain exclusive breastfeeding for 6 months with home support from well-trained lay counsellors, and that resolving conflicting messages around the role of breastfeeding is an integral part of this work.

Lay counsellors were trained using the WHO Breastfeeding Counselling Course and the WHO Integrated Course (upon which this training is based). All participating women received one home counselling visit within 72 hours of delivery, and breastfeeding mothers received three more visits in the first 2 weeks and biweekly visits until 6 months after delivery. All infant feeding choices were discussed with the mothers during the visits, and the final choice of feeding method was up to the mothers themselves. Study nurses also supported the mothers at their regular clinic visits.

Many mothers need support regardless of their feeding method. Mothers with HIV who are not breastfeeding in a community where most mothers breastfeed may need extra support from a group especially concerned with HIV.

Session 26: International Code of Marketing of Breast-milk Substitutes

Learning objectives

After completing this session, participants will be able to:

- Explain how manufacturers promote formula milks.
 - Summarise the main points of the International Code of Marketing of Breast-milk Substitutes.
 - Describe how the International Code of Marketing of Breast-milk Substitutes helps to protect breastfeeding.
 - Explain the difficulties with donations of formula milk.
-

All manufacturers promote their products to try to persuade people to buy more of them. Formula manufacturers also promote their products to persuade mothers to buy more formula.

This promotion undermines women's confidence in their breastmilk and makes them think that it is not the best for their babies. This harms breastfeeding.

Breastfeeding needs to be protected from the effects of formula promotion. One essential way to protect breastfeeding is to regulate the promotion of formula, both internationally and nationally.

Individual health facilities and health workers can also protect breastfeeding, if they resist letting companies use them to promote formula. This is an important responsibility.

The government is in the process of finalizing the Lesotho Code of Marketing of Certain Foods for Infants and Young Children, and of Feeding Bottles, Teats and Pacifiers.

Ways manufacturers promote formula to the public:

- Manufacturers stock shops and markets with formula and feeding bottles, so that mothers can always see them when they go shopping.
- They give free samples of formula to mothers. Sometimes this is part of another gift. We know that even mothers who intend to breastfeed are more likely to give up if they receive a free sample.
- They give coupons to mothers for a discount on formula.
- They advertise on radio, television, videos for hire, billboards, buses, and magazines.

Ways manufacturers use health workers and health facilities to promote formula:

- They give posters and calendars to health facilities to display on the walls. These are very attractive and make the place look better.
- They give attractive informational materials to health facilities to distribute to families. Often there are no other materials to give to families, and some of the information is useful.
- They give useful bits of equipment, such as pens or growth charts, with the company logo on it. Sometimes they give larger items such as television sets or incubators to doctors or health facilities.
- They give free samples and free supplies of formula to maternity units.
- They give free gifts to health workers.
- They advertise in medical journals and other literature.

- They pay for meetings or conferences, workshops or trips, or they give free lunches for medical, nutrition, or midwifery schools.
- They fund and sponsor health services in many other ways, and give grants.

The International Code of Marketing of Breast-milk Substitutes

Slide 26/1. The International Code.

26/1

The International Code

- 1981 World Health Assembly adopted The Code, which aims to regulate promotion and sale of formula
- The Code is a code of **marketing**
- The Code covers all breastmilk substitutes – including infant formula, other milks or foods, including water and teas and cereal foods which are marketed for infants under 6 months, and teats and bottles

In 1981, the World Health Assembly adopted the International Code of Marketing of Breast-milk Substitutes, which aims to regulate promotion and sale of formula. This Code is a minimum requirement to protect breastfeeding.

The Code is a code of marketing. It does not ban infant formula or bottles, or punish people who bottle feed. The Code allows baby foods to be sold everywhere, and it allows every country to make its own specific rules.

The Code covers all breastmilk substitutes—including infant formula and any other milks or foods, such as water, teas, and cereal foods, which are sometimes marketed as suitable for infants less than 6 months of age, and also feeding bottles and teats.

Slides 26/2 and 26/3.

26/2

Summary of the Main Points of the International Code

- No advertising of breastmilk substitutes and other products to the public.
- No free samples to mothers.
- No promotion in the health service.
- No company personnel to advise mothers.
- No gifts or personal samples to health workers.

26/3

Summary of the Main Points of the International Code (cont.)

- No pictures of infants, or other pictures idealizing artificial feeding, on the labels of products.
- Information to health workers should be scientific and factual.
- Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Some people are confused and think that the Code no longer applies where there are women living with HIV, who may choose to feed their infants artificially. However, the Code is still relevant, and it fully covers the needs of mothers with HIV.

If formula is made easily available, there is a risk that women who are HIV negative or who have not been tested will want to use it. They may lose confidence in breastfeeding and decide to feed their babies artificially. This spread is called 'spillover'.

So implementing the Code is in fact even more important, both to protect HIV-positive mothers and to help prevent spillover.

Supplies of breastmilk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spillover to women who are breastfeeding.

Difficulties with donations of formula

You may have heard that some manufacturers, distributors, or other organisations have offered to donate formula for women who are HIV positive. Let us look at what the Code says.

Slide 26/4. Donated supplies.

26/4

Donated supplies

“ Where donated supplies of infant formula ... are distributed ... the institution or organization should take steps to ensure the supplies can be continued as long as the infants concerned need them ”

Under the Code and its subsequent resolutions, these donations cannot be given through the health care system—that is, through maternity or paediatric wards, maternal and child health or family planning clinics, private doctors’ offices, or child care institutions.

The health system, if it wishes, can provide free or subsidised formula to HIV-positive mothers, but the health service has to **buy** the formula to give to mothers, in the same way that it does most drugs and food for patients and other supplies.

In addition, the health service should ensure that the mother will have a supply of formula for as long as her infant needs it—that is, at least 6 months—and milk in some form after that.

If hospitals and health centres have to buy formula, as they usually buy drugs and food, it is more likely that they will ensure that it is given out in a carefully controlled way, and not wasted or misused. Formula is more likely to be given only to mothers who are HIV positive, who have been counselled, and who have chosen to use formula.

Me Mamotlatsi has been counselled about HIV and about infant feeding, and has decided to use formula. The counsellor has referred her to a charity organisation to obtain free supplies of formula. She is talking to the charity worker, who is **not** a counsellor.

Demonstration: Donations of infant formula

Charity worker: 'Good morning, Me. How can I help you?'

Me Mamotlatsi: (*Nervous and embarrassed—looks around to see if anyone is observing her. Gives charity worker a letter.*) 'Good morning, madam. The counsellor at the health centre gave me this letter to give you—she said that I can get some formula here to feed my baby, as I can't afford to buy any.'

Charity worker: 'Oh yes, I understand. Of course we can help you. I will give you these four tins of formula, which the company donated to us. This should be enough for 1 month. You learnt how to make it up in hospital, didn't you? Next time you go for the baby to be weighed, she will give you another note, and you can come back for more formula.'

Me Mamotlatsi: 'Thank you. I was so worried about how I would afford the tins. We have so little money. Now I know I will have enough to feed my baby.' (*Me leaves.*)

Me Mamotlatsi: 'Good morning—my baby is growing well on the formula that you gave me 1 month ago, but it is nearly finished, so I need some more.'

Charity worker: 'Oh dear, I am so sorry. I am afraid that we are out of stock at the moment, and we just don't have anything that we can give you. No more supplies have arrived—and all of the last delivery has been given out. I don't know what to suggest. I am really sorry, but there is nothing I can do. Can you come back next week? Perhaps some will have arrived.'

Me Mamotlatsi (crying): 'What can I do now? My breastmilk has dried up, and I have no money to buy milk. How can I feed my baby?'

Session 27: Importance of complementary feeding

Learning objectives

After completing this session, participants will be able to:

- Explain the importance of continuing breastfeeding.
- Define complementary feeding.
- Explain the optimal age for children to start complementary feeding.
- List the Key Messages from this session.
- Discuss related complementary feeding activities.

The period from 6 completed months of age⁵ until 2 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 list Key Messages to discuss with caregivers about complementary feeds.

Sustaining breastfeeding

Starting at 6 completed months, a baby needs a variety of foods in addition to breastmilk because breastmilk alone no longer meets a baby's nutritional needs.

In Session 2, we discussed the importance of continued breastfeeding. From 6 to 12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12 to 24 months at least one-third of his 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 a baby older than 6 months.

Slide 27/1. Key Message 1: Breastfeeding.

27/1

Key Message 1

Breastfeeding for two years or longer helps a child to develop and grow strong and healthy

Infant and young child feeding (IYCF) 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.

⁵ 6 completed months = 180 days, not the start of the sixth month.

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 breastmilk should receive another source of milk and need special attention. There are special recommendations for feeding the non-breastfed child from 6 to 24 months. We will be looking at these recommendations in the following sessions.

Define complementary feeding

An age is reached when breastmilk 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.

Slide 27/2. Definition of complementary feeding.

27/2

Definition of complementary feeding

- Providing other solid and semi-solid foods and liquids along with breastmilk or breastmilk substitute (e.g., commercial infant formula, animal milk) 6 to 24 months.

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 and in adequate amounts so the child can continue to grow.

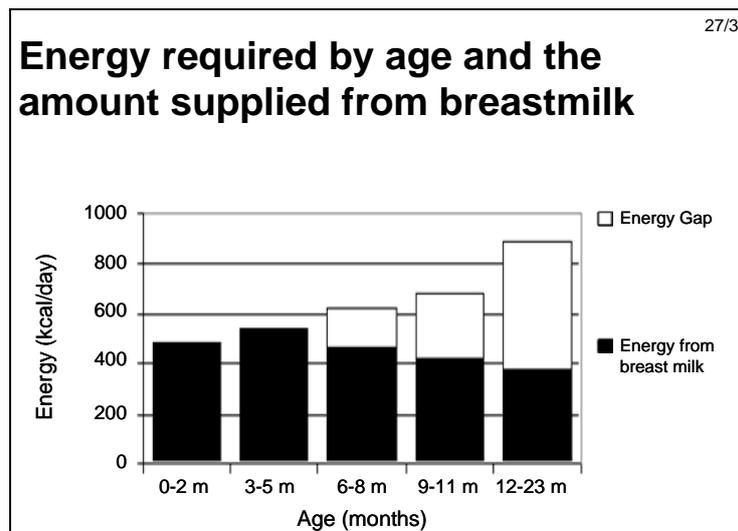
The term '**complementary feeding**' is used to emphasise that this feeding complements breastmilk rather than replaces it. Effective complementary feeding activities include support to continue breastfeeding.

During the period of complementary feeding, the young child gradually becomes accustomed to eating family foods. In addition to the nutritional importance, it also contributes to psychomotor and behavioural development. Feeding includes more than just the foods provided. *How* the child is fed can be as important as *what* the child is fed.

The optimal age to start complementary feeding

Our bodies use food for energy to keep alive, to grow, to fight infection, to move around, and to 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.

Slide 27/3. Energy required by age and the amount supplied from breastmilk.



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 breastmilk.

You can see that from about 6 months onward, there is a gap between the total energy needs and the energy provided by breastmilk. The gap increases as the child gets bigger.

This graph represents an 'average' child and the nutrients supplied by breastmilk 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, 6 months of age is a good time to start complementary foods. Complementary feeding from 6 completed months helps a child to grow well and be active and content.

Slide 27/4. Key Message 2: When to start complementary feeding.

27/4

Key Message 2

- Starting when your child completes 6 months, give a variety of other foods in addition to breastmilk to grow well and be healthy.

A photograph showing a woman in a white long-sleeved shirt sitting at a table, feeding a baby with a spoon. The baby is sitting in a high chair. There are some bowls and a plate on the table.

After 6 completed months, babies need to learn to eat thick porridge, puree, and mashed foods. These foods fill the energy gap more than liquids.

When a baby completes 6 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.

Slide 27/5. Starting other foods too soon.

27/5

Starting other foods too soon

Adding foods too soon may

- take the place of breastmilk
- 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 breastmilk, 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 breastmilk are consumed.
- Increase the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breastmilk.
- 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.

Slide 27/6. Starting other foods too late.

27/6

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.

Exploring feeding practices

Reasons a family might start to give foods before a baby completes 6 months:

- 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 6 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 breastmilk. 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 breastmilk alone. For all babies, this is 6 completed months of age.

Ensuring adequate complementary feeding

Adequate nutrition in early childhood is essential for development. Poor nutrition during the first 2 years of life can permanently impair physical and mental development.

Slide 27/7. Complementary foods should be....

