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

Learning objectives
After completing this session participants will be able to:

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

Preparation and materials

- Make sure that **Slides 24/1 and 24/2** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- This session should have been discussed in detail beforehand. The milks you will prepare and the types of fuel you will use should be appropriate for your area and cover all local options. This session requires some flexibility as the types of replacement milk and fuels that are appropriate for different areas will vary. This session requires careful preparation by all trainers as the participants will work in small groups.
- The entire session can take place where the cooking will take place if it is suitable. The introduction and discussion are for the whole group together. For the rest of the time, the participants work in their small groups.
- Prepare a place where the groups can cook.
- Each group should use a different type of fuel commonly used in your area: e.g., wood, paraffin, charcoal. If there are six groups and only three types of fuel commonly used, then two groups will prepare feeds using the same type of fuel.
- Arrange for a fireplace or obtain enough stoves of a commonly used type for each group. Ensure that the stoves will work, that they have wicks and are filled with fuel.
- Obtain firewood, charcoal, paraffin, and/or other locally used fuels. Put wood where it will keep dry or dry out.
- Provide matches and any other necessary equipment—prickers for the stove, paper or kindling to start fires, etc.
- Mark each group's area, and try to allow enough space for their mats, utensils, and cookers.
- Discuss with the trainers their role during the session. Make sure all trainers are clear about what types of milk their group is preparing.
- You will follow the appropriate HIV and Infant Feeding Take Home Flyers as you prepare the replacement feeds. Make sure you have copies of the relevant flyers for your group.
- Be sure to emphasise that home-modified milks are not safe for replacement feeding and should only be used temporarily if a woman runs out of formula.

Time: 110 minutes

Session guide

Make these points:

- 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?

Explain the following:

- 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 below the age of 6 months.

Ask: Are there any circumstances where home-modified animal milk could be used?
Allow participants to discuss.

Explain the following:

- 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 below 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.

Practical preparation of replacement feeds

Show each group where they will work. As soon as they are in their place, they can start to follow the instructions on the flyers. Encourage the group to take a note of how long each feed takes to prepare. If participants are preparing a fire and collecting water from a river, then the preparation time should start from this moment.

The trainers will work with their small groups to check that they:

- Have all their equipment and ingredients.
- Are doing the exercise correctly.
- Are working in a safe manner.
- Are observing and giving feedback to the others as appropriate.

Practical session discussion

Ask participants to come back to plenary to discuss what they learnt about preparing the feeds, and how easy or difficult it would be for mothers. Use the following questions to facilitate the discussion.

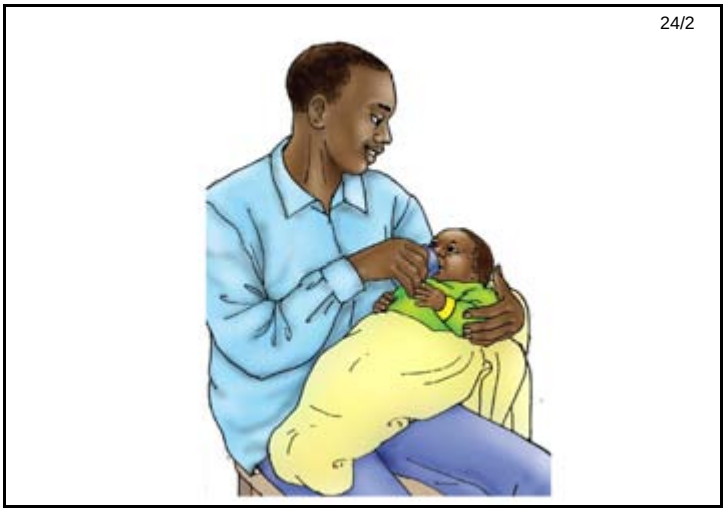
- ***Which fuel was the easiest to use?***
- ***Which milk was the most difficult to prepare and why?***
- ***What are the things that a mother is most likely to have difficulty with, and perhaps make mistakes over and over?***
- ***Would a mother be able to prepare these feeds many times a day?***
- ***How could she manage at night?***
- ***What special instructions would help her to prepare feeds both as safely and as easily as possible?***

Explain that there are several counselling cards that can be used when talking with mothers who have decided to replacement feed. Show **Slide 24/1. Counselling Card 10: How to prepare formula in a hygienic way**

Ask: What do you see in this picture? How can women and families practice good hygiene when preparing formula?
Participants should mention the following:

- 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.

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



Ask: What do you see in this picture? (Response: A baby is being fed by a cup.)

Explain the following:

- 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.

Using a doll, demonstrate how to feed a baby with a cup by doing the following:

- 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.

Trainer's notes

Fresh cow's milk or other animal's milk to be used for a baby also needs to be briefly boiled to kill harmful bacteria. Boiling also makes the milk more digestible. The milk and water can be boiled together. Milk sold in the shops may already have been heat-treated in various ways such as pasteurization, UHT (ultra-high temperature), or sterilization. These treatments kill the harmful micro-organisms, and they help the milk to keep longer if it is not opened. It can be used without boiling if it is used immediately on opening. After it is open, it will only keep as long as fresh milk. If it has been open more than an hour, it will need to be boiled before modifying it and giving it to a baby.

In addition to diluting, adding sugar, and boiling animal milk, it is necessary to give the micronutrients. Breastmilk contains the micronutrients that a baby needs, and if not breastfeeding these need to be provided in another way. Micronutrients are the vitamins and minerals that the body needs in small amounts to keep it working well. The micronutrients that may not be available easily from other milks are iron, zinc, vitamin A, vitamin C, and folic acid. Micronutrient supplements are added to commercial formula when it is manufactured. 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 these 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 + 3/4 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
Viatmin 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.

Materials and preparation

- Make sure that **Slides 25/1 through 25/17** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Markers.
- Tape or other items for affixing papers on walls or chalkboards.
- Flip chart with The Ten Steps to Successful Breastfeeding listed as follows:

The Ten Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within an hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they are separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
7. Practise rooming-in—allow mothers and infants to remain together—24 hours a day.
8. Encourage breastfeeding on demand.
9. Do not give artificial teats or pacifiers (also called dummies or soothers) to infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Suggested time: 60 minutes

Session guide

Introduce The Ten Steps to Successful Breastfeeding and BFHI

Ask participants to refer to the flip chart with The Ten Steps to Successful Breastfeeding. (There is no need to read out the 'Ten Steps' as you will be covering them in detail during this session.)

Make these introductory points:

- 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, WHO and 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' are a summary of the main recommendations of the Joint Statement.
- They are the basis of the 'Baby-Friendly Hospital Initiative' (BFHI), a worldwide effort launched in 1991 by the 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 the 'Ten Steps' are followed the outcome is better than if only a few steps are followed.

Make the following points:

- 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.

Explain The Ten Steps to Successful Breastfeeding

Explain that the following slides illustrate 'The Ten Steps to Successful Breastfeeding.'

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

Show **Slide 25/1. Step 1.** Share the following information:

- 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 this decision.

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

Show **Slide 25/2. Step 2**. Share the following information:

- 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

Show **Slide 25/3. Step 3,** and make the points that follow:

- 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.

Present the following information about 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 the hospital so that they know what to expect.
  - Give simple, relevant information on how to breastfeed (e.g., 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 breast 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 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

Show **Slide 25/4. Step 4,** and **Slide 25/5. Early Initiation**. Have a participant read the fourth step.

Make the following points:

- This mother is holding her baby immediately after delivery. They are both naked, so that 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.

Ask: What can you do to prevent a baby from getting cold?
Participants should mention the following.

- 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 to 1 hour after delivery, but there is no exact fixed time.
- Try to delay non-urgent medical routines for at least 1 hour.

Ask: What medical routines occur in your hospital or clinic which could interrupt early contact between the mother and her baby?
Wait for a few replies. Encourage participants to think of ways in which these non-urgent medical routines could be postponed.

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.

Show **Slide 25/6. Separation of mother and baby,** and make the following points:

- This baby was born about half an hour ago. He has been separated from his mother while she is resting and being bathed.

Ask: What is he doing with his mouth?
Wait for a few replies and then continue.

- 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 onwards. 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

Show **Slide 25/7. Step 5**. Explain the following:

- 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.

Ask: How would you suggest that this midwife help the mother?
Wait for a few replies. Participants should mention the following:

- 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.

Show **Slide 25/8. Expressing breastmilk**

Explain the following:

- 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.

Make the following points:

- 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.

Ask: Does a baby need a feed while he waits for his mother to breastfeed him?
Wait for a few replies and then continue.

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

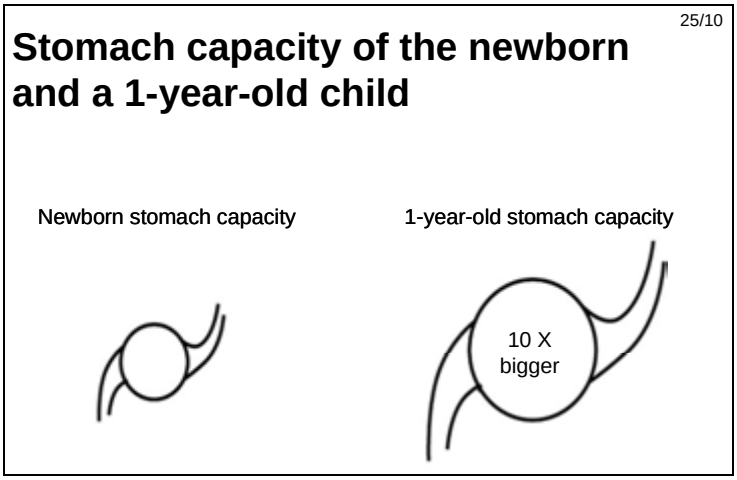
Step 6: Give newborn infants no food or drink other than breastmilk, unless medically indicated

Show **Slide 25/9. Step 6.** Have a participant read the step.

Make the following points:

- 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.

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



Explain that 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.

Make the following points:

- 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

Show **Slide 25/11. Step 7.** ***Ask: What are the advantages of rooming-in or bedding-in?***

Wait for a few replies and then continue. Participants should mention the following:

- 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 the 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

Show **Slide 25/12. Step 8**. ***Ask: What does breastfeeding on demand mean?***
Wait for a few replies and then continue.

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

Ask: What are the advantages of breastfeeding on demand?
Wait for a few replies. Be sure that they mention the following advantages:

- 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.

Explain that 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.

Ask: What would you suggest to a mother about how long she should let her baby suckle?
Wait for a few replies and then continue.

- 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.

Ask: Would you suggest that a mother let her baby suckle from one breast, or from both breasts at each feed?
Wait for a few replies and then continue.

- 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

Show **Slide 25/13. Step 9**. Have a participant read the step. Then show **Slide 25/14. Nipples, teats, and dummies**.

Make the following points:

- Teats, bottles, and pacifiers 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 14.
- 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.

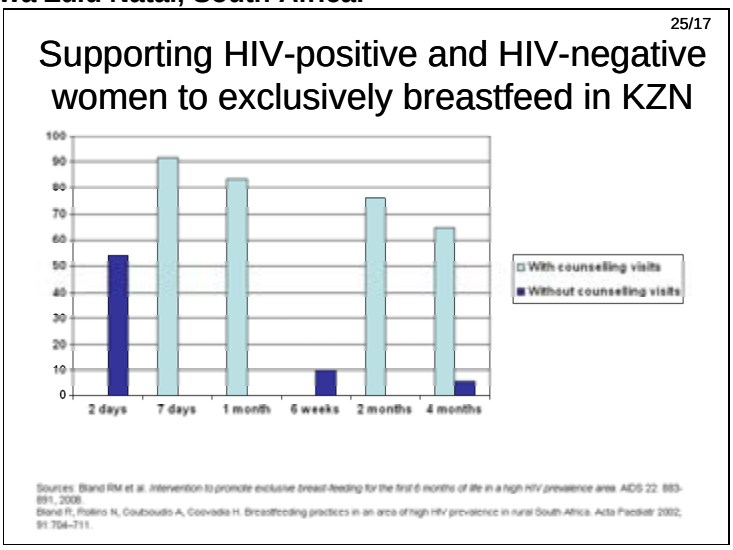
Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic

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

Explain the following:

- 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.

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



Make the following points:

- 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.

Ask participants if they have any questions, and answer them.

Trainer's notes

Examination of women's breasts: It is not essential to examine women's breasts routinely, because it is not often useful, and it can make a woman worry about them when she was quite confident before. However, it may be the policy in your health service to do so. If so, it gives you an opportunity to talk to the mother about breastfeeding. Almost always you will be able to reassure her that her breasts are good for breastfeeding.

Preparation of breasts for feeding: Preparing breasts physically for breastfeeding is not necessary. Traditional ways of preparing the breasts, that are culturally important, may give a mother confidence. If you feel that they help mothers psychologically, there is no need to discourage them. If a mother has flat or inverted nipples, doing stretching exercises, or wearing nipple shells during pregnancy, does not help. Most nipples improve towards the end of pregnancy and in the first week after delivery. A nipple that looked difficult in pregnancy may not be a problem after the baby is born. The most important time to help a mother is soon after delivery. If a mother is worried about inverted nipples, explain that they will improve, and that you can help her to breastfeed. Explain about how a baby suckles from the breast behind the nipple, not from the nipple itself. If a mother has a problem with her breasts that you are not sure about, such as previous breast surgery or burns, try to get help from someone more experienced. Meanwhile, it may help to encourage her that babies often can breastfeed from a breast which has had surgery, or that a baby can get enough milk from just one breast if necessary.

Bonding: Participants may need to discuss bonding at some length. Allow time to discuss this if necessary. Mothers may not be aware of bonding happening immediately. Strong affectionate ties grow gradually. But early close contact gives them the best possible start. Separation makes bonding more difficult, especially in high-risk families, for example, young mothers with poor support. However, the effects of early separation can be overcome, and bonding can also take place later, particularly during the first 9 months of a baby's life. If initiation of breastfeeding is delayed, for example, if a mother or her baby is ill, or for cultural reasons, breastfeeding can still be successfully established. It is helpful if the mother and baby have prolonged skin-to-skin contact as soon as possible, and if the mother is well supported. However, separation and delay put bonding and breastfeeding at risk, and should be avoided.

Reasons why mothers and babies are separated in hospital: There are four common reasons why mothers and babies are separated in hospital. The intentions behind them are often good, but the reasons themselves are unsound.

1. <u>To allow the mother to rest</u>**.** Immediately after delivery, both mother and baby are usually alert and need close contact. After this period, they can rest quite well together.
2. <u>To prevent infection</u>**.** There is no evidence that putting babies in nurseries reduces infection. On the contrary, it may increase cross-infection between babies, which can be carried by health care staff.

3. A lack of space in the wards for cots. Administrators can often overcome the problem of space if they realise how important rooming-in is. In many hospitals, babies stay in the same bed with their mothers, so there is no need for extra space.
4. To observe the baby**.** Health care staff can observe babies with their mothers just as well as in a nursery. Mothers observe their babies very closely, and they often notice something wrong before busy health care staff. There is no justification for separating mother and baby while waiting for a doctor to examine a baby.

Skin-to-skin contact and bacterial colonisation: Early skin-to-skin contact also enables harmless bacteria from the mother to be the first to colonise her baby. These harmless bacteria help to protect a baby against more harmful bacteria, such as those from the hospital and hospital staff.

Prophylaxis of eye infection: It may be health service policy to put either silver nitrate drops or tetracycline ointment into the eyes of all newborns to prevent gonococcal and chlamydial infection, which can lead to blindness. To be effective, the treatment must be given within 1 hour of delivery. To minimise any interference with breastfeeding, allow the baby to suckle if possible before putting in drops or ointment. Tetracycline ointment may be preferable, because it is less irritating than silver nitrate drops.

Medical indications for giving artificial feeds: Participants may want to discuss further the medical indications for giving artificial feeds. There are rare exceptions during which the infant may require other fluids or food in addition to, or in place of, breastmilk. The feeding programme of these babes should be determined by qualified health professionals on an individual basis.

The commonest reasons for giving prelacteal and supplementary feeds are:

- To prevent low blood sugar, or hypoglycaemia.
- To prevent dehydration, especially if a baby is jaundiced, and needs phototherapy.
- Because the mother's breastmilk has not ‘come in.’

Full-term, normal-weight babies are born with a store of fluids and glycogen. Breastfeeding, which provides first colostrum and then mature milk, is all that they need. Sick or low-birthweight babies may require special feeding, for example, to prevent hypoglycaemia, or because they are unable to breastfeed. However, even for these babies, breastmilk is usually the best kind of feed to give. Babies who are jaundiced need more breastmilk, which helps to clear jaundice. Other fluids, such as glucose water, do not help to clear jaundice, and are only needed if the baby is dehydrated. Acceptable medical reasons for supplementation or replacement feeding include: severe illness in the mother if breastfeeding is difficult to achieve; maternal medications such as anti-metabolites, radioactive iodine, and some anti-thyroid drugs; absence of the mother; very-low-birthweight (<1500g) or born before 32 weeks gestational age (feeds are usually withheld for the first 24 hours); inborn errors of metabolism such as galactosaemia, PKU, and maple syrup urine disease; sick infants in intensive care; severe dehydration; and malnutrition.

Patterns of breastfeeding in the first few days: Babies differ very much in how often they want to feed. These patterns are all normal. For the first 1 to 2 days, a baby may not want many feeds. Some babies sleep for 8 to 12 hours after a good feed. Provided a baby is warm and well and not low-birthweight, and he has had at least one good breastfeed, it is not necessary to wake him at any fixed time for another feed. For the next 3 to 7 days, a baby may want to feed very often—as the milk supply becomes established. After that babies usually feed less often, but their habits continue to vary a lot. Any baby may want to feed more on some days and nights than on others.

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.

Materials and preparation
- Make sure that **Slides 26/1 through 26/4** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip chart, with two pages labelled 'Promotion to the Public' and 'Promotion through Health Services.'
- Markers.
- If possible, gather some examples of promotional material from formula manufacturers.
- Ask two participants to prepare to give the demonstration.

Suggested time: 30 minutes

Session guide

Introduction
Introduce this session by making the following points:
- 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"

Display the flip charts with the titles 'Promotion to the Public' and 'Promotion through Health Services.'

Ask: In what ways do manufacturers promote formula to the public?
Write participants' ideas on the flip-chart sheets with the title 'Promotion to the Public.' The list should include the following:
- 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.

Ask: In what ways do manufacturers use health workers and health facilities to promote formula?

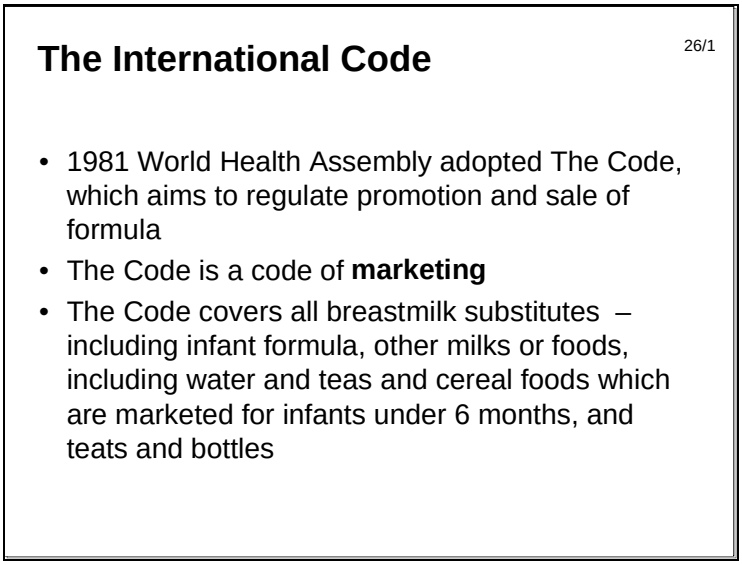
Write participants' ideas on the flip-chart sheets with the title 'Promotion through Health Services.' The list should include the following:

- 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 information 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.

If you have any examples of promotional materials or free gifts from the manufacturers, show these to the participants at the end of the session or during the next break.