27/7

Complementary foods should be

- Rich in energy and nutrients
- Clean and safe
- Easy to prepare family foods
- Locally available and accessible

Health workers and IYCF counsellors should help mothers understand the key factors that impact the quality of complementary feeding.

Slide 27/8. Key factors to ensure proper complementary feeding.

27/8

Key factors to ensure proper complementary feeding

- Amount of food consumed
- Consistency of food consumed
- Variety of food consumed
- Frequency of meals
- Safe and clean handling of foods
- Responsive feeding techniques

Examine the role of the health worker and the health facility

Slide 27/9.



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 a picture of a mother with her 7-month-old daughter. She has brought her daughter to the health facility regularly for immunisations and health checks.

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.

HANDOUT: ASSESS YOUR PRACTICES				
Does this practice occur?	With all children	With some children	Does not occur	Comments
Weigh child				
Measure child's length				
Review child's growth chart and determine if the child is underweight or (if possible) growing inadequately				
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 28: Foods to fill the energy gap

Learning objectives

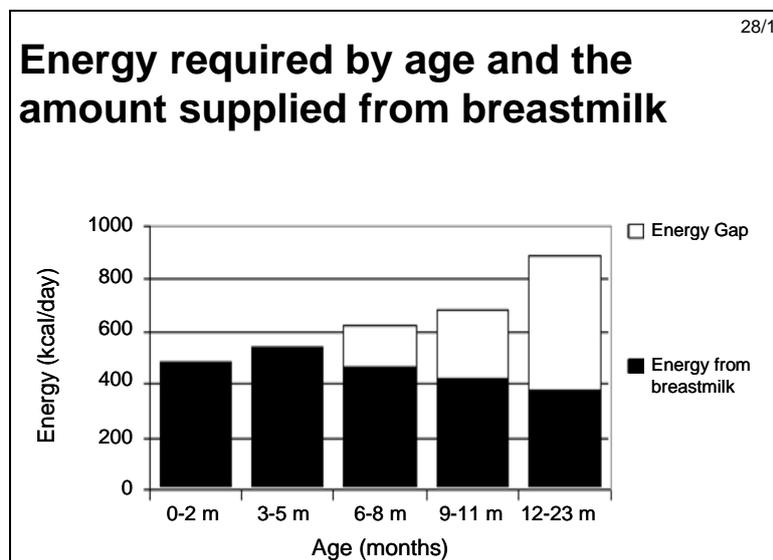
After completing this session, participants will be able to:

- 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.

We talked earlier that as a baby grows and becomes more active, an age is reached when breastmilk 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.

Slide 28/1. Energy gap again.



As the young child gets older, breastmilk 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.

Foods that can fill the energy gap

Think of the child's bowl or plate.

The first food we may think 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, or oats.
- Starchy roots such as potato.
- Starchy fruits such as banana.

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 the main staples are that families eat in your area. Then you can help them to use these foods for feeding their young children.

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.

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.

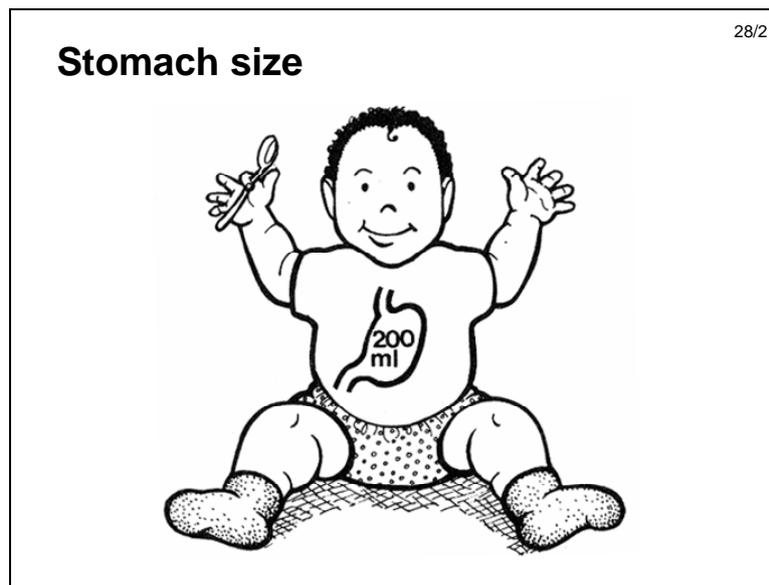
Using a thick consistency of food

We have the staple in the child's bowl. Let us say this child will have (for 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, get 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.

Slide 28/2. Stomach size.

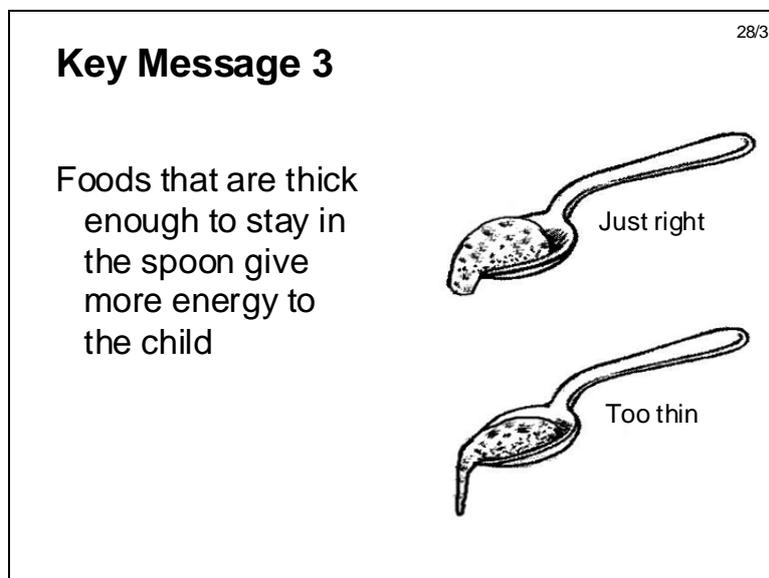


This is Seipati. He is 8 months old. At this age, Seipati's stomach can hold about 200 ml at one time.

Seipati's mother makes his porridge from maize flour. His mother is afraid Seipati will not be able to swallow the porridge, so she adds extra water.

When you are talking with families, give them the following Key Message.

Slide 28/3. Key Message 3: Thick foods.



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 in how well that food meets the young child's energy needs. Foods of a thick consistency help to fill the energy gap.

Ways to enrich foods

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.

Foods can be made more energy- and nutrient-rich in a number of ways:

For a porridge or other staple

- 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.

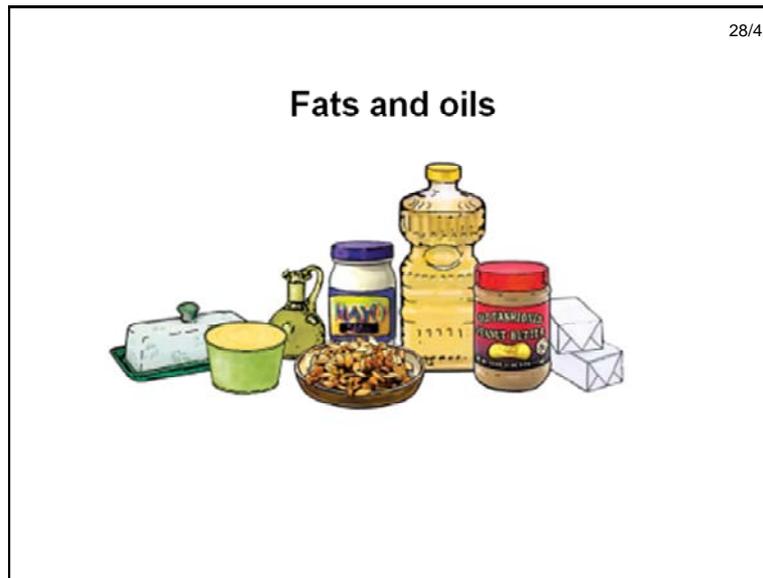
For a soup or stew

- 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.

- Replace some (or all) of the cooking water with fresh milk, yoghurt, 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 peanut butter.
- Add a spoonful of margarine or oil.
- Add boiled and mashed fish to the porridge.
- Or add a boiled and mashed egg.

Slide 28/4. 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 staples 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, children 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 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 should not be 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 breastmilk (see Session 2).

For children more than 6 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.

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 can be 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 with 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.

FEEDING RECOMMENDATIONS FOR THE FIRST 2 YEARS

	0–5 months of age		6 months–11 months	12 months–23 months	2 years and older
Feeding recommendations	<ul style="list-style-type: none"> Start breastfeeding immediately after birth (within the first hour) Breastfeed on demand day and night, at least 8 times in 24 hours Express breastmilk and leave for the baby when away Do not give other foods or fluids (not even water) If breastfeeding is not possible due to medical reasons, or if the mother is not available (e.g., not alive), advise on replacement feeding 		<ul style="list-style-type: none"> Breastfeed on demand (HIV-positive mothers who chose exclusive breastfeeding should stop gradually) Introduce enriched complementary foods Food should be soft or mashed for easy chewing and swallowing Give milk and any type of fruit Enrich food with meat, fish, vegetables, beans, groundnuts, peas, and eggs Add one spoonful of extra oil/fat to the child's food Give 3 times per day if breastfed and 5 times if not breastfed 	<ul style="list-style-type: none"> Breastfeed on demand Give adequate servings of enriched foods 5 times a day Give thick, enriched family foods Add small bits of meat, fish, vegetables, beans, groundnuts, peas, and eggs Give milk and any type of fruit Add one spoonful of extra oil/fat to the child's food Give 5 times a day 	<ul style="list-style-type: none"> Give enriched family foods 3 times a day Give nutritious snacks in between the meals Give at least 2 cups of milk per day
Play and development	Up to 4 months Play: Provide ways for your child to see, hear, feel, and move Communicate: Look into your child's eyes and smile at him or her; communicate even while breastfeeding	4–5 months Play: Have large colourful things for your child to reach Communicate: Talk to your child and get a conversation going with sounds or gestures	Play: Give your child clean, safe household things to handle, bang, and drop Communicate: Respond to your child's sounds and interests; tell your child the names of things and people	Play: Give your child things to stack up, and to put into and take out of containers Communicate: Ask your child simple questions; respond to your child's attempts to talk; play games like "bye"	Play: Help your child count, name, and compare things; make simple toys for your child Communicate: Encourage your child to talk and answer your child's questions; teach your child stories, songs, and games
Feeding during illness	Feeding recommendations for a child who has persistent diarrhoea <ul style="list-style-type: none"> If still breastfeeding, give more frequent, longer breastfeeds, day and night If taking other milk: <ul style="list-style-type: none"> Replace with increased breastfeeding OR Replace with fermented breastmilk products such as mafi or other yoghurt drinks, as these are tolerated better, OR Replace half the milk with nutrient-rich semisolid food such as fermented porridge, thick enriched porridge, or enriched staple food For other foods, follow feeding recommendations for the child's age; encourage the child to feed Give an extra meal per day and continue until 1 month after diarrhoea has stopped Give vitamin/mineral supplements 			Feeding during illness <ul style="list-style-type: none"> If breastfeeding, give more frequent breastfeeds per day and night If not able to breastfeed, express breastmilk and give by cup If not breastfeeding, give replacement feeds as per recommendations If feeding is poor, give small, frequent, enriched feeds, especially those that the child normally likes Give one extra meal per day up to 2 weeks after illness Encourage the child to feed 	

From the National Infant and Young Child Feeding Guidelines.

Session 29: Foods to fill the iron and vitamin A gaps

Learning objectives

After completing this session, participants will be able to:

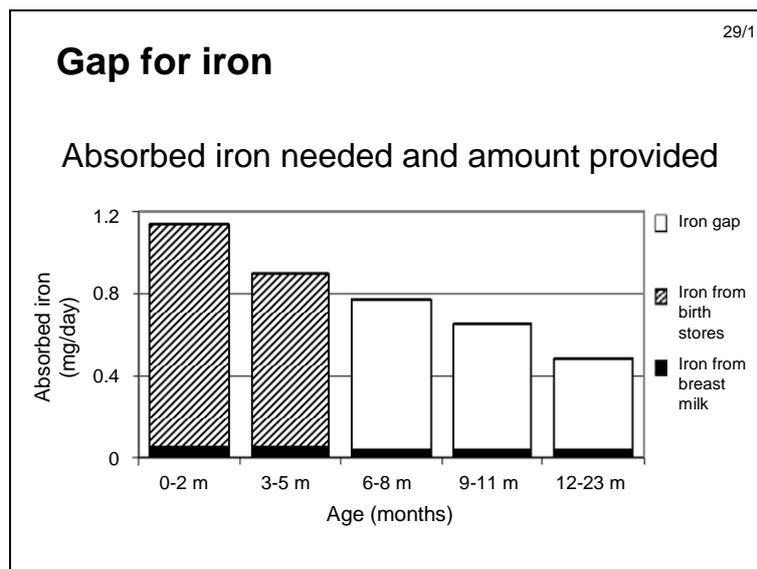
- List the local foods that can fill the nutrient gaps for iron and vitamin A.
- Explain the importance of animal-source foods.
- Explain the importance of legumes.
- Explain the use of processed complementary foods.
- Explain the fluid needs of the young child.
- List the Key Messages from this session.

So now, our child has an energy-rich, thick staple in his bowl to help fill the energy gap. In a similar way, there are also gaps for iron and vitamin A.

Foods that fill the iron gap

The young child needs iron to make new blood, to assist in growth and development, and to help the body to fight infections.

Slide 29/1. Gap for iron.



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 6 months (this is the striped/shaded area).

The black area along the bottom of the columns shows us that there is some iron provided by breastmilk for the duration of breastfeeding.

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 6 months. After that time, we see a gap between the child's iron needs and what he receives from breastmilk. This gap needs to be filled by complementary foods (the white area is the gap).

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 children 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.
- Assist families to use these iron-rich foods to feed their young children.

The importance of animal-source foods

We will now look at the importance of animal foods in the child's diet.

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.

The flesh and organs of animals, birds, and fish (including shellfish 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.

The following are several ways to make these foods easier for the young child to eat:

- Cooking chicken, liver, or other meat with rice or other staples or vegetables, and then mashing them together.
- Cutting meat with a knife to make soft, small pieces.
- Pounding dried fish so bones are crushed to powder and then sieving before mixing with other foods.

Animal-source foods may be expensive for families. However, adding even small amounts of an animal-source food to the meal adds nutrients. Organ meats, such as liver and heart, are often less expensive and have more iron than other meats.

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 is 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 you are talking with families, give them the following Key Message.

Slide 29/2. Key Message 4: Animal-source foods.

29/2

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 carton of eggs, a wedge of Swiss cheese, a slice of cheddar, a glass of milk, a whole chicken drumstick, a piece of salmon, and a stack of scallops.

The importance of legumes

Slide 29/3. Key Message 5: Legumes.

29/3

Key Message 5

Peas, beans, lentils, nuts and seeds are also good for children



The illustration shows a variety of legumes and nuts: a pile of lentils, a pile of red kidney beans, a pile of almonds, a pile of peanuts, a jar of Old Fashioned Peanut Butter, and a pile of green peas.

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.

Some ways these foods could be prepared 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 and 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 (rice and beans), or adding a milk product to a cereal or grain (maize meal with milk).

Iron absorption

Pulses (beans, peas, chickpeas, etc.) 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.

Slides 29/4, 29/5, and 29/6 on iron absorption.

29/4

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).

29/5

Iron Absorption (2)

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, orange, lemon and other citrus fruits
- small amounts of the flesh or organs/offal of animals, birds, fish and other sea foods.

Iron Absorption (3)

Iron absorption is decreased by:

- Drinking teas and coffee
 - Foods high in fibre such as bran
 - Foods rich in calcium
- *Foods rich in calcium such as milk and cheese inhibit iron absorption, but are needed for calcium intake*

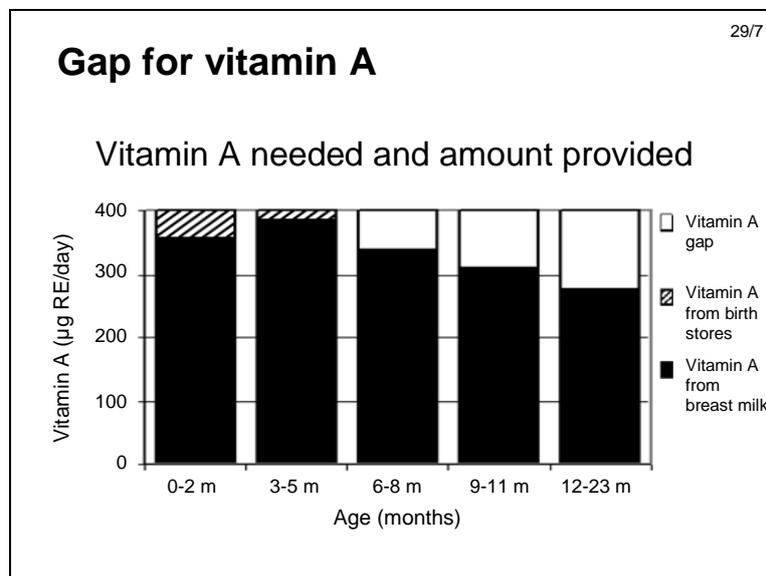


Foods that can fill the vitamin A gap

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.

Slide 29/7. Vitamin A gap.



On this graph, the top of each column represents the amount of vitamin A that the child needs each day. Breastmilk supplies a large part of the vitamin A needed, provided that the child continues to receive breastmilk 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 (the white area is the gap to be filled).

Good foods to fill this gap are dark-green leaves and yellow-coloured vegetables and fruits.

Carrots, green leafy vegetables (spinach, beet-root greens), pumpkin, and apricots are all fruits and vegetables that are good sources of vitamin A.

Other sources of vitamin A that we mentioned already were:

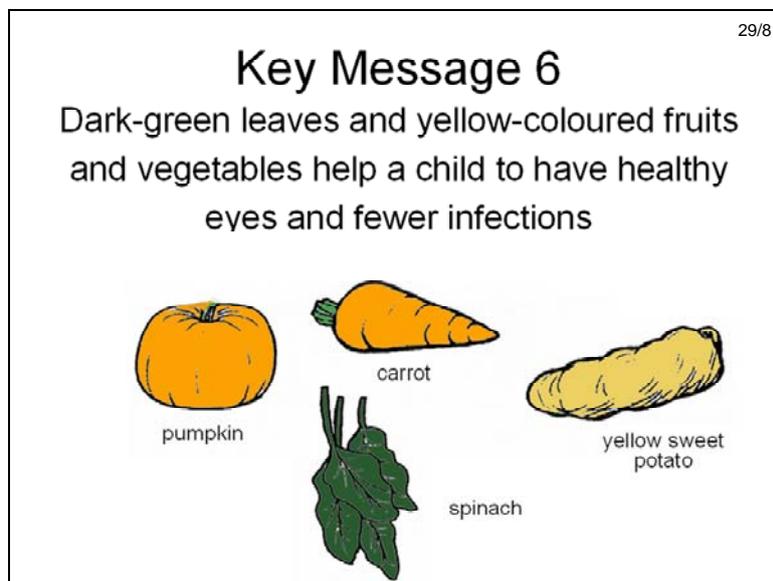
- Organ foods/offal (liver) from animals.
- Milk and foods made from milk, such as butter, cheese, and yoghurt.
- Egg yolks.
- Margarine, dried milk powder, and other foods that are fortified with vitamin A.

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, breastmilk supplies much of the vitamin A required. A child that is not breastfed needs a diet rich in vitamin A.

There are vitamin A supplementation programmes in our country. These programmes provide mass-doses of vitamin A for infants and children aged 6 through 59 months, and for girls/women of reproductive age. For infants and young children, the dosages are provided every 6 months, with 100,000 international units given before 1 year of age and 200,000 international units given thereafter through the age of 5 years. For girls and women of reproductive age, mass-dose vitamin A is safe only when the girl/woman cannot become pregnant, so a single dose of 200,000 international units is provided to breastfeeding mothers during the period from delivery up to 6 weeks postpartum.

Slide 29/8. Key Message 6: Vitamin A foods.



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.*

The use of fortified complementary foods

Fortified complementary foods are available in some areas (for example, flour or a cereal product with added iron and zinc).

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.

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 flour. It may have some vegetables, fruits, 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 or 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 6 months of age or as a breastmilk 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. It should be reported to the company concerned and the appropriate government authority.

The fluid needs of the young child

The baby who is exclusively breastfeeding receives all the liquid he needs in the breastmilk and does not require extra water. Likewise, a baby who is younger than 6 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 breastmilk 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.

Water is good for thirst. A variety of pure fruit juices can be used also. However, 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. Teas and coffee have no nutrient value and they can make the infant irritable (and thus fussier at feeding). Discourage caregivers from giving infants and young children coffee or tea. If they are given, they should not be given at the same time as food or within 2 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 breastmilk need special attention and special recommendations. A non-breastfed child aged 6 to 24 months of age needs approximately two to three cups of water per day in a temperate climate and four to six 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.

HANDOUT: 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?

Session 30: Quantity, variety, and frequency of feeding

Learning 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.

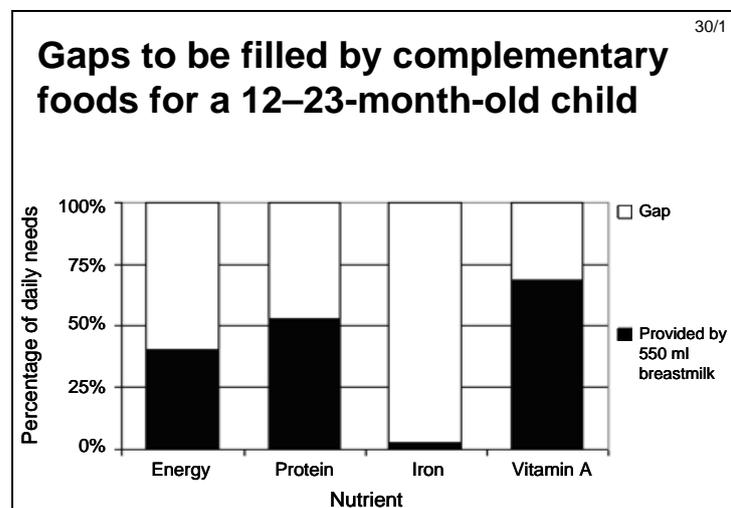
The importance of using a variety of foods

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 young children's needs and the amount of energy, vitamin A, and iron supplied by breastmilk. If we put the day's needs onto a graph, it looks like this:

Slide 30/1. Gaps to be filled by complementary foods for a child 12–23 months old.



In Session 2, we talked about the importance of breastfeeding and the nutrients breastmilk can supply in the second year of life.

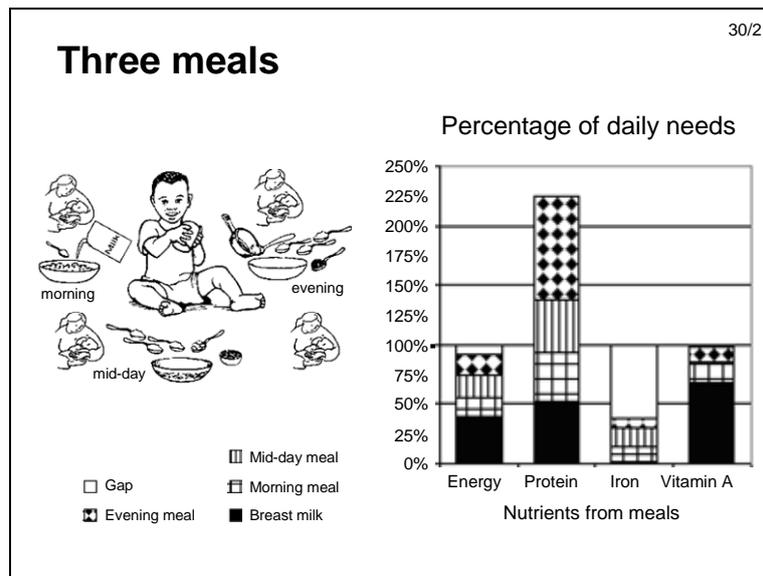
On this graph, the top line represents how much energy, protein, iron, and vitamin A are needed by an 'average' child aged 12–23 months. The dark section in each column indicates how much breastmilk supplies at this age if the child is breastfeeding frequently.

Notice that:

- Breastmilk 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.

Slide 30/2. Percentage of daily needs.



This is Nthako, who is 15 months old. The daily needs for a child of this age are shown by the line at 100%.

Nthako continues breastfeeding⁶ as well as eating complementary foods. The breastmilk gives energy, protein, some iron, and vitamin A.

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.

Mid-day: 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.