Describe the International Code of Marketing of Breast-milk Substitutes

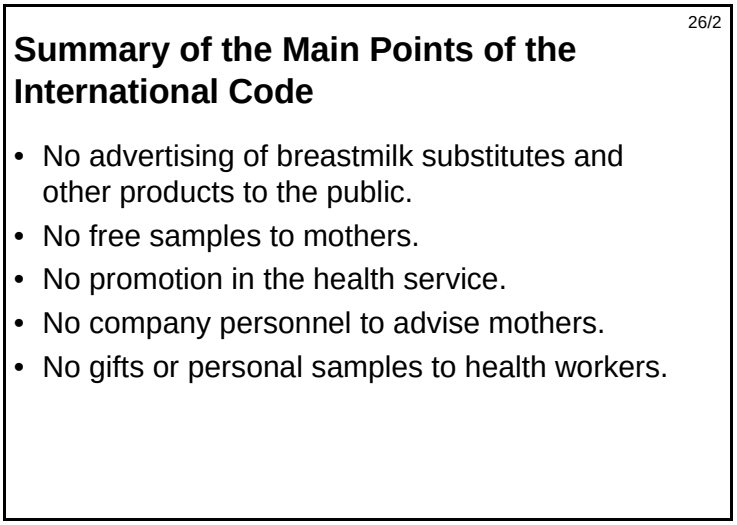
Show **Slide 26/1. The International Code**

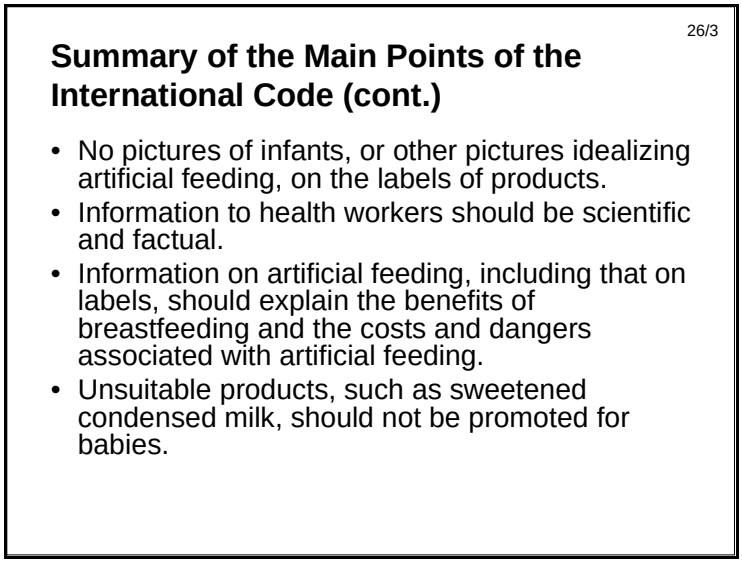


Share the following information:

- In 1981, the World Health Assembly (WHA) 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 under 6 months of age, and also feeding bottles and teats.

Show **Slides 26/2 and 26/3** and review the main points.





Continue with the following points:

- 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.'

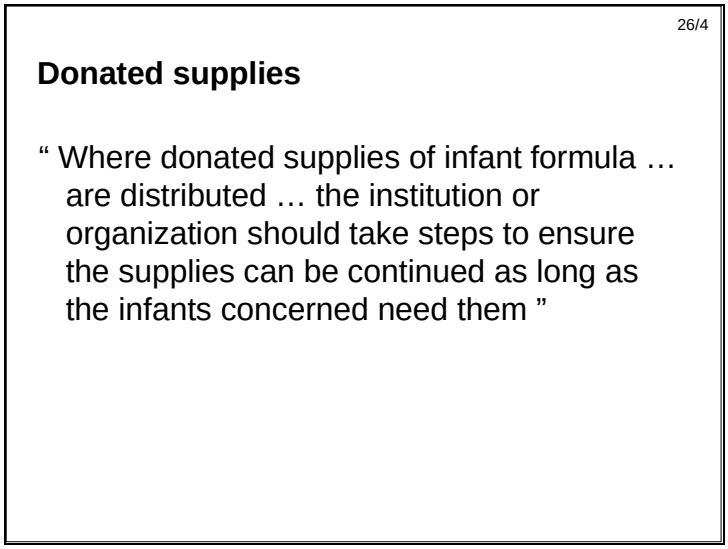
- So implementing the Code is in fact even more important, both to protect HIV-positive mothers and to help prevent spillover.
- Supplies of breastmilk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spillover to women who are breastfeeding.

Discuss and demonstrate the difficulties with donations of formula

Make these points:

- 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.

Show **Slide 26/4. Donated supplies**



Make the following points

- 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 (MCH) 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 for 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.

Ask the two participants whom you prepared to give the demonstration to read the words of the charity worker and Me Mamotlatsi.

Introduce the role play by making these points:

- 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)***
Trainer:	**Me returns to the charity worker 1 month later.**
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?'

Ask: What points does this demonstration make? Does this happen in the country?
Let participants make some suggestions. They should mention at least some of the following points:

- Supplies need to be reliable and sustainable. Short-term supplies can be dangerous.
- It is risky to rely on donated supplies.
- When a woman has started to use formula, it is difficult to go back to breastfeeding.

Ask participants if they have any questions, and try to answer them.

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.

Materials and preparation
- Make sure that **Slides 27/1 through 27/9** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip chart and markers.
- On the flip chart, write up the two Key Messages from this session. Arrange the words so that the first message can be uncovered with the second message still covered. (One way to do this is to have a sheet of blank flip-chart paper with tape on each side at the top. Move this cover down as needed.)
    - ***Key Message 1: Breastfeeding for 2 years or longer helps a child to develop and grow strong and healthy.***
    - ***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.***
- Tape or other means of fixing the page to the wall or board.
- Scrap paper for participants to write their recommendations on. These will be used again in Session 33.
- Copies of Handout: 'Assess Your Practices' (located at the end of this session guide).

Suggested time: 45 minutes

Session guide

Make these points:
- The period from 6 completed months of age[1] 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.

Distribute scrap paper to each participant. Ask them to write down the most frequent recommendations or information that you give to caregivers about feeding children aged 6-24 months.

After participants have written on any piece of scrap paper, collect these and give them to the trainer who is conducting Session 34. We will come back to these recommendations in Session 34.

Discuss sustaining breastfeeding
Explain that:
- 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.

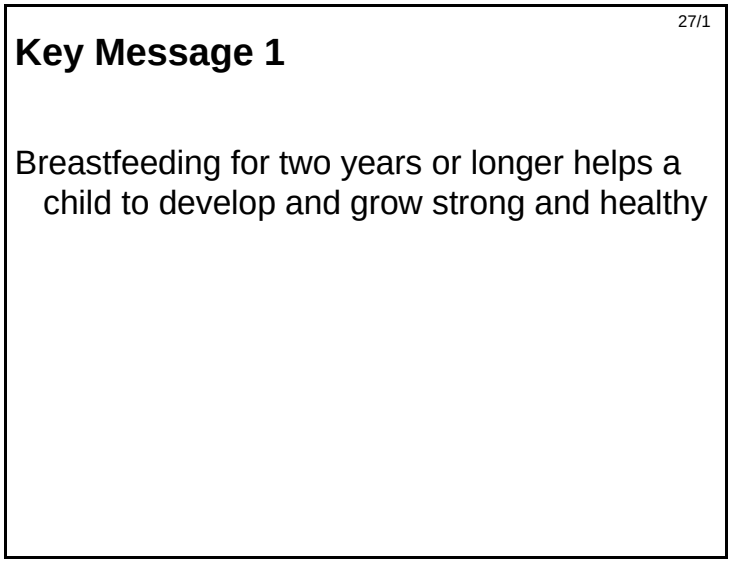
[1] Six completed months – 180 days, not the start of the sixth month.

Ask: Why is it important to continue breastfeeding after 6 months?
Wait for a few responses and then continue.

Make these points:

- 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 their nutritional needs.
- As well as nutrition, breastfeeding continues to provide protection to the child against many illnesses and provides closeness and contact that helps psychological development.
- So remember to include this key point when talking about the baby over 6 months old.

Show **Slide 27/1. Key Message 1: Breastfeeding,** and ask a participant to read out the Key Message.



Make the following points:

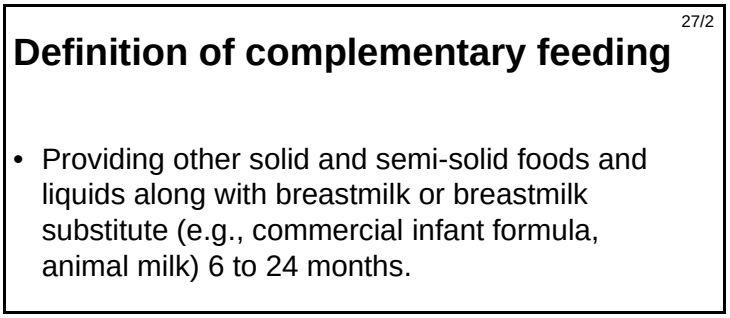
- IYCF counsellors can do a lot to support and encourage women who want to breastfeed their babies. You can help to protect good practices in a community. If you do not actively support breastfeeding, you may hinder it by mistake.
- Every time you see a mother, try to build her confidence. Praise her 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

Make these points:

- 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.

Show **Slide 27/2. Definition of complementary feeding,** and read out the definition:



Explain:

- 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 replacing it. Effective complementary feeding activities include support to continue breastfeeding.
- During the period of complementary feeding***,*** the young child gradually becomes accustomed to eating family foods. 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.

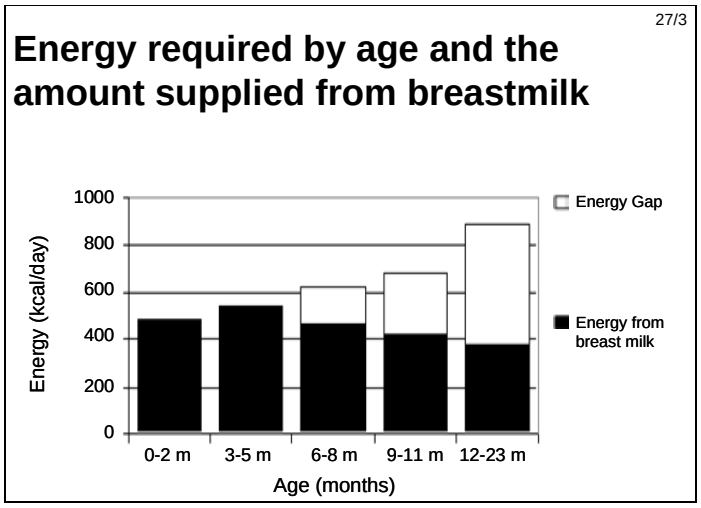
Discuss the optimal age to start complementary feeding.

Ask: What do our bodies use food and nutrients for?
Allow participants to discuss quickly.

Explain energy needs:

- Our body uses 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.

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



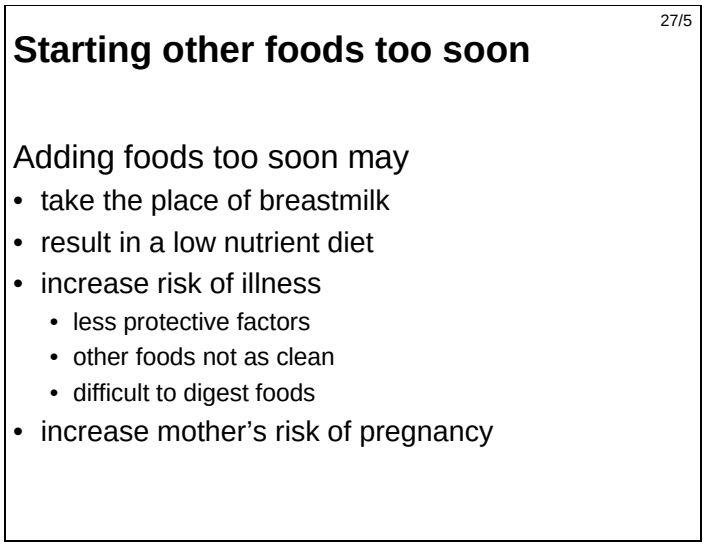
- On this graph, each column represents the total energy needed at that age. The columns become taller to indicate that more energy is needed as the child becomes older, bigger, and more active. The dark part shows how much of this energy is supplied by breastmilk. ***(Point to the dark area on the graph.)***
- You can see that from about 6 months onwards there is a gap between the total energy needs and the energy provided by breastmilk. The gap increases as the child gets bigger. ***(Point to the white area on the graph.)***
- 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.