Evening: A full bowl of food—three big spoons of rice, one spoon of fish, one spoon of green leaves.

Nthako's family gives 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 an orange.

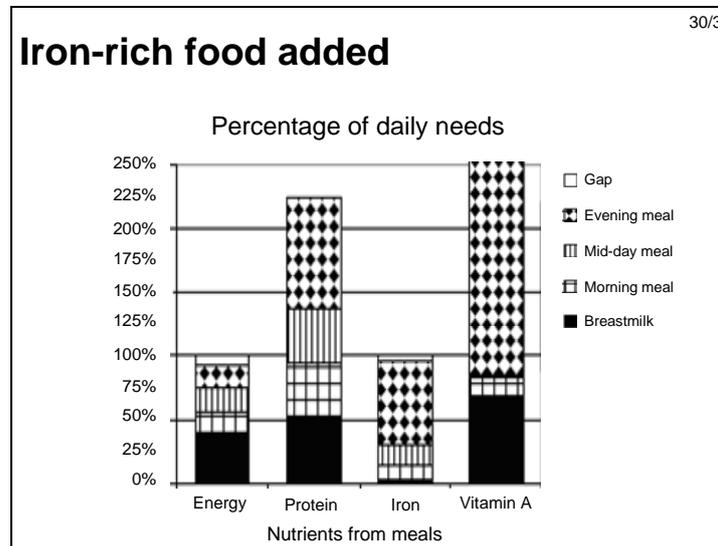
The protein and vitamin A gaps are more than filled. However, these meals do not fill this child's needs for iron or energy.

If meat is eaten in the area, Nthako 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.

⁶ Approximately 550 ml of breastmilk per day.

If meat is eaten in the area, Nthako's family could give him a spoonful of liver instead of the fish. This fills his iron gap as shown in the following graph. If animal-source foods are not available, Nthako's family could give him radishes, green peas, boiled spinach, baked beans, dried apricots, or figs.

Slide 30/3. Iron-rich food added.



If foods fortified with iron are available, these should be used to help fill the iron gap. 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.

However, in the graph, the energy gap is still not filled. Next, we will look at ways of filling this gap.

The frequency of feeding complementary foods

Nthako is already eating a full bowl of food at each meal. There is no space in his stomach for more food at mealtimes.

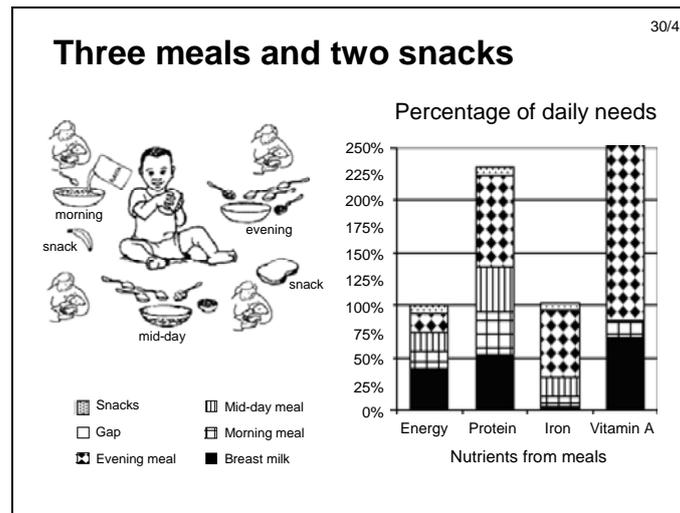
To fill the energy gap, Nthako's family can give him some food more often. They do not need to cook more meals. They can give some extra foods between meals that are easy to prepare. These extra foods are in addition to the meals—they should not replace them.

These extra foods are often called snacks. However, they should not be confused with foods such as sweets, crisps, or other processed foods, 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.

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; and cooked potatoes⁷ 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.

Slide 30/4. Percentage of needs with three meals and two snacks.



Nthako 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 the following Key Message.

Slide 30/5. Key Message 7: Frequency of feeding.

Key Message 7

A growing child needs 2-4 meals a day plus 1-2 snacks if hungry: give a variety of foods

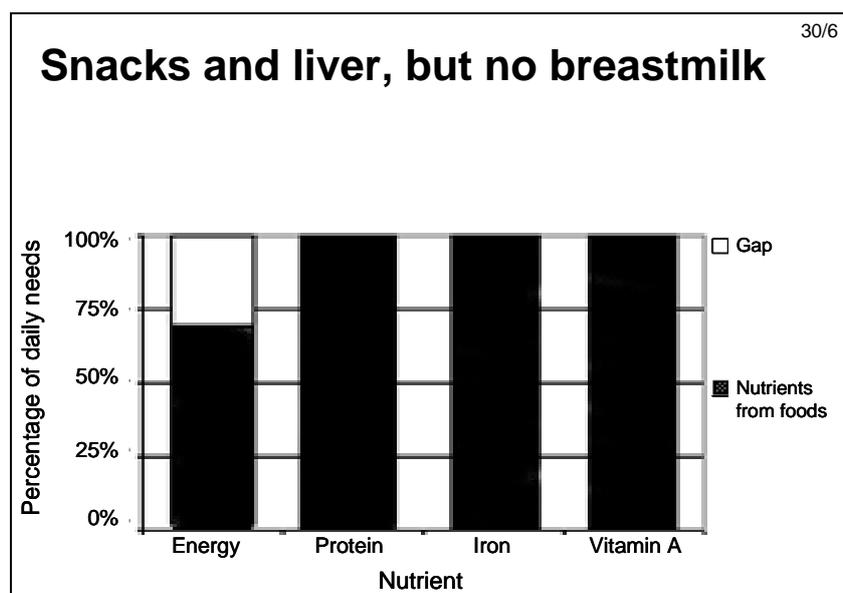
⁷ Cooked moist foods (such as potatoes) should not be kept more than 1 hour if there is no refrigeration.

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 when the caregiver has many other duties and when additional foods are expensive or hard to obtain. Other family members can often help. Assist the family to find solutions that fit their situation.

Feeding the non-breastfed child

Now we will look at feeding the non-breastfed child. We have mentioned in previous sessions that a child who does not receive breastmilk needs special attention to ensure he gets sufficient food.

Slide 30/6. Snacks and liver, but no breastmilk.



If the child is not taking any breastmilk 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 milk⁸) 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 breastmilk needs special attention to ensure he receives sufficient food.

Children older than 6 months who are not receiving breastmilk need one to two cups of milk (where one cup is equal to 250 ml) and an extra one to two 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.

⁸ Infant formula if affordable, acceptable, and available.

Slide 30/7. Recommendations for feeding the non-breastfed child from 6 to 24 months.

30/7

Recommendations for feeding the non-breastfed child from 6 to 24 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: two to three cups in a temperate climate and four to six cups 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 one to two cups of milk per day, and an additional one to two meals.

The quantity of complementary food to be offered

When a child starts to eat complementary foods, he needs time to get accustomed to the new tastes and textures of the foods. A child needs to learn the skill of eating. Encourage families to start with two to three 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.

Slide 30/8. Amounts of foods to offer, which shows the age, texture of the food offered, and the amount of food an average child will usually eat at each meal.

QUANTITIES OF FOOD TO OFFER A YOUNG CHILD FOR A MEAL			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal⁹
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 half 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.	Half 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.	Three-quarters 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.			

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 encouragement (discussed further in Session 33).

When you are talking with families, give the following Key Message:

Slide 30/9. Key Message 8: Amount of food.

30/9

Key Message 8

A growing child needs increasing amounts of food



⁹ Adapt this 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: Amounts to offer		
Age of child	Frequency	Amount
22 months	3 meals plus 2 snacks	Full cup
8 months	3 times per day	2/3 of a cup
12 months	3 meals plus 2 snacks	Full cup
7 months	3 times per day	2/3 of a cup
15 months	3 meals plus 2 snacks	Full cup
9 months	3 meals plus 1 snack	3/4 of a cup
13 months	3 meals plus 2 snacks	Full cup
19 months	3 meals plus 2 snacks	Full cup
11 months	3 meals plus 1 snack	3/4 of a cup
21 months	3 meals plus 2 snacks	Full cup
3 months	A trick question!	Only breastfeeding

Session 31: Practical Session 3—Building confidence and giving support exercises

Learning objectives

After completing this session, participants will be able to:

- Demonstrate appropriate use of the confidence and support skills.
- Use counselling cards with mothers on feeding children 6–24 months.

Refer to Counselling Cards 13–15.



Scenario 1: Mother of a healthy 19-month-old baby whose weight is on the median is worried that her child will become a fat adult so she will stop giving him milk.

Scenario 2: Mother of a 7-month-old baby whose child is not eating any food that she offers. She plans to stop breastfeeding so often. Then he will be hungry and will eat the food.

Scenario 3: Mother of a 12-month-old child who has diarrhoea. She thinks she should stop giving him any solids.

Scenario 4: Mother of an 8-month-old child whose neighbour's child eats more than her child and he is growing much bigger. She thinks that she must not be giving her child enough food.

Scenario 5: A mother of a 1-year-old child is worried about giving family foods in case he chokes.

Scenario 6: A mother of a 10-month-old child who has not gained weight over the past 2 months.

Scenario 7: A mother of an 18-month-old child who is refusing to eat vegetables and she is very worried.

Scenario 8: A mother is giving her 9-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.

Session 32: Gathering information on complementary feeding practices

Learning objectives

After completing this session, participants will be able to:

- Gather information on complementary feeding practices by:
 - Demonstrating appropriate use of counselling skills.
 - Observing a mother and child.
 - Using the FOOD INTAKE JOB AID, 6–24 MONTHS, demonstrate appropriate use of the confidence and support skills.
-

If you are going to counsel a mother on complementary feeding, you need to find out what her child is eating. This is quite complicated because children eat different things at different times in a day.

Earlier in the training, you looked at the GUIDE FOR EVALUATING INFANT FEEDING, 0–6 MONTHS, and learnt how to take a feeding history. Now we are going to look at assessing the intake of complementary feeds in detail.

Gathering information on feeding practices

Earlier we learnt about assessing a breastfeed. We talked about how important it is to observe a mother and her baby, and the breastfeed itself. Observation is just as important when you are gathering information about complementary feeding as it is when you are assessing a breastfeed.

Enter ✓ in the Yes column if the practice is in place.
 Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL, 6–24 MONTHS, for the message).

FOOD INTAKE JOB AID, 6–24 MONTHS		
Child's name		
Date of birth		Age of child at visit
Feeding practice	Yes / number where relevant	Suggestion
Growth curve following or exceeding the trend line?		
Child received breastmilk?		
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 was appropriate for child's age?		
Mother assisted the child at mealtimes?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

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.

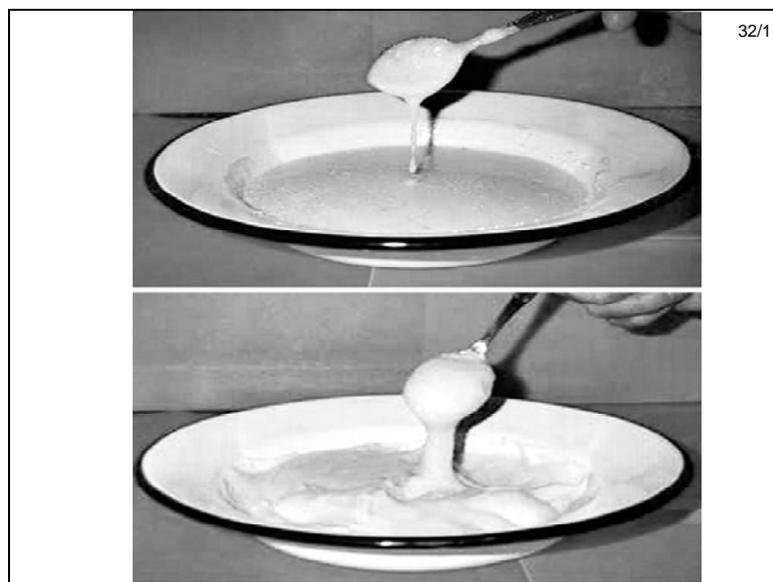
The FOOD INTAKE JOB AID, 6–24 MONTHS, helps you to do this.

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 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.

Slide 32/1, showing two pictures of porridge.



When 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 thick and 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, 6–24 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, 6–24 MONTHS, to indicate which items you discussed in more detail and gave Key Messages about.

It is important to choose just two to three 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.

FOOD INTAKE REFERENCE TOOL, 6–24 MONTHS

Feeding practice	Ideal feeding practice	Key Messages to help counsel mothers
Child received breastmilk?		
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 was appropriate for child's age?		
Mother assisted the child at mealtimes?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

Instructions to complete the FOOD INTAKE JOB AID, 6–24 MONTHS

1. Greet the mother. Explain that you want to talk about the child's feeding.
2. Fill out the child's name, birth date, age in completed months or years, and today's date.
3. Ask to see the growth chart and observe the pattern of the growth.
4. Start with: *'(Mother name), let us talk about what (child's name) ate yesterday.'*
5. 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?'
6. If the mother mentions a preparation, such as a porridge or stew, ask her for the ingredients in the porridge or stew.
7. 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?'
8. Remember to 'walk' through yesterday's events with the mother to help her remember all the food/drinks/breastfeeds that the child had.
9. 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).
10. Clarify any points or ask for further information as needed.
11. Mark on the FOOD INTAKE JOB AID, 6–24 MONTHS, the practices that are present. If appropriate, show the mother the photos 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 was it thin, flowed off the spoon, and did not hold its shape on the plate?
12. Praise practices you wish to encourage. Offer two or three Key Messages as needed and discuss how the mother might use this information.
13. If the child is ill on that day and not eating, give Key Message 10:
Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly.
14. See the child another day and use the FOOD INTAKE JOB AID, 6–24 MONTHS, when the child is eating again.

Demonstration: Learning what a child eats

Thabo is 11 months old. Me Puleng has brought him to the health centre for immunisation. While he is there, the health worker notices that Thabo's weight line is rising very slowly though he is generally healthy. So the health worker asks Me Puleng to talk to her about how Thabo is eating.

- Health worker:* 'Thank you for coming today, Me Puleng. Your child's weight line is going upward, which shows that he has grown since I last saw him. (*Shows growth chart.*) Because Thabo lost some weight when he was ill, the line needs to rise some more. Could we talk about what Thabo ate yesterday?'
- Mother:* 'I am pleased that he has put on some weight, as Thabo has been ill recently and I was worried that he might have lost weight.'
- Health worker:* 'I can see you are anxious about his weight.'

<i>Mother:</i>	'Yes. I was wondering if I was feeding him the right sorts of food.'
<i>Health worker:</i>	'Perhaps we could go through everything that Thabo ate or drank yesterday?'
<i>Mother:</i>	'Yes, I can tell you about that.'
<i>Health worker:</i>	'What was the first thing you gave Thabo after he woke up yesterday?'
<i>Mother:</i>	'First thing, he breastfed. Then about 1 hour later, the baby had a small amount of bread with butter, and several pieces of apricot.'
<i>Health worker:</i>	'Breastfeeding, then bread, butter, and some pieces of apricot. That is a good start to the day. What was the next food or drink or breastfeed that he had yesterday?'
<i>Mother:</i>	'At mid-morning, the baby had some porridge with milk and sugar.'
<i>Health worker:</i>	'Which of these drawings is most like the porridge you gave to Thabo?' (Shows two consistency pictures.)
<i>Mother:</i>	'Like that thick one.' (Points to the thick consistency.)
<i>Health worker:</i>	'A thick porridge helps Thabo to grow well. After the porridge mid-morning, what was the next food, drink, or breastfeed Thabo had?'
<i>Mother:</i>	'Let's see, in the middle of the day, he had soup with vegetables and beans.'
<i>Health worker:</i>	'How did the baby eat the vegetables and beans?'
<i>Mother:</i>	'I mashed them all together and added the liquid of the soup so he could eat it.'
<i>Health worker:</i>	'Which picture is most like this food that you fed Thabo yesterday in the middle of the day?' (Shows two consistency pictures.)
<i>Mother:</i>	'This one—the more runny one.' (Points to the thin consistency.)
<i>Health worker:</i>	'Was there anything else that Thabo had at mid-day yesterday?'
<i>Mother:</i>	'Oh yes, he had a small glass of fresh orange juice.'
<i>Health worker:</i>	'That is a healthy drink to give to Thabo. After this meal at mid-day, what was the next thing he ate?'
<i>Mother:</i>	'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 mashed fish.'
<i>Health worker:</i>	'Breastfeeding will help Thabo 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?' (Shows two consistency pictures.)
<i>Mother:</i>	'This thicker one. I mashed up the foods together and it looked like that.'
<i>Health worker:</i>	'Did Thabo eat or drink anything more for the evening meal yesterday?'
<i>Mother:</i>	'No, nothing else.'
<i>Health worker:</i>	'After that or during the night, what other foods or drinks did Thabo have?'
<i>Mother:</i>	'Thabo breastfeeds during the night, but he has no more foods.'
<i>Health worker:</i>	'Using this bowl, can you show me about how much food Thabo ate at his main meal yesterday?' (Shows typical bowl.)
<i>Mother:</i>	(Points to bowl.) 'About half of that bowl.'
<i>Health worker:</i>	'Thank you. Who helps Thabo to eat, or does he eat by himself?'
<i>Mother:</i>	'Oh, yes. Thabo needs help. Usually I help him, but sometimes if my mother or sister is there, they will help also.'
<i>Health worker:</i>	'Is Thabo taking any vitamins or minerals?'
<i>Mother:</i>	'No, not now.'
<i>Health worker:</i>	'Thank you for telling me so much about what Thabo eats.'

Ask: Is the growth curve heading upward?

Wait for a few replies and then continue.

- Yes; however, it is going upward very slowly.

Ask: Child receives breastmilk?

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.

- Two, the porridge and the evening meal of rice, mashed greens, and fish. However, the soup given at lunchtime was thin, so this might be something to discuss with the mother.

Ask: Did the child eat an animal-source food yesterday?

Wait for a few replies and then continue.

- Yes, fish in the evening.

Ask: Did he eat a dairy product?

Wait for a few replies and then continue.

- Yes, there was milk on the porridge.

Ask: Did he eat 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 with iron absorption.

Ask: Did he eat a dark-green or yellow-coloured fruit or vegetable yesterday?

Wait for a few replies and then continue.

- Yes, some apricot 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.

Ask: What was the 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 a 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 two or three 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 flip chart. 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 on which to give relevant information? Which Key Message could you give to this mother?

Wait for a few replies and then continue.

- After you praise the practices, you would discuss:
 - The amount of food in each meal. Suggest increasing so that by 12 months, the child has a full bowl.
 - Making the food a thick consistency at each meal (remember the bean and vegetable meal was thin).

Mention the following:

- For this particular child, the growth curve was 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 with the mother practices which could be improved, giving the relevant Key Messages.
- The health worker puts her initials next to 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; now we will practise with each other.

Ask if there is any point the participants would like made clearer or any questions.

Stories for food intake practice

Story 1:

Child is 15 months old. Healthy, growing well, and eating normally. Breastfeeds frequently.

Early morning: Breastfeed, half bowl of thick porridge, milk, and small spoon of sugar.

Mid-morning: Small piece of bread with nothing on it, breastfeed.

Mid-day: Three large spoons of rice, two spoons of mashed beans ($\frac{3}{4}$ of a bowl), pieces of mango ($\frac{1}{4}$ of a bowl), drink of water.

Mid-afternoon: Breastfeed, one small biscuit/cookie.

Evening: Two large spoons of rice, one large spoon of mashed fish, two large spoons of green vegetables ($\frac{3}{4}$ of a bowl), drink of water.

Bedtime: Breastfeed.

During night: Breastfeed.

Story 2:

Child is 9 months old. Not ill at present. Not difficult to feed. Not breastfeeding.

Early morning: Half cup of cow's milk, half bowl of thin porridge, spoon of sugar.

Mid-morning: Half a mashed banana, small drink of fruit drink.

Mid-day: Thin soup, one spoon of rice, and one spoon of mashed beans (half bowl), drink of water.

Mid-afternoon: Sweet biscuit, half cup of cow's milk.

Evening: Two spoons of rice, one spoon of mashed meat and vegetable from family meal (half a bowl), drink of water.

Bedtime: Piece of bread with no spread, half cup of cow's milk.

During the night: drink of water.

Story 3:

Child is 18 months old. Not ill at present. Not difficult to feed. Breastfeeds.

Early morning: Full bowl of thick porridge with sugar, breastfeed.

Mid-morning: Cup of diluted fruit drink.

Mid-day: Three spoons of rice, three spoons of mashed beans and vegetables from the family meal (one full bowl), half cup of diluted fruit drink.

Mid-afternoon: Large piece of bread with jam, breastfeed.

Evening: Whole mashed banana, one sweet biscuit, cup of diluted fruit drink.

Bedtime: Breastfeed.

During the night: Breastfeed.

Story 4:

Child is 12 months old. Growing very slowly.

Early morning: Breastfeed. Half a bowl of thin porridge.

Mid-morning: Two small spoons of mashed banana, breastfeed.

Mid-day: Four spoons of thin soup, one spoon of mashed meat/vegetables/potato from the soup ($\frac{3}{4}$ of a bowl), breastfeed.

Mid-afternoon: Breastfeed, two spoons mashed mango.

Evening: Two spoons of mashed meat/vegetable/potato from family meal (less than half a bowl), breastfeed.

Bedtime: Breastfeed, sweet biscuit mashed in cow's milk ($\frac{1}{4}$ cup).

During the night: Breastfeed.

Story 5:

Child is 6½ months old and healthy. Growing well. Easy to feed. Has recently started complementary feeds.

Early morning: Breastfeeds.

Mid-morning: Three spoons of thin porridge with milk, breastfeeds.

Mid-day: Breastfeeds.

Mid-afternoon: Breastfeeds.

Evening: Three spoons of mashed family meal—potato, fish, carrots. Thick consistency.

Bedtime: Breastfeed.

During night: Breastfeeds.

Story 6:

Child is 8 months old. Not ill. Does not show much interest in eating.

Early morning: Breastfeed, two spoons thin porridge with milk and sugar (less than half a bowl).

Mid-morning: Breastfeed.

Mid-day: One spoon rice, one spoon mashed beans, small piece of egg, one spoon mashed greens, from the family meal (half a bowl). Drink of water.