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

- 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.

Ask: What might happen if complementary foods are started too soon (before 6 months)?
Wait for a few replies, and then continue.

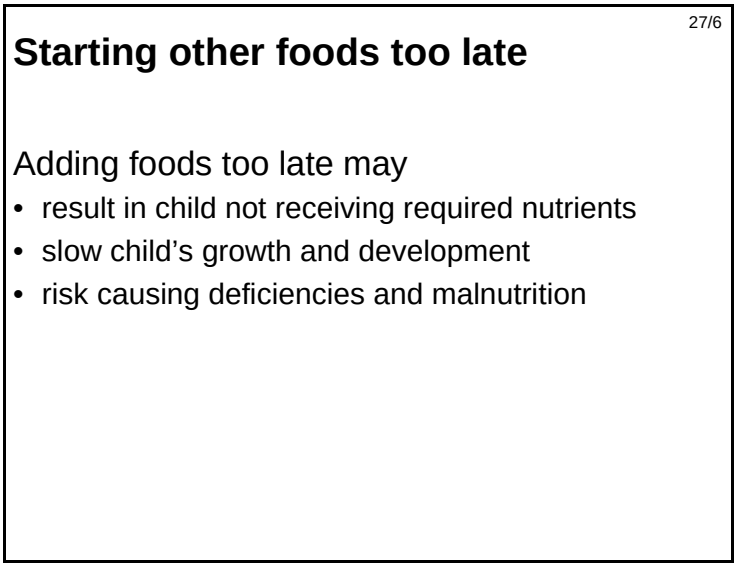
Show **Slide 27/5. Starting other foods too soon**



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.

Ask: What might happen to the child if complementary foods are started too late (older than 6 months)?
Wait for a few replies, and then continue.

Show **Slide 27/6. Starting other foods too late**



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

Ask the following questions:

- ***When do most mothers/caregivers start to give foods and liquids other than breastmilk in our country?***
- ***What are the reasons why a family might start to give foods before a baby completes 6 months?***

Write all responses on a flip chart. Examples of possible responses include the following:

- 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.

Explain the following:

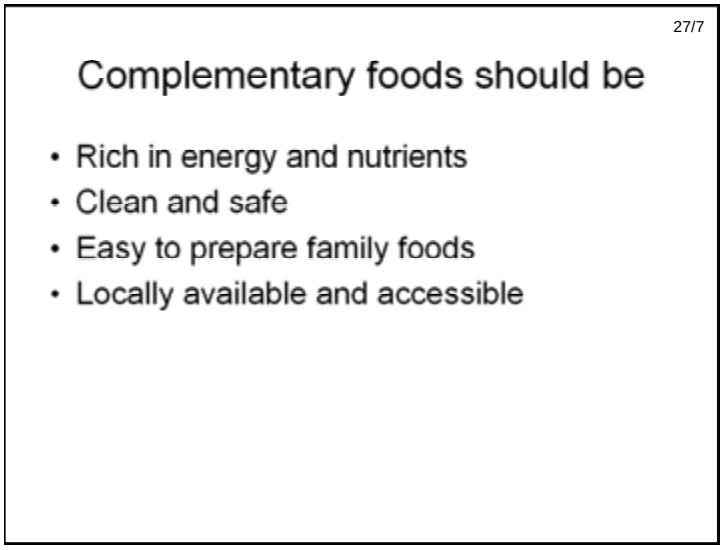
- Knowing why families start complementary foods helps you to decide how to assist them. For example, a mother may give foods to a very young baby because she

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.

Ask participants to read each of the reasons listed on the flip chart and ask for volunteers to list ways to address these reasons, one at a time. Facilitate a discussion and ask other participants if they think this is a good approach. Encourage participants to share their experiences talking with families about appropriate complementary feeding.

Ensuring adequate complementary feeding
Make the following points:
- 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.

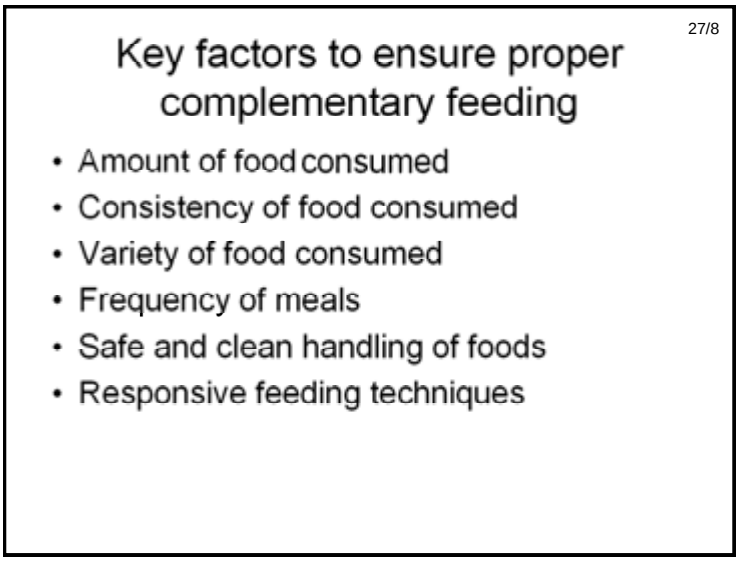
Show **Slide 27/7. Complementary foods should be…**



Ask the participants to describe how to meet young children's nutritional requirements.
Write their answers on a flip chart.

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

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



Inform participants that we will cover each of these in more detail over the upcoming sessions.

Examine the role of the health worker and the health facility

Show **Slide 27/9.**

Make these points:

- Parents of young children may receive information about feeding their child from many sources, such as families, health facility personnel, and community members.
- Here is 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.

Ask: Imagine she is coming to visit your health facility. What are all of the feeding or nutrition-related activities that she could have found on their visit to you or your health facility?
Write participants' comments on a flip chart.

Pass out copies of the handout: 'Assess Your Practices.' Ask participants to think about the health facility where they work.

Ask: When a young child comes to your facility—both well and sick children—what activities occur related to nutrition?
Share the following instructions:

- Fill in the table with the activities that occur.
- You may add comments to help clarify your marks in the table. For example, if all children who attend the well-baby clinic are weighed and measured but those who attend sick-baby clinic are just weighed, you can note this. For another example, if all children who see a nutritionist receive some nutrition counselling or discussion but children who do not see the nutritionist do not, you can note this.

Trainers go around their group as they are writing to ensure that participants understand the exercise. Encourage participants to think of their own situations. Allow about 10 minutes for this exercise.

Return to the larger group. Briefly summarise the findings of the exercise by asking the following questions:

- ***What are the practices that occur most frequently at your place of work?***
- ***What are the practices that occur least frequently?***

Make these points:

- The nutritional status of a child affects overall health. Health is not only growth and development but also the ability to fight off illness, and recover from illness. This means the nutritional status of children is important to all health staff, and that all health staff should promote good feeding practices.
- Creating a health facility environment that gives importance to children's nutrition will go a long way in promoting healthy children.

Summarise the session

Ask participants if they have any questions or if there are points you can make clearer.

Make these points:

- In this session, we discussed the importance of adequate and timely complementary feeding.
- We had two Key Messages.
    - Key Message 1: Breastfeeding for 2 years or longer helps a child to develop and grow strong and healthy.
    - 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.

Display the flip-chart pages with the Key Messages from this session. Keep these messages displayed throughout the course.

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.

Materials and preparation

- Make sure that **Slides 28/1 through 28/4** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip chart and markers.
- Tape or other items for affixing papers on walls or chalkboards.
- On the flip chart, write up the Key Message from this session.
    - ***Key Message 3: Foods that are thick enough to stay in the spoon give more energy to the child.***
- You need a bowl or plate that would be used when feeding a young child.
- Find out if germinated flour or fermented porridge is used in the area. If so, include the relevant section.
- Adapt lists of foods to reflect those available locally.
- You need food demonstration equipment as described below. Practise the demonstration beforehand.

CONSISTENCY DEMONSTRATION EQUIPMENT

- Extra table or tray in case porridge spills.
- Two empty see-through containers that will each hold 200 ml when filled to the top for the 'stomach.' This could be a drinking glass, or a plastic container such as a soft drink bottle, cut to the right size. Sharp scissors or knife to cut the soft drink bottles, if needed.
- Measuring jug or other means to measure 200 ml.
- 400 ml made-up porridge from a suitable local staple. Make up to a thick consistency so that it stays easily in the spoon when the spoon is tilted. Divide the cooked porridge into two even portions:
    - One portion put in a bowl or container that holds at least 500 ml. Later you will stir water into this portion.
    - The other portion you will use undiluted. The container size does not matter.
- Extra water (about 200 ml) to dilute porridge.
- A large eating spoon.
- Cleaning materials to tidy up afterwards, including hand-washing facilities.
- This session can be conducted with a second trainer carrying out the demonstration while the first trainer speaks.

Practise this demonstration to ensure the quantities of porridge are right for the 'stomach.' The first portion should be about twice as much (after diluted) as the stomach size. The second portion should all fit in with none left over and the stomach full.

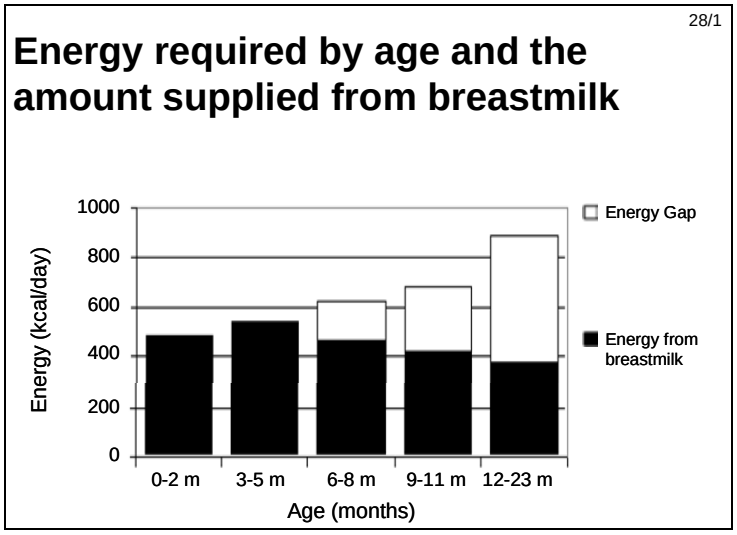
Suggested time: 40 minutes

Session guide

Make these points:

- 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.