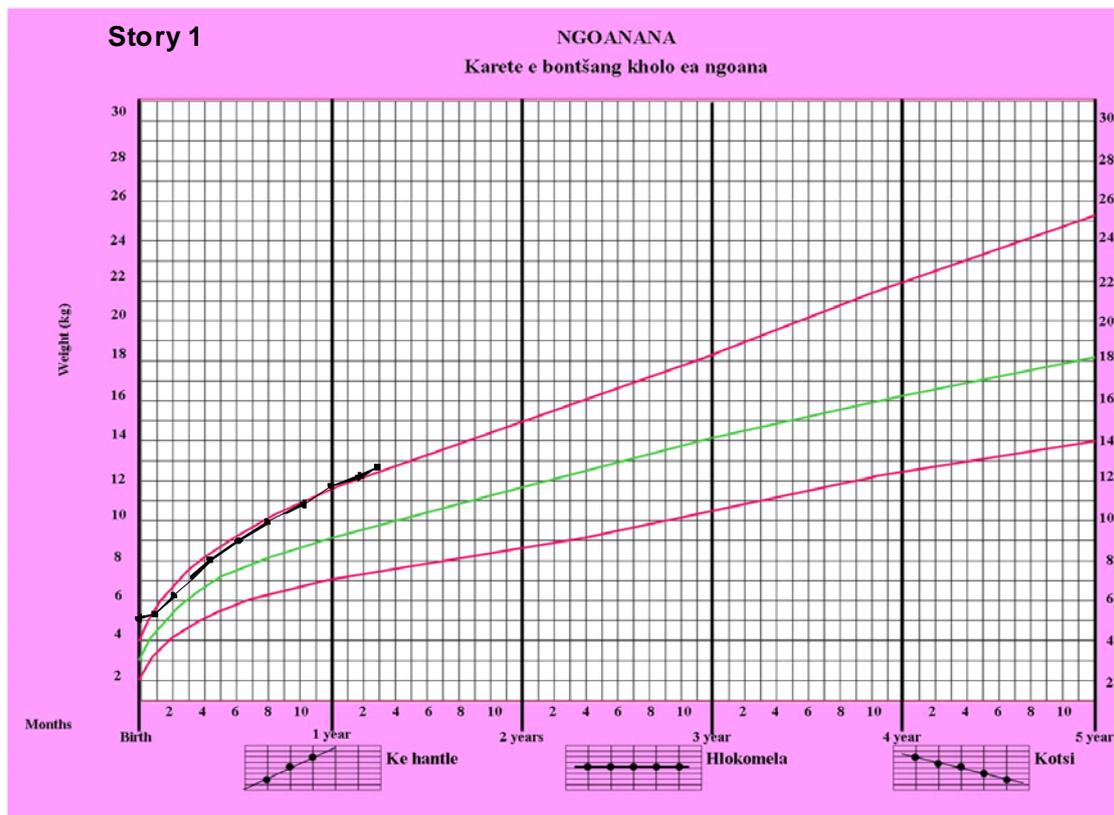
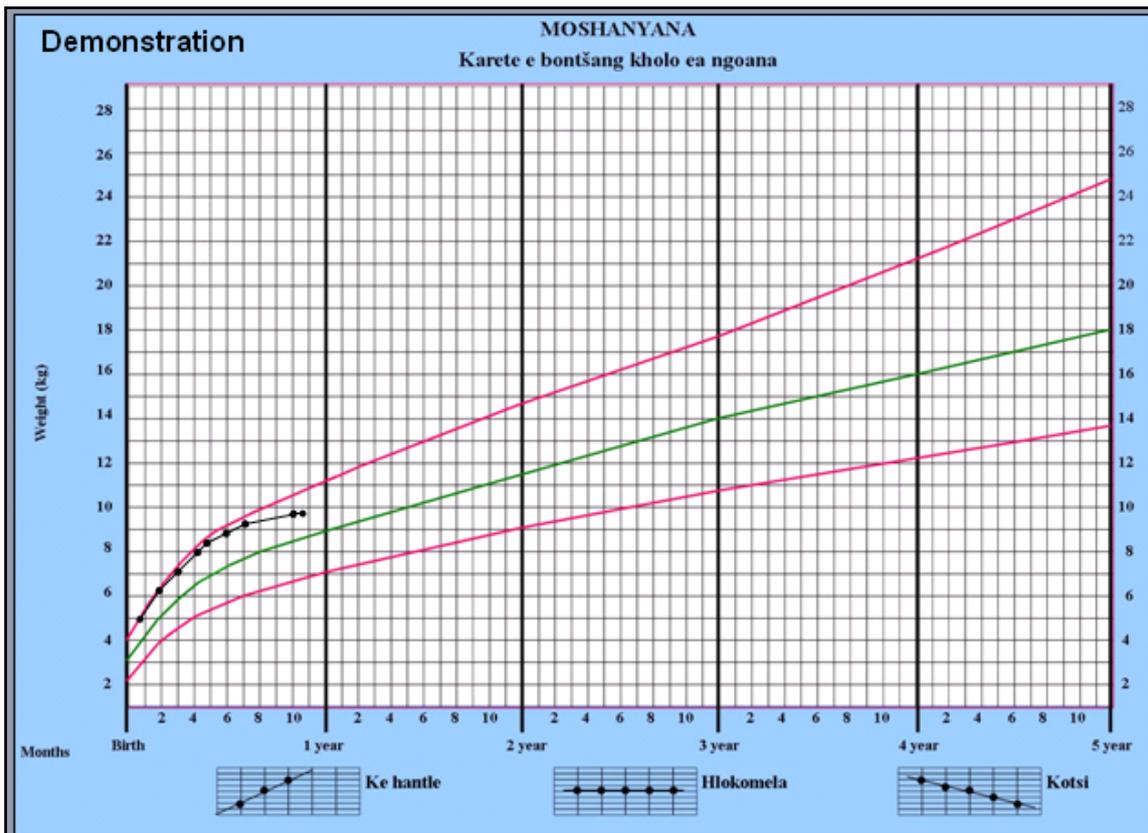
Mid-afternoon: One sweet biscuit, breastfeed.

Evening: One piece of bread with some butter, breastfeed.

Bedtime: Breastfeed.

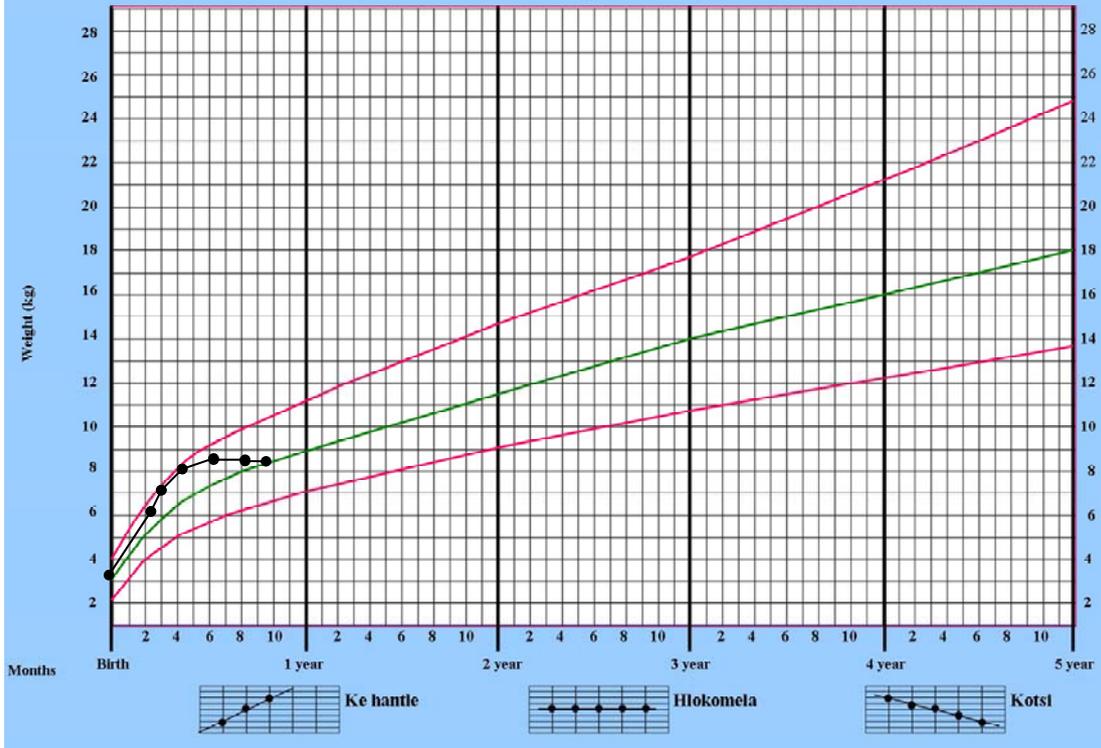
During the night: Breastfeed.

Weight charts for session



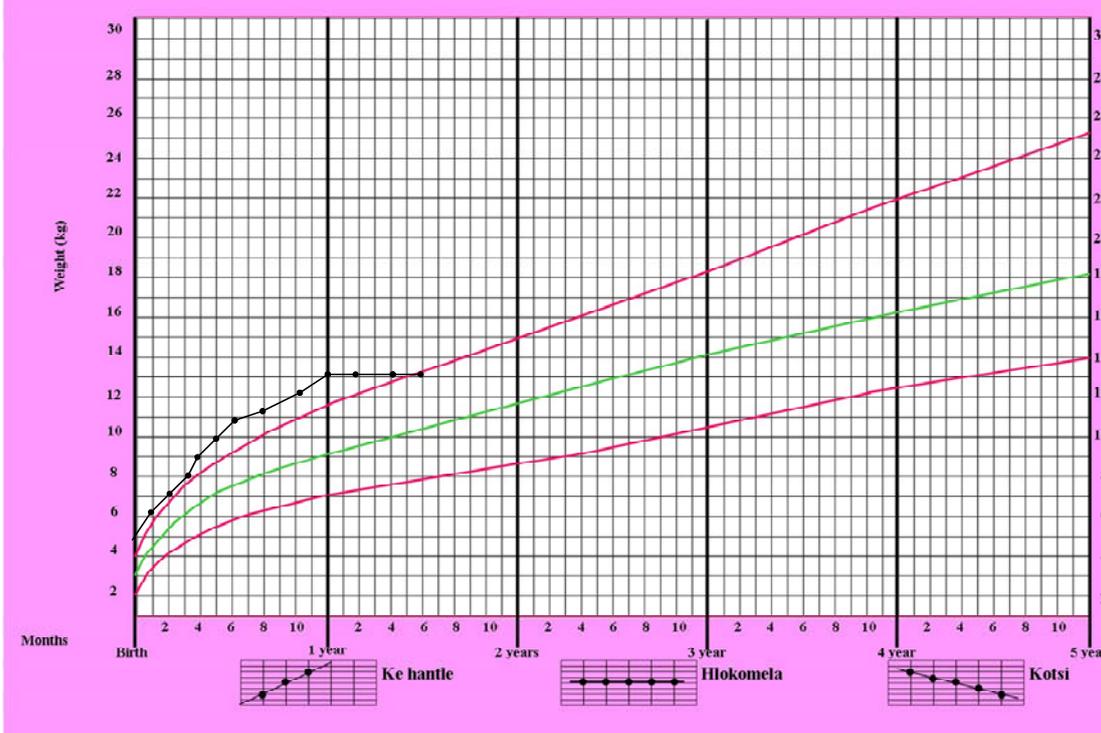
Story 2

MOSHANYANA
Karete e bontšang kholo ea ngoana



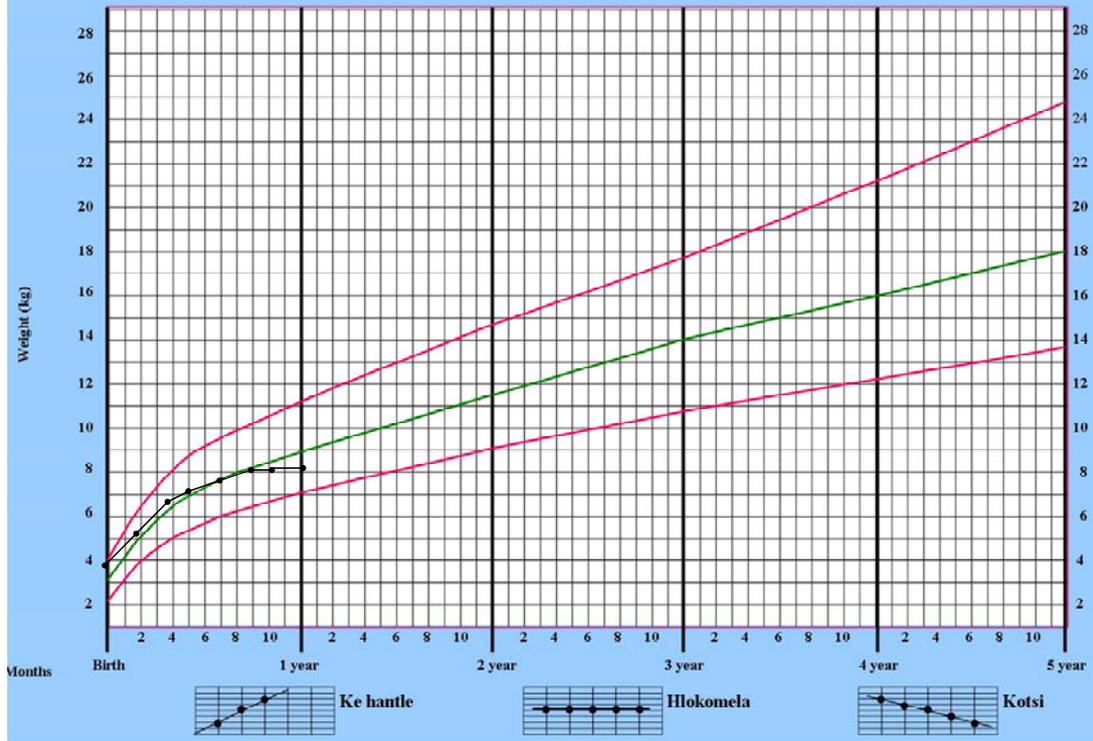
Story 3

NGOANANA
Karete e bontšang kholo ea ngoana



Story 4

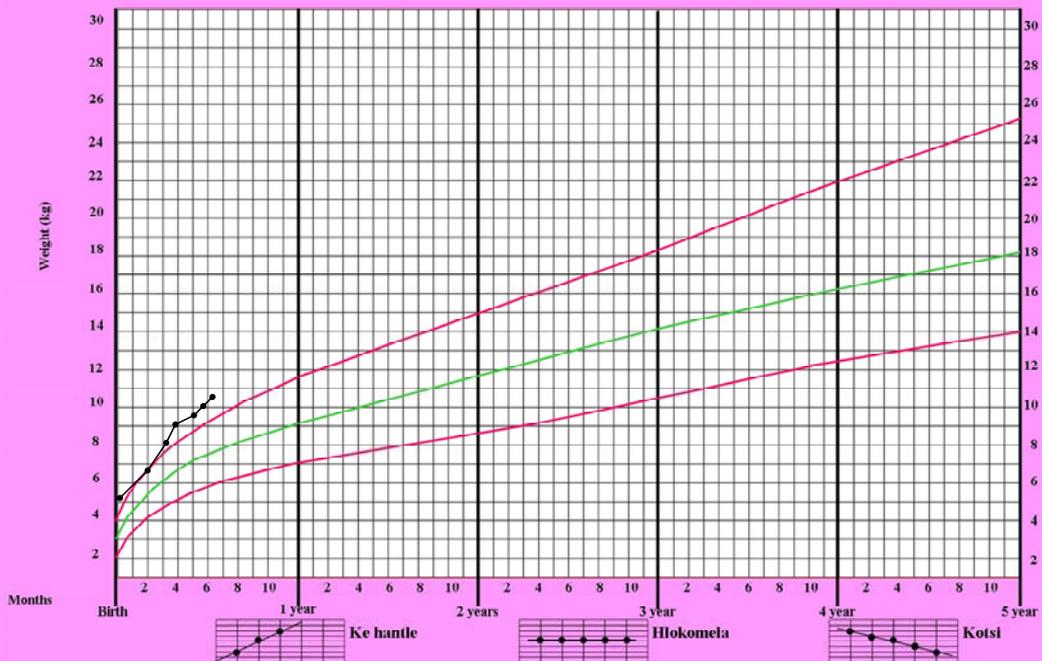
MOSHANYANA
Karete e bontšang kholo ea ngoana



Story 5

NGOANANA
Karete e bontšang kholo ea ngoana

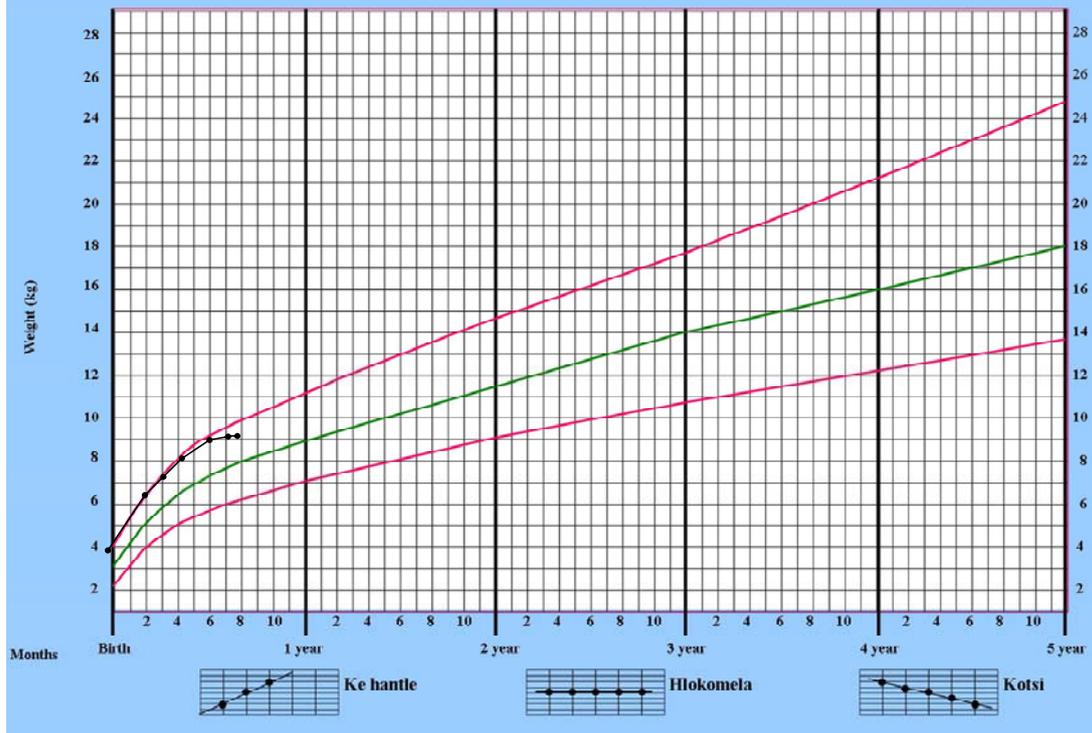
8/3



Story 6

MOSHANYANA

Karete e bontšang khoho ea ngoana



Session 33: Responsive feeding

Learning 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.
-

Health workers like you frequently give information to caregivers about feeding young children. We will now look at the recommendations and suggestions that you give and that you wrote down in an earlier session.

Often health workers talk about what foods to give to 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 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.

A child needs food, health, and care to grow and develop. Even when food and health care are limited, good caregiving 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.

Responsive feeding practices

Responsive Feeding Practice 1: 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 a lot 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 he does not have the skill of moving it to the back of his 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.

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 less than 2 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: **children are left to feed themselves**. The caregiver believes that the child will eat if hungry. The caregiver may also believe that when the child stops eating, 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 differences in these three feeding styles is to demonstrate them.

Now we see demonstrations of three ways to feed a young child. After each demonstration, we will discuss what it shows.

Demonstration 1: Controlled feeding

The 'young child' is sitting next to the caregiver (or on the caregiver's knees). The caregiver prevents the child from putting his 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.

Now we see another way of feeding a young child.

Demonstration 2: Leave to themselves

The 'young child' is 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 in the bowl, looks to caregiver for help, eats a little, cannot manage a spoon well, tries with his hands but drops the food, gives up, and moves away.

Caregiver says, 'Oh, you aren't hungry', and takes the bowl away.

Now we see a third way of feeding a young child.

Demonstration 3: 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 or 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.

Responsive Feeding Practice 2: Feed slowly and patiently, encourage but do not force

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.

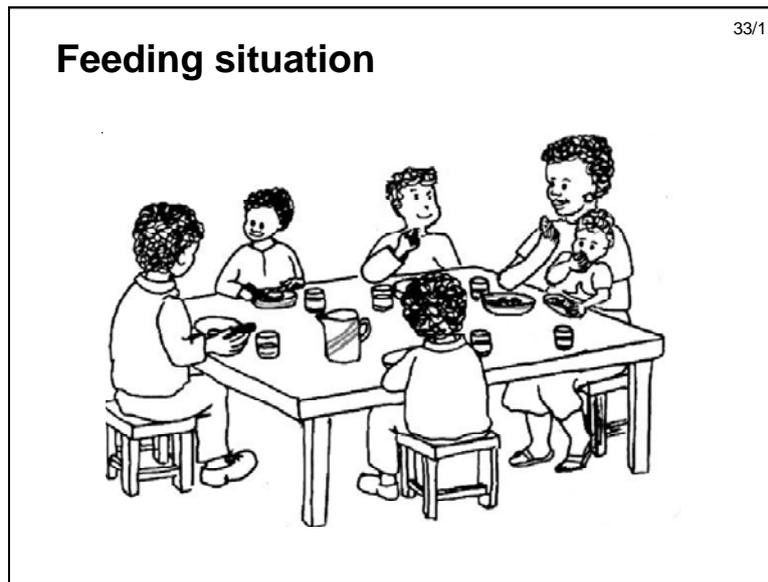
RESPONSIVE FEEDING TECHNIQUES

- 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.
- Minimise distractions if the child loses interest easily.
- Stay with the child through the meal and be attentive.

Responsive Feeding Practice 3: Talk to children during feeding and make eye-to-eye contact

- Feeding times are periods of learning and love. Children may eat better when 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.

Slide 33/1. Feeding situation.



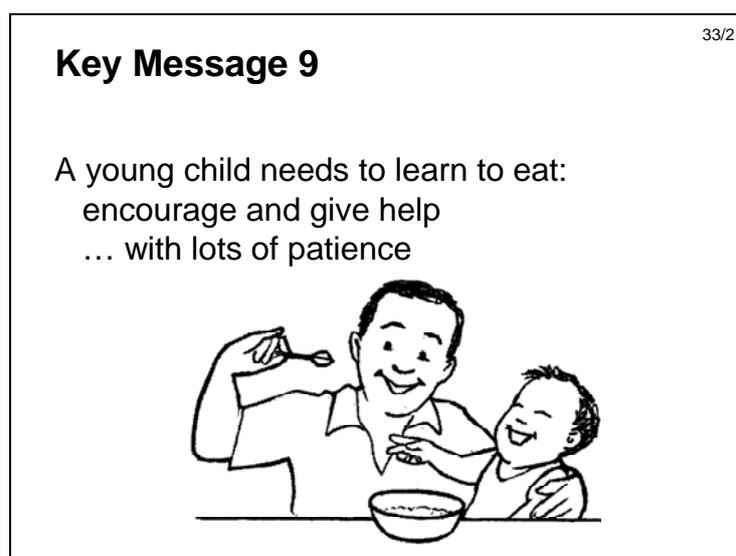
The overall feeding environment may also affect food intake. This includes:

- Sitting with the family or other children at mealtimes so the child sees them eating.
- Sitting with others eating to provide an opportunity to offer extra food to the young child.
- Using a separate bowl for the child so the caregiver can see the amount eaten.
- Talking with the child.
- Encouraging all the family to help with responsive feeding practices.

In this session, we saw three responsive feeding practices to encourage:

- Assisting children to eat, being sensitive to their cues or signals.
- Feeding slowly and patiently, encouraging but not forcing.
- Talking to children during feeding, and maintaining eye-to-eye contact.

Slide 33/2. Key Message 9: Responsive feeding.



Session 34: Practical Session 4—Gathering information on complementary feeding practices

Learning objectives

After completing this session, participants will be able to:

- Demonstrate how to gather information about complementary feeding using counselling skills and the FOOD INTAKE JOB AID, 6–24 MONTHS.
 - Provide information about complementary feeding and continuing breastfeeding to a mother of a child 6–24 months old.
-

During the practical session, you will work in small groups of three or four and take turns talking with a mother while the others in your group observe.

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:

- The FOOD INTAKE REFERENCE TOOL, 6–24 MONTHS.
- Pencil.
- Two copies of the COUNSELLING SKILLS CHECKLIST.
- Two copies of the FOOD INTAKE JOB AID, 6–24 MONTHS, and the pictures of thick and thin consistency.
- Common bowl used to feed a young child—one per group of participants.

- Each group will have one trainer.
- You will talk with mothers of children 6–24 months.
- One participant will talk with the mother, filling in the FOOD INTAKE JOB AID, 6–24 MONTHS, at the same time.
- The others in the group will observe and fill in the counselling checklist.
- Do not offer suggestions for treatment of an ill child.

When talking 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 in a course. 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, 6–24 MONTHS. 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, 6–24 MONTHS, as you listen and learn from the mother.

Use the information you have gathered and then:

- Try to praise two 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 as you can. Ask your trainer for assistance if necessary.

When observing...

Explain that the participants who 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 an interview is complete...

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.

Notice other feeding practices, such as:

- If children eat any food or have any drinks while waiting.
- Whether children are given a bottle or pacifier (dummy) while waiting.
- General interactions between mothers and children.
- Any posters or other information on feeding in the area.

Session 35: Checking understanding and arranging follow-up

Learning 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.

In this session, you will learn two further skills to help support mothers:

- Checking understanding.
- Arranging follow-up.

Checking understanding

We have already practised the counselling skills of 'listening and learning' and 'building confidence and giving support'. However, you need to discuss the suggestions you make with a mother so she can decide on a course of action. Your suggestion does not automatically become what a mother will do.

Often 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 the understanding of the term 'frequently'.

It is not enough to ask a mother if she understands, because she may not realise 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'. They do not tell you if a mother really understands.

Checking understanding also helps to summarise what you have talked about.

We will now see a demonstration of the need for using the skill of checking understanding. The demonstration involves a mother and health worker coming to the end of a discussion about feeding a 12-month-old baby.

Demonstration: Checking understanding

Health worker: 'Now, (name), have you understood everything that I've told you?'

Mother: 'Yes, ma'am.'

Health worker: 'You don't have any questions?'

Mother: 'No, ma'am.'

Comment: What did you observe?

This mother would need to be very determined to say that she had questions for this health worker. Let us hear this again with the health worker using good checking questions.