Show **Slide 28/1. Energy gap again**



Ask: Why do you think the gap becomes bigger as the child grows older (point to white space)?

Wait for a few replies and then continue.

- As the young child gets older, 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.

Outline foods that can fill the energy gap

Make these points:

- Think of the child's bowl or plate (***Hold up the child's bowl).***
- The first food we may think of to put in the bowl is the family staple***.*** Every community has at least one staple or main food. The staple may be:
    - Cereals, such as rice, wheat, maize/corn, or oats.
    - Starchy roots such as potato.
    - Starchy fruits such as banana.

Ask: What are the main staples eaten in your community?

Write participants' replies on the flip chart. Make sure that the following points are mentioned:

- 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.

Ask: Look again at the list of staples that you made on the flip chart. Which of these staples are given to young children?

Wait for a few replies and then continue. Mark which staples are given to children. Make these points:

- In rural areas, families often spend much of their time growing, harvesting, storing and processing the staple food. In urban areas, the staple is often bought, and the choice depends on cost and availability.

Ask: Does the staple used in this community depend on where you live or on the time of the year?

Wait for a few replies and then continue.

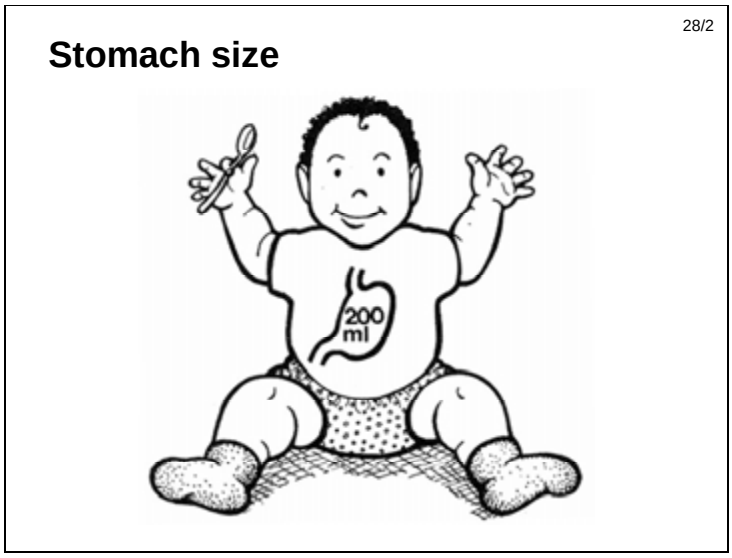
- Preparing the staple may take a lot of the caregiver's time. Sometimes a family will use a more expensive staple that requires less preparation or less fuel for cooking rather than use a cheaper staple.

Demonstrate using a thick consistency of food

Introduce the next section with these points:

- 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, be stuck in the baby's throat, or give the baby constipation. Therefore, they add extra liquid to the foods to make it easier for the young child to eat. Sometimes extra liquid is added so that it will take less time to feed the baby.
- It is important for you to help families understand the importance of using a thick consistency in foods for young children.

Show **Slide 28/2. Stomach size,** and make the points that follow:



- This is Seipati. He is 8 months old. At this age, Seipati's stomach can hold about 200 ml at one time. This is the amount that fits into this container.

Show the empty see-through container that holds 200 ml.

- 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.

Use one portion of the made-up porridge and dilute this portion of porridge to at least twice the volume and show to participants.

- Now the porridge looks like this (thin and watery).

Ask: Can all this thin porridge fit in his stomach?
Wait for a few replies. Spoon or pour the porridge into the see-through container 'stomach' as you ask the question. Wait for a response and then continue.

- No, it cannot all fit in his stomach, there is still porridge left in the bowl. Seipati's stomach would be full before he had finished the bowlful. So Seipati would not get all the energy he needs to grow.
- Seipati's mother has talked with you, the health worker, and you have suggested that she give thick porridge. The mother makes the porridge using the same amount of maize but does not add extra water. The porridge looks like this (thick).

Ask: Can all this thick porridge fit in Seipati's stomach?
Use the other portion of the made-up porridge but do not dilute it. Show the participants how thick it is. Spoon all the porridge into the see-through container 'stomach' as you ask the question. Wait for a few replies and then continue.

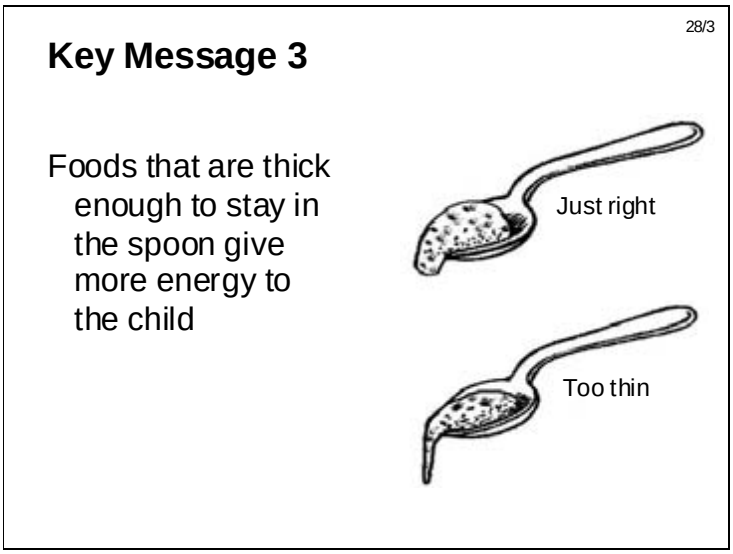
- Yes. Seipati can eat a bowlful, which will help meet his energy needs.

Now, use a spoon to demonstrate the consistency of the porridge.

- Look at the consistency of the porridge on the spoon. This is a good way to show families how thick the food preparation should be. The food should be thick enough to stay easily on the spoon without running off when the spoon is tilted.
- If families use a blender to prepare the baby's foods this may need extra fluid to work. It may be better to mash the baby's food instead so that less fluid is added.

- Porridge or food mixtures that are so thin that they can be fed from a feeding bottle, or poured from the hand or that the child can drink from a cup, do not provide enough energy or nutrients.
- The consistency or thickness of foods makes a big difference to how well that food meets the young child's energy needs. Foods of a thick consistency help to fill the energy gap.
- So when you are talking with families, give this Key Message:

Show **Slide 28/3. Key Message 3: Thick foods,** and ask a participant to read out the Key Message:



Ways to enrich foods

Explain:

- Similar to the porridge, when soups or stews are given to young children they may be thin and dilute and fill the child's stomach. There may be good foods in the soup pot, but little of the food ingredients are given to the child. It is mostly the watery part of the soup that is given.

Ask: How could families make the young child's food more energy-rich?
Wait for a few replies and then present the following information.

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, yogurt, 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.

Show **Slide 28/4. Fats and oils,** and make the points that follow:

Present the following information:

- 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 over 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.

Present the following information:

Fermented porridge

- Fermented porridge can be made in two ways—the grain can be mixed with water and set to ferment overnight or longer before cooking, or the grain and water is cooked into porridge and then fermented. Sometimes, some of a previous batch of the fermented porridge (starter) is added to speed up the process of fermentation. Porridge made from germinated grain can also be fermented.
- The advantages of using fermented porridge are:
    - It is less thick than plain porridge so more grain/flour can be used for the same amount of water. This means each cupful of porridge contains more energy and nutrients than plain (unfermented) porridge.
    - Children may prefer the taste of 'sour' porridge and so eat more.
    - The absorption of iron and some other minerals is better from the soured porridge.
    - It is more difficult for harmful bacteria to grow in soured porridge, so it can be kept for a day or two.
- Grain is also fermented to make alcohol. However, the short fermentation talked about here to make fermented porridge will not make alcohol or make the child drunk!

Germinated or sprouted flour

- Cereal or legume seeds are soaked in water and then left to sprout. The grains are then dried (sometimes toasted) and ground into flour. A family can do this at home but it is more common to buy flour already germinated.
- Mixed flours that include germinated (or malted) flour in addition to the main flour may be available in the store.
- If families in your area use germinated grain, the following ways can be used to make a thicker and more nutritious porridge:
    - Use this germinated flour to make porridge. This type of flour does not thicken much during cooking so less water can be used.
    - Add a pinch of the germinated flour to cooked thick porridge that has cooled a little bit. The porridge should be boiled again for a few minutes after adding the germinated flour. This addition will make the porridge softer and easier for the child to eat.
- Germination also helps more iron to be absorbed.

Summarise the session

Ask participants if they have any questions or if there are points you can make clearer.

Make these points:

- In this session, we talked about ***Key Message 3: Foods that are thick enough to stay in the spoon give more energy to the child.***

Display the flip-chart pages with the Key Message from this session. Keep this message together with previous Key Messages displayed throughout the course.

Feeding recommendations for the first 2 years

<table>
<tr><th></th><th colspan="2">0–5 months of age</th><th>6 months–11 months</th><th>12 months–23 months</th><th>2 years and older</th></tr>
<tr><td>Feeding recommendations</td><td colspan="2">• 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</td><td>• 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</td><td>• 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</td><td>• Give enriched family foods 3 times a day
• Give nutritious snacks in between the meals
• Give at least 2 cups of milk per day</td></tr>
<tr><td>Play and development</td><td>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 when breastfeeding</td><td>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</td><td>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 name of things and people</td><td>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"</td><td>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</td></tr>
<tr><td>Feeding during illness</td><td colspan="3">Feeding recommendations for a child who has persistent diarrhoea
• If still breastfeeding, give more frequent, longer breastfeeds, day and night
• If taking other milk:
- 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</td><td colspan="2">Feeding during illness
• 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</td></tr>
</table>

From the National IYCF 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.

Materials and preparation

- Make sure that **Slides 29/1 through 29/8** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip chart, markers, tape or other items for affixing papers on walls or chalkboards.
- Write up the three Key Messages from this session:
    - ***Key Message 4: Animal-source foods are especially good for children, to help them grow strong and lively.***
    - ***Key Message 5: Peas, beans, lentils, nuts, and seeds are good for children.***
    - ***Key Message 6: Dark-green leaves and yellow-coloured fruit and vegetables help a child to have healthy eyes and fewer infections.***
- A bowl or plate that would be used when feeding a young child.
- Examples of locally available processed complementary foods (empty packets are suitable).
- Adapt lists of foods to reflect those available locally. Review the section on the use of animal-source foods and adapt it if necessary for the local situation.
- Copies of the handout 'What is in the bowl?' (Located at the end of this session.)

Time: 60 minutes

Session guide

Introduce the session by making the following points:

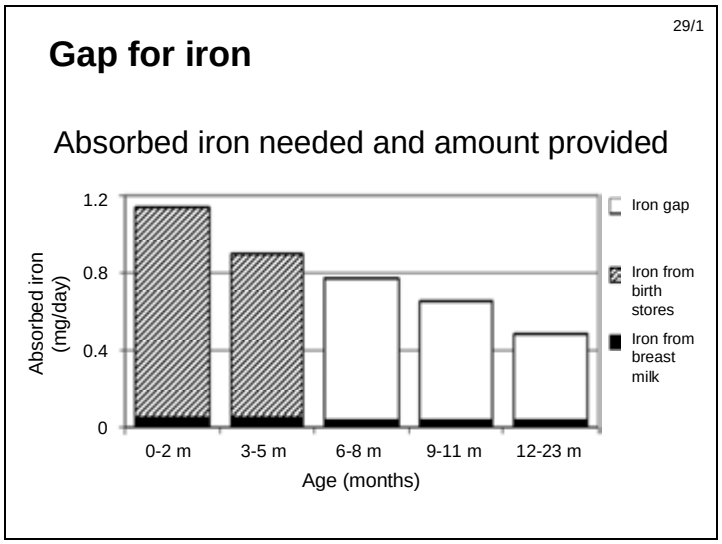
- So now, our child has an energy-rich, thick staple in their bowl to help fill the energy gap (***Hold up the child's bowl).***
- In a similar way, there are also gaps for iron and vitamin A.

Foods that fill the iron gap

Make these points:

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

Show **Slide 29/1. Gap for iron,** and make these points:



- In this graph, the top of each column represents the amount of absorbed iron that is needed per day by the child. A full-term baby is born with good stores of iron to cover his needs for the first 6 months. ***(Point to the striped/shaded area.)***
- The black area along the bottom of the columns shows us that there is some iron provided by breastmilk for the duration of breastfeeding. ***(Point to black area.)***
- The young child grows faster in the first year than in the second year. This is why the need for iron is higher when the child is younger.
- However, the iron stores are gradually used up over the first 6 months. So, after that time we see a gap between the child's iron needs and what they receive from breastmilk. This gap needs to be filled by complementary foods. ***(Point to white area—this is the gap.)***

Ask: What happens if the child does not have enough intake of iron to fill this gap?
Wait for a few replies and then continue.

- If the child does not have enough iron, the child will become anaemic, will be more likely to get infections, and to recover slowly from infections. The child will also grow and develop slowly.
- Zinc is another nutrient that helps children to grow and stay healthy. It is usually found in the same foods as iron, so we assume that if they are eating foods rich in iron they are also receiving zinc.
- Your goals, as health workers, are:
    - To identify local foods and food preparations that are rich sources of iron.
    - To assist families to use these iron-rich foods to feed their young children.

The importance of animal-source foods

Explain that we will now look at the importance of animal foods in the child's diet. ***Note: Read the following section only if meat is eaten in your area.***

- Foods from animals, the flesh (meat) and organs/offal, such as liver and heart, as well as milk, yoghurt, cheese, and eggs are rich sources of many nutrients.

Ask: Which of these foods are commonly given to children in your area?
List the replies on the flip chart. Then make these points:

- 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.

Ask: What are some ways of making these foods easier for the young child to eat?
Wait for a few replies and then continue. Responses should include:

- 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 sieve before mixing with other foods.

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

Present the following:

- Foods from animals, such as milk and eggs, are good for children because they are high in protein and other nutrients. However, milk and milk products, such as cheese and yoghurt, are not good sources of iron.
- Milk fat (cream) contains vitamin A. Therefore, foods made from whole milk are good sources of vitamin A.
- Foods made from milk (whole milk or skimmed or powdered) and any food containing bones, such as pounded dried fish, are good sources of calcium to help bones to grow strong.
- Egg yolk is another source of nutrients and rich in vitamin A.
- It can be hard for children to meet their iron needs without a variety of animal-source foods in their diet. Fortified or enriched foods such as fortified flours, pasta, cereals, or instant foods made for children, help to meet these nutrient needs.
- Some children may need supplements if they do not eat enough iron-containing foods or if they have particularly high needs for iron.
- When talking with families, give this Key Message:

Show **Slide 29/2. Key Message 4: Animal-source foods,** and ask a participant to read out the Key Message:

The importance of legumes

Show **Slide 29/3. Key Message 5: Legumes,** and read out the Key Message:

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.

Ask: What types of legumes are used in our area?
Wait for a few replies and then continue. List the replies on the flip chart.

Ask: What are ways that legumes, nuts, and seeds could be prepared that would be easier for the child to eat and digest?
Wait for a few replies and then continue. Refer to participants' replies as you make these points.

- Some ways these foods could be prepared 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.

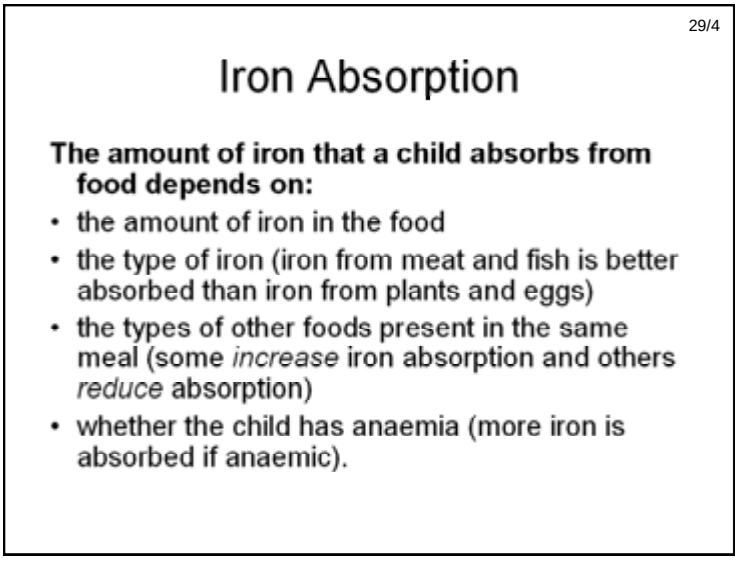
- Eating a variety of foods at the same meal can improve the way the body uses the nutrients. For example, combining a cereal with a pulse (for example: rice and beans), or adding a milk product to a cereal or grain (maize meal with milk).

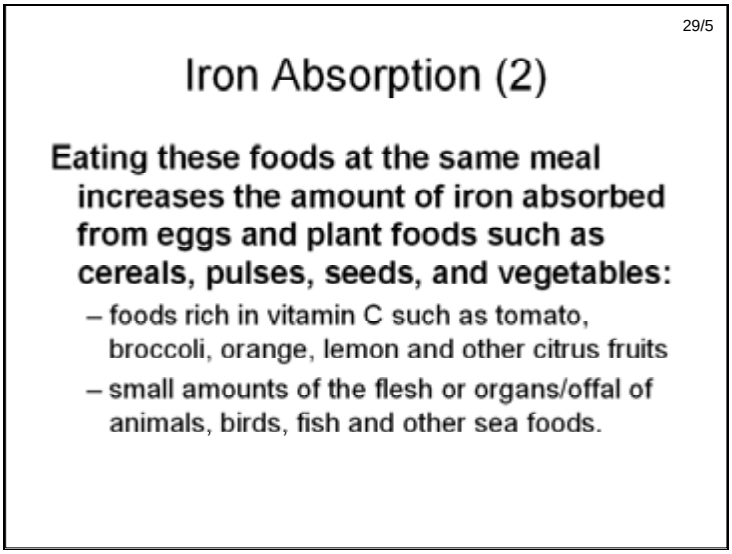
Iron absorption

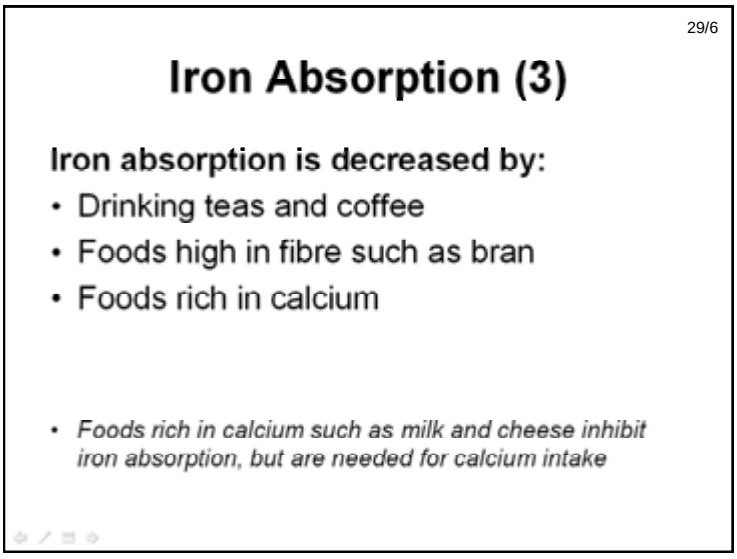
Make these points:

- 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.

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







Display the flip-chart page with the Key Messages from this section and read them out. Keep these Messages displayed throughout the course.

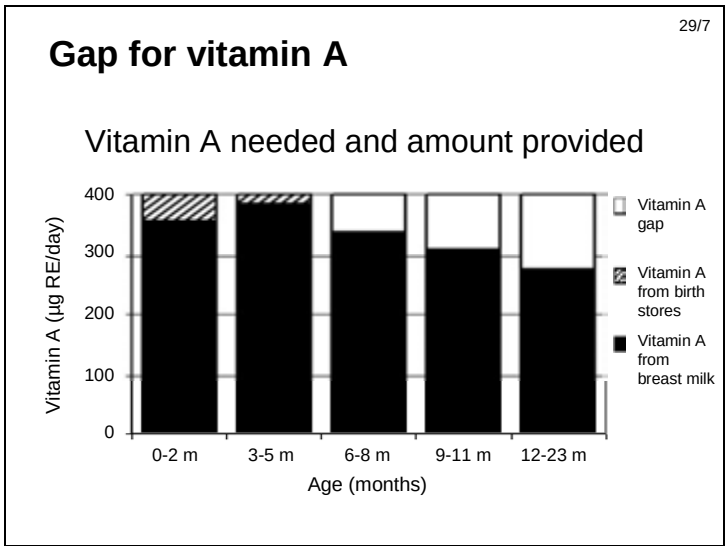
Note: Iron supplements are provided at health facilities.