<i>Health worker:</i>	'Now, (name), we talked about many things today, so let's check to make sure everything is clear. What foods do you think you will give (name) tomorrow?'
<i>Mother:</i>	'I will make his porridge thick.'
<i>Health worker:</i>	'Thick porridge helps him to grow. Are there any other foods you could give, maybe from what the family is eating?'
<i>Mother:</i>	'Oh yes. I could mash some of the rice and lentils we are having, and I could give him some fruit to help his body to use the iron in the food.'
<i>Health worker:</i>	'Those are good foods to give your child to help him to grow. How many times a day will you give food to (name)?'
<i>Mother:</i>	'I will give him something to eat five times a day. I will give him thick porridge in the morning and evening, and in the middle of the day, I will give him the food we are having. I will give him some fruit or bread in between.'
<i>Health worker:</i>	'You have chosen well. Children who are 1 year old need to eat often. Would you come back to see me in 2 weeks to see how the feeding is going?'
<i>Mother:</i>	'Yes, OK.'
Comment:	<p>What did you observe this time?</p> <p>This time the health worker checked the mother's understanding and found that the mother knew what to do. She also asked the mother to come back for follow-up.</p> <p>If you get an unclear response, ask another checking question.</p> <p>Praise the mother for correct understanding, or clarify any information as necessary.</p>

Arrange follow-up or referral

All children should receive visits to check 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 specialised care.

Follow-up is especially important if there has been any difficulty with feeding. Ask the mother to visit the health facility in 5 days for follow-up.

This follow-up includes checking what foods are used and how they are given, checking how breastfeeding is going, and 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. These children are at special risk. In addition, it is important to check how the mother is coping with her own health and difficulties.

Session 36: Food demonstration

Learning objectives

After completing this, session participants will be able to:

- Prepare a plate of food suitable for a young child.
- Explain why they have chosen these foods.
- Conduct a food demonstration with a mother.

Helping a mother learn to prepare a suitable meal

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. You can use your skills to:

- Use open questions to find out if the mother understands.
- Avoid words which sound judgemental 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.

- Likelehi talked to the health worker a few days ago about her 10-month-old baby. Makalo grew well for the first 6 months, but his weight gain has slowed down since then. The health worker gathered information by observing, listening, and learning.
- The health worker discussed Makalo's 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 on the home of Likelehi to help her learn more about foods and amounts to offer Makalo. The health worker asked Likelehi to keep some of the food from the family meal.

Demonstration: Supportive teaching

Health worker: 'Good morning, Me Likelehi. How are you and Makalo today?'

Mother: 'We are well, thank you.'

Health worker: 'A few days ago, we talked about feeding Makalo, and you decided you would try to offer Makalo some food more often. How is that going?'

Mother: 'It is good. One time he had about half of a banana. Another time he had a piece of bread with some butter on it.'

Health worker: 'Those sound like 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.'

<i>Health worker:</i>	'It can be hard. What sort of bowl or cup do you feed him from?'
<i>Mother:</i>	'We usually use this bowl.' (<i>Shows a bowl about 250 ml in size</i> ¹⁰ .)
<i>Health worker:</i>	'How full do you fill the bowl for his meal?'
<i>Mother:</i>	'Oh, about a third.'
<i>Health worker:</i>	'Makalo is growing very fast at this age, so he needs increasing amounts of food.'
<i>Mother:</i>	'What foods should I use?'
<i>Health worker:</i>	'You have some of the food here from the family today. Let us see.' (<i>Uncovers food.</i>)
	'First we need to wash our hands.'
<i>Mother:</i>	'Yes, I have some water here.' (<i>Washes hands with soap and dries them on clean cloth.</i>)
<i>Health worker:</i>	'Now, what could you start with for the meal?'
<i>Mother:</i>	'I guess we would start with some rice.' (<i>Puts in two large spoonfuls.</i>)
<i>Health worker:</i>	'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?'
<i>Mother:</i>	'I kept a few pieces of fish from our meal.' (<i>Puts in one large spoonful.</i>)
<i>Health worker:</i>	'Fish is a good food for Makalo. A little animal-source food each day helps him to grow well.'
<i>Mother:</i>	'Does he need some vegetables, too?'
<i>Health worker:</i>	'Yes, dark-green or yellow vegetables help Makalo to have healthy eyes and fewer infections. What vegetables could you add?'
<i>Mother:</i>	'Some spinach?' (<i>Puts in some.</i>)
<i>Health worker:</i>	'Spinach would be very nutritious. Some would fill half the bowl.'
<i>Mother:</i>	'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.'
<i>Health worker:</i>	'Yes, you are able to do it. Now, what about his morning meal?'
<i>Mother:</i>	'I can give some porridge, with milk and a little sugar.'
<i>Health worker:</i>	'That's right. How much will you put in the bowl?'
<i>Mother:</i>	'Until it is at least half full.'
<i>Health worker:</i>	'Yes. So, we've talked about his morning meal, and the main meal with the family. Makalo needs three to four meals each day. So what else could you give?'
<i>Mother:</i>	'Well, he could have some banana or some bread like I said before.'
<i>Health worker:</i>	'Those are healthy foods to give between meals. Makalo needs at least half a bowl of food three to four times a day as well.'
<i>Mother:</i>	'Oh, I don't know what else to give him.'
<i>Health worker:</i>	'Your family has a meal in the middle of the day. What do you eat in the evening?'
<i>Mother:</i>	'Usually there is a pot of soup with some beans and vegetables in it. Could I give him that?'

¹⁰ If a different size cup or bowl is used, adjust the text accordingly. 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.

<i>Health worker:</i>	‘Thick foods will 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 Makalo? And maybe soak some bread in the soup?’
<i>Mother:</i>	‘Yes, I could do that easily enough.’
<i>Health worker:</i>	‘So, how much will you put in Makalo’s bowl for each meal?’
<i>Mother:</i>	‘I will fill it half full.’
<i>Health worker:</i>	‘Very good. And how often each day will you give him some food?’
<i>Mother:</i>	‘I will give half a bowl of food three to four times a day. If he is hungry, I will give some extra food between meals.’
<i>Health worker:</i>	‘Exactly. You know how to feed Makalo well. Will you bring Makalo back to the health centre in 2 weeks so we can look at his weight?’
<i>Mother:</i>	‘Yes, I will. With all this food, I know he will grow very well.’

- 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 criticise 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.

Remember to use the counselling skills when you teach a mother. This supportive teaching can help to build her confidence as well as make it easier for her to learn.

Whenever possible, let the mother prepare 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.

The health worker would be looking for techniques such as:

- Assisting the child to eat, being sensitive to his cues or signals.
- Feeding slowly and patiently, encouraging but not forcing.
- Talking to the child during feeding, and maintaining eye-to-eye contact.

Preparing a plate of food

- Each group will now prepare a bowl or plate of food suitable for the age of child they are assigned: 6½ months old, 8 months old, 10 months old, 15 months 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).
- 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 the kinds of foods mothers in your community give to young children.
- You are a busy mother. Do this task quickly.
- Be prepared afterward 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.

QUANTITIES OF FOOD TO OFFER A YOUNG CHILD FOR A MEAL			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal¹¹
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 half 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.	Half 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.	Three-quarters 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.			

¹¹ Adapt this 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: Preparing a young child's meal		
Group:		
Task	Achieved	Comments
Mixture of foods:		
Staple:		
Animal-source food:		
Bean/pulse <i>plus</i> 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.

<p style="text-align: center;">Planning guide for a group demonstration of the preparation of young children's food</p>
--

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 simple and nutritious food for young children using local ingredients (to learn through doing).
2. Demonstrate to mothers the appropriate consistency (thickness) for these foods.
3. Demonstrate the taste and acceptability of the food preparations for mothers and young children.

Decide the Key Messages

- Select one to three Key Messages to say to mothers.
- Follow each message with a checking question (a question that cannot be answered 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 to your child in the next 2 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 a lot 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 two or three pairs of mothers 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:
 - Washing hands.
 - Mashing a potato or _____ .
 - Adding the correct quantity of fish or egg, etc.
 - Adding the 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 have 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 opinions (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.
- Read out the list of foods again.
- Ask the mothers when they think they can prepare this food for their young child (for example, 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^{12,13}

Fill in the foods and the amounts needed.

Recipe 1

Family food for a 10-month-old child's main course
(about half a 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 with 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 food 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 with 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 and cut them into small pieces or slightly mash them together (depending on the child's age).
- Add the oil or margarine and mix well.

¹² The amounts indicated are recommended when the energy content of the meals is 0.8 to 1 Kcal/g. These amounts should be adjusted when the foods are diluted.

¹³ If there is a need to increase the amount of food for each meal, instruct the participants to make the changes in their recipes.

Session 37: Feeding during illness and low-birthweight babies

Learning 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-birthweight babies.
 - Estimate the volume of milk to offer to a low-birthweight baby.
 - Identify the Key Message from this session.
-

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 when 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.

Importance of feeding during illness

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 or breastfeeding.

Slide 37/1. Growth chart of Thabo, who is 12 months old.



Thabo grew well for the first 5 months and 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 toward 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 are used as fuel. This is why they lose weight, look thin, and stop growing.

Slide 37/2. Key Message 10: Feeding during and after illness.

37/2

Key Message 10

Encourage children to drink and eat during illness and provide extra food after illness to help them recover quickly

The illustration shows a woman sitting at a table, feeding a young child with a spoon. Another child is standing next to her, looking on. There is a bowl of food on the table.

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.

Appropriate feeding during illness and recovery

Slide 37/3. Feeding the child who is ill.

37/3

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

Slide 37/4. Feeding during recovery.

37/4

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.

Feeding of low-birthweight babies

The term 'low-birthweight' means a birthweight of less than 2,500 grams (up to and including 2,499 grams), regardless of gestational age. (Babies who weigh less than 1,500 grams are considered extremely low-birthweight.) 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-birthweight.

In this country, the percentage of all babies who are low-birthweight ranges from 6.2% in Leribe and Berea districts to 13.3% in Botha Bothe¹⁴.

Low-birthweight babies are at particular risk of infection, and they need breastmilk more than larger babies. Yet they are given artificial feeds more often than larger babies. Many low-birthweight 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 breastmilk by tube or cup, and helped to establish full breastfeeding later. Breastfeeding is easier for these babies than bottle feeding.

Mothers of low-birthweight babies need skilled help to express their milk and to cup feed.

It is important to start expressing on the first day, within 6 hours of delivery if possible. This helps to start breastmilk to flow, in the same way that suckling soon after delivery helps breastmilk to 'come in'.

If a mother can express just a few millilitres of colostrum, it is valuable for her baby.

Slide 37/5. Feeding low-birthweight babies.

37/5

Feeding low-birthweight 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

¹⁴ Lesotho National Nutrition Survey Report, November–December 2007.

- Babies of about 32 weeks gestational age or more are able to start suckling on the breast.
- Babies between about 30 and 32 weeks gestational age can take feeds from a small cup, or from a spoon.
- Babies less than 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 breastmilk by cup to make sure the baby gets all that he needs.
- When a low-birthweight baby starts to suckle effectively, he may pause during feeds quite often and for quite long periods. For example, he may take four or five 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 low-birthweight baby at the breast are:

- Across her body, holding him with the arm on the opposite side to the breast.
- The underarm position.

Low-birthweight babies need to be followed up regularly to make sure that they are getting all the breastmilk that they need.

Low-birthweight babies of mothers who are HIV positive and who have chosen-replacement feeding are at higher risk of complications and should also be followed regularly to make sure they are growing. Encourage mothers to feed the replacement milk to their babies by cup.

AMOUNT OF MILK FOR LOW-BIRTHWEIGHT BABIES WHO CANNOT BREASTFEED
<p>What milk to give: Choice 1: Expressed breastmilk, if possible, from the baby's mother. Choice 2: Formula made up according to the instructions.</p> <p>Steps to take for babies who weigh less than 2.5 kg (low-birthweight):</p> <ol style="list-style-type: none"> 1. Start with 60 ml/kg body weight. 2. Increase the total volume by 20 ml/kg per day, until the baby is taking a total of 200 ml/kg per day/night. 3. Divide the total into 8 to 12 feeds over 24 hours, to feed every 2 to 3 hours. 4. If the baby is extremely low-birthweight (weighs less than 1.5 kg), continue until the baby weighs 1.8 kg or more and is fully breastfeeding. If the baby is low-birthweight (weighs between 1.5 and 2.5 kg), continue until the baby weighs at least 1.8 kg or more, and is fully breastfeeding. 5. Check the baby's 24-hour intake. <p>Note: The size of individual feeds may vary.</p>