Foods that can fill the vitamin A gap

Make these points:

- ***(Show bowl)*** We now have a staple in our child's bowl to fill the energy gap and foods that will help to fill the iron gap.
- Another important nutrient is vitamin A, which is needed for healthy eyes and skin and to help the body fight infections.

Show **Slide 29/7. Vitamin A gap**



Make the following points:

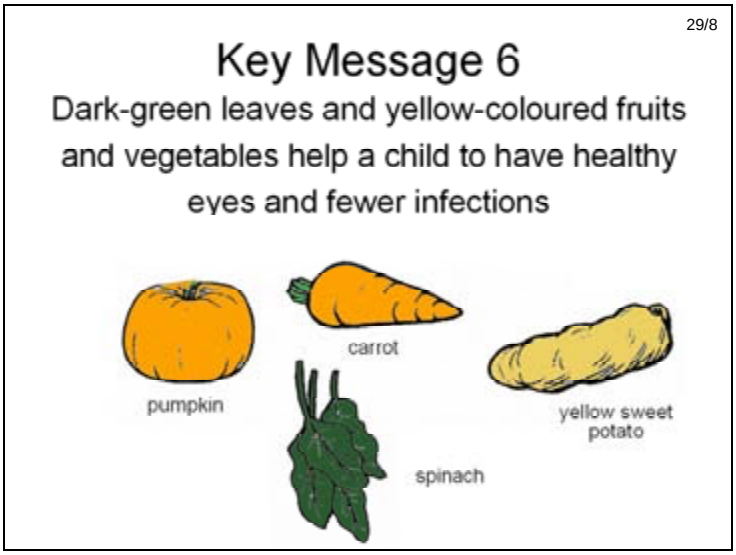
- On this graph the top of each column represents the amount of vitamin A that the child needs each day. Breastmilk supplies a large part of the vitamin A needed, provided that the child continues to receive breastmilk and the mother's diet is not deficient in vitamin A. As the young child grows, there is a gap for vitamin A that needs to be filled by complementary foods. ***(Point to the white area—this is the gap to be filled.)***
- Good foods to fill this gap are dark-green leaves and yellow-coloured vegetables and fruits.

Ask: What fruits and vegetables are good sources of vitamin A?
Wait for responses.

- Participants should mention carrots, green leafy vegetables (spinach, beet-root greens), pumpkin, and apricots.
- 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 six months, with 100,000 international units given before one year of age, and 200,000 international units given thereafter through the age of five 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 six weeks post-partum.

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



- Explain that when talking with caregivers, they should give this ***Key Message: Dark-green leaves and yellow-coloured fruits and vegetables help a child to have healthy eyes and fewer infections.***

Display the flip-chart page with the Key Message from this section. Keep this message displayed throughout the course.

Discuss the use of fortified complementary foods
Make these points:

- In some areas, there are fortified complementary foods available. For example, flour or a cereal product with added iron and zinc.

Ask: What products do you see in your area that are fortified?
Wait for a few replies, and then continue.

- Fortified processed complementary foods may be sold in packets, cans, jars, or from food stalls. These may be produced by international companies and imported or they may be made locally. They may also be available through food programmes for young children.

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.

Discuss the fluid needs of the young child

Make these points:

- 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 under 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.

Ask: What types of drinks are given to young children between 6 and 24 months old?
Wait for a few responses and then continue.

Present the following information:

- Water is good for thirst. A variety of pure fruit juices can be used also. Too much fruit juice may cause diarrhoea and may reduce the child's appetite for foods.
- Drinks that contain a lot of sugar may actually make the child thirstier as his body has to deal with the extra sugar. If packaged juice drinks are available in your area, find out which ones are pure juices and which ones have added sugar. Fizzy drinks (sodas) are not suitable for young children.
- Teas and coffee reduce the iron that is absorbed from foods. 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 2 to 3 cups of water per day in a temperate climate and 4 to 6 cups of water per day in a hot climate. This water can be incorporated into porridges or stews, but clean water should also be offered to the child several times a day to ensure that the infant's thirst is satisfied.

Exercise: 'What is in the bowl?'

Divide the participants into four groups. Assign each group a child's age—7 months, 10 months, 12 months, and 15 months. Pass out the handout: What is in the bowl?

Explain the exercise:

- Now we will put these recommendations or Key Messages into foods. Each group has a picture of a mother feeding a child from a bowl. In your group, think of the foods available to families in your area that could be used to form one meal that would be appropriate for a young child of your assigned age.
- Although we talk about types of foods such as staples, legumes, foods from animals, dark-green leaves, yellow-coloured fruits and vegetables, and so on, it is easier and more natural for caregivers to think in terms of the meals they usually prepare or foods that taste good together.
- Families may give complementary foods that are:
    - Specially-prepared foods, or
    - The usual family foods that are modified to make them easy to eat and provide enough nutrients.
- For example, a caregiver may specially prepare porridge for the baby while the rest of the family eats rice and bean stew. Or, the caregiver may take some suitable foods out of the family meal and mash these foods to a soft consistency that is easy for the young child to eat.
- In this exercise, try to use foods that would be eaten in an average family meal in your area, not a rich family.
- At this time, focus on an example of foods a family could use. We will discuss the quantity of food to give later.
- You will describe your meal to the other groups and give the Key Messages connected with the foods you have chosen.

Trainers sit with their group, helping as needed. Aim to get foods listed that reflect the Key Messages learnt so far (Key Messages 1 to 6). However, it is not necessary to use all six Key Messages with one meal. If unsuitable foods are listed, gently discuss why these foods might be considered and if others might be used instead. Allow 7 minutes to decide on the meal and why they chose each food. Remind participants that they can find a list of the Key Messages at the back of their manual.

Go back to the whole group. Ask one person from each group to present their meal. Ask the whole group if the 'bowl' includes foods that match the Key Messages.

Thank participants at the end for their meal suggestions. Display the exercise sheets so the groups can see them.

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?

Summarise the session

Ask participants if they have any questions or if there are points that you can make clearer.

Make these points:

- In the last two sessions, we talked about the recommendations about foods for young children.
- The most difficult gaps to fill are usually for:
  - Energy
  - Iron and zinc
  - Vitamin A
- In the previous sessions, we saw the Key Messages 1, 2, and 3 (Point to where they are displayed):
  - ***Key Message 1: Breastfeeding for 2 years of age or longer helps a child to develop and grow strong and healthy.***
  - ***Key Message 2: Starting other foods in addition to breastmilk at 6 months helps a child to grow well.***
  - ***Key Message 3: Foods that are thick enough to stay in the spoon give more energy to the child.***
- In this session, there were three new Key Messages to use with families to discuss ways to fill the gaps for iron and vitamin A.
  - ***Key Message 4: Animal-source foods are especially good for children, to help them grow strong and lively.***
  - ***Key Message 5: Peas, beans, lentils, nuts, and seeds are good for children.***
  - ***Key Message 6: Dark-green leaves and yellow-coloured fruit and vegetables help a child to have healthy eyes and fewer infections.***

In some areas there are supplementation programmes for other important micronutrients, for example iodine. If such programmes exist in your area mention them here.

Trainer's notes

Iron
Absorbed iron is referred to in the text. This is the iron that passes into the body after it has been released from food during digestion. Only a small proportion of the iron present in food is absorbed. The rest is excreted in the faeces.

If a baby is born preterm or of low birthweight, these body stores will be less, so these babies will need iron supplements, usually iron drops, from about 2 months of age.

If fresh liquid milk is given to young children it should be boiled or pasteurised.

It is very difficult, if not impossible, for young children to meet the recommended intake of iron and zinc from foods unless meats are eaten regularly (ideally daily, or as frequently as possible). Organ meats are highest in iron. Mineral and vitamin supplements may be needed by children who do not have meat.

In some parts of the world iron pots are used for cooking. Iron absorption is increased by cooking in iron pots, particularly if the food is acidic.

Vitamin A
If a mother is deficient in vitamin A during pregnancy, the baby will have lower stores at birth and there will be less vitamin A in the breastmilk. Supplements may be used for pregnant and newly-delivered mothers in areas where vitamin A deficiency is common.

Fluids
Large quantities of artificial sweeteners such as saccharine or aspartame are not good for young children.

When tea is referred to in the text this includes black tea, green tea, red tea, and herbal or bush teas.

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.

Materials and preparation
- Make sure that **Slides 30/1 through 30/9** are in the correct order. Study the slides and the text that goes with them so that you are able to present them.
- Flip chart, markers, tape, or other items for affixing papers on walls or chalkboards.
- Determine the local measures to use in the box AMOUNTS OF FOOD TO OFFER. Show approximate amounts using common local cup, bowl, or other containers.
- Write the Key Messages for this session on a flip-chart page. Keep covered until later in the session:
    - ***Key Message 7: A growing child needs 2 to 4 meals a day plus 1 to 2 snacks if hungry: give a variety of foods.***
    - ***Key Message 8: A growing child needs increasing amounts of food.***

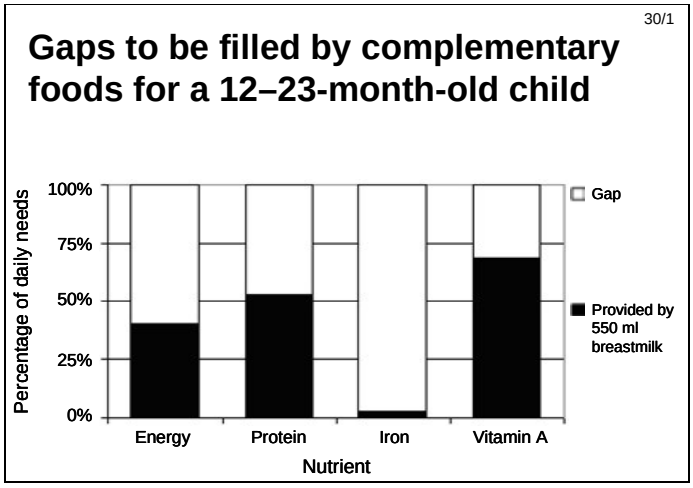
Suggested time: 40 minutes

Session guide

The importance of using a variety of foods

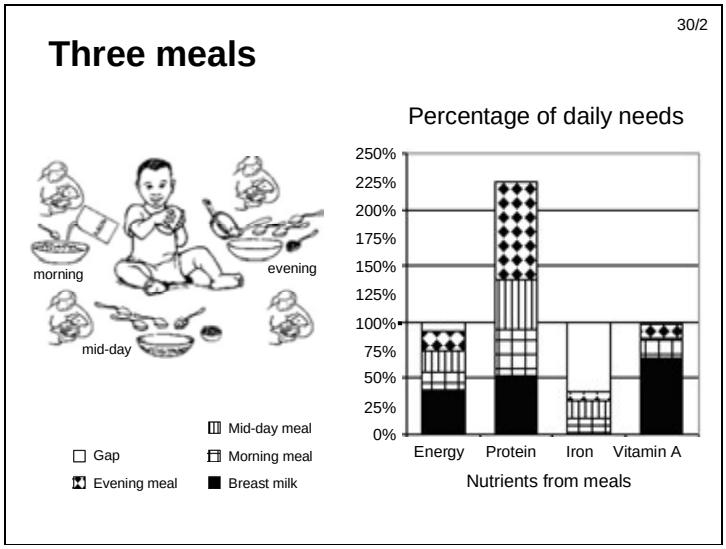
Make these points:
- Most adults and older children eat a mixture or variety of foods at mealtime. In the same way, it is important for young children to eat a mix of good complementary foods. Often the food preparations of the family meals include all or most of the appropriate complementary foods that young children need.
- When you build on the usual food preparations in a household, it is easier for families to feed their young children a diet with good complementary foods.
- Earlier we looked at the difference between the young children's needs and the amount of energy, vitamin A, and iron supplied by breastmilk. If we put the day's needs onto one graph it looks like this:

Show **Slide 30/1. Gaps to be filled by complementary foods for a 12–23-month-old child,** and make the points that follow:



- In Session 2 of this course we talked about the importance of breastfeeding and the nutrients 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 to 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. Show Slide **30/2. Percentage of daily needs**. Make the points that follow and show how each meal builds on the graph:



- 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 breastfeeding[2] as well as eating complementary foods. The breastmilk gives energy, protein, some iron, and vitamin A. ***(Show where breastmilk is on the graph—dark area at bottom.)***
- This is what he has to eat in a day in addition to breastfeeding:

  Morning: A bowl of thick porridge, with milk and a small spoon of sugar. ***(Show where this meal is on graph.)***

  Midday: A full bowl of food—three big spoonfuls of rice, one spoon of beans, and half an orange. The vitamin C in the orange helps the iron in the beans to be absorbed. ***(Show where this meal is on graph.)***

  Evening: A full bowl of food—three big spoons of rice, one spoon of fish, one spoon of green leaves. ***(Show where this meal is on graph.)***

- 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.

Ask: What do you see from the graph? Are these foods filling the gaps?
Wait for a few replies and then continue.

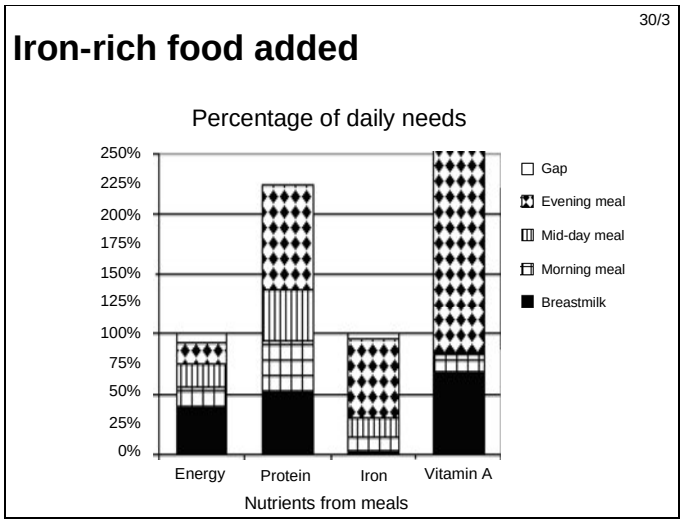
- The protein and vitamin A gaps are more than filled. However, these meals do not fill this child's needs for iron or energy.

Ask: How could this child get more iron?
Wait for a few replies and then continue.

- If meat is eaten in the area, 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.
- 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.

[2] Approximately 550 ml of breastmilk per day

Show **Slide 30/3. Iron-rich food added** and make the points that follow:



- If foods fortified with iron are available, these should be used to help fill the iron gap.[3]
- 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.

Discuss the frequency of feeding complementary foods

Make these points:

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

Ask: What can you suggest to Nthako's family to help fill the energy gap?
Wait for a few replies and then continue.

- 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,[4] which may include the term snack foods in their name.
- These extra foods may be easy to give, however, the child still needs to be helped and supervised while eating to ensure the extra foods are eaten.

Ask: What kind of healthy snacks would be easy to feed this child? Wait for a few replies and then continue.

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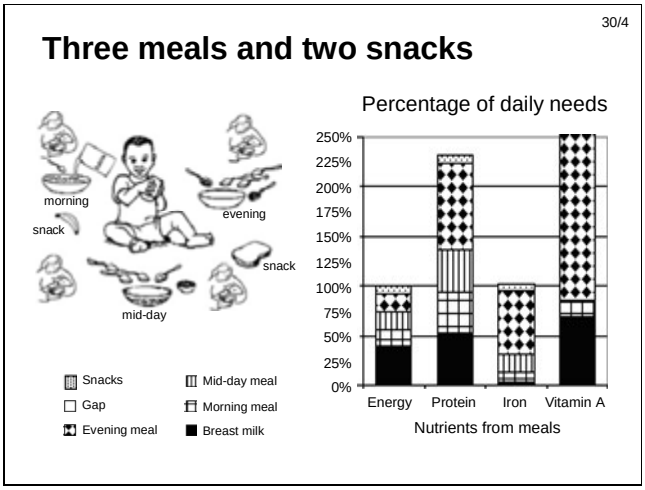
[3] Remind participants of iron-fortified foods if discussed in the previous session.

[4] Give examples of local processed foods that might be called snack foods.

- 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 potatoes[5] 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.

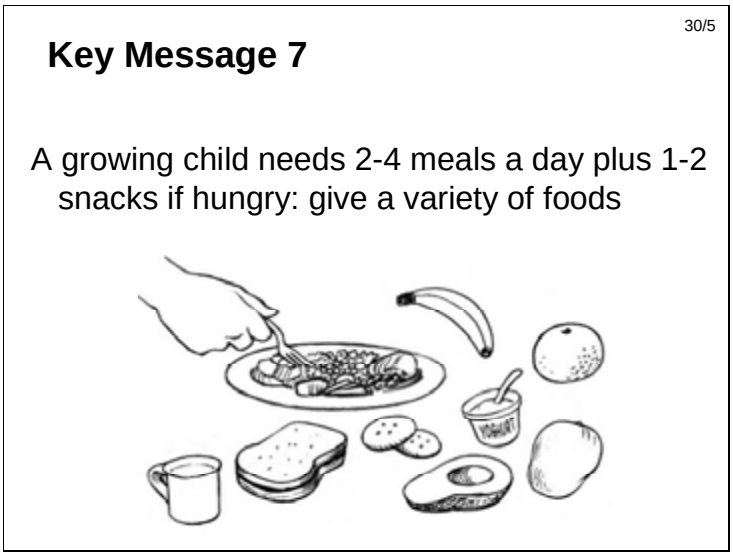
Show **Slide 30/4. Percentage of needs with three meals and two snacks,** and make the points that follow:



- 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 this key message:

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

Show **Slide 30/5. Key Message 7: Frequency of feeding,** and read out the Key Message:

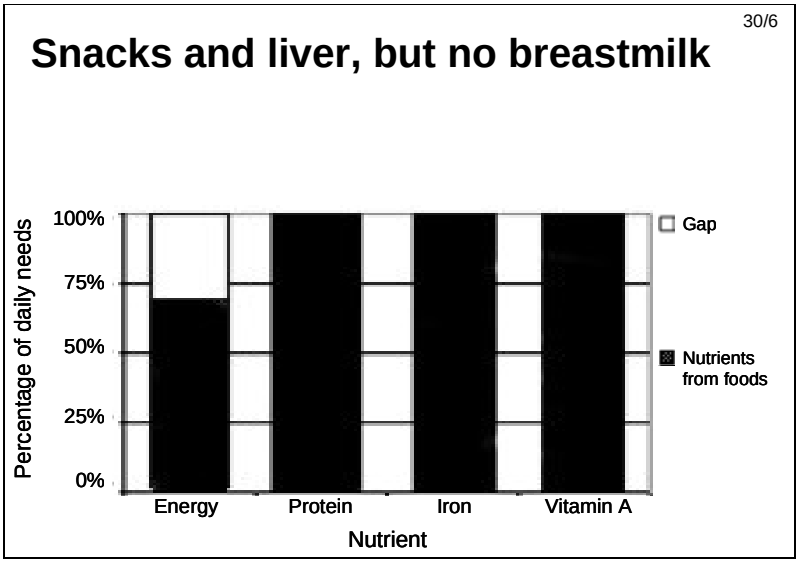


- When you are talking with a family about feeding their young child more frequently, suggest some options for them to consider. It can be difficult to feed a child frequently if the caregiver has many other duties and if additional foods are expensive or hard to obtain.
- Other family members can often help. Assist the family to find solutions that fit their situation.

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.

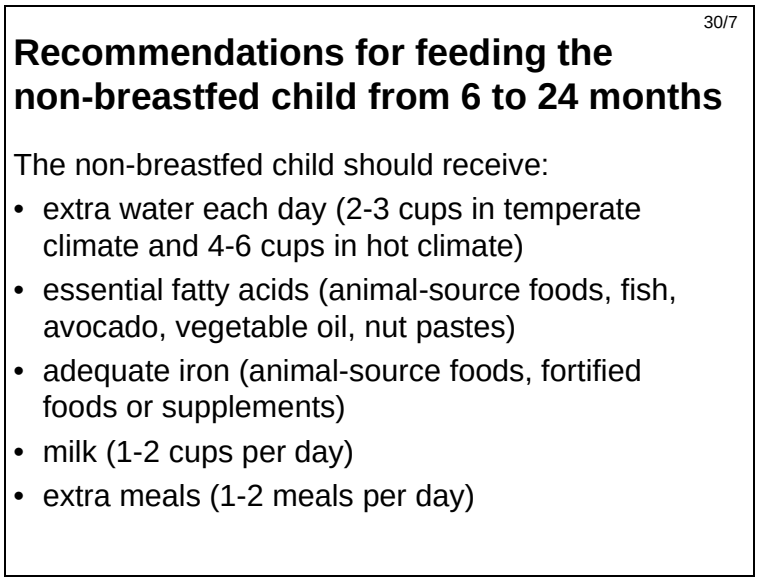
Show **Slide 30/6 - Snacks and liver, but no breastmilk,** and make the points that follow:



- 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 to 240 ml (two half-cups) of milk (full-fat cow's milk or milk from another animal or formula milk[6]) 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 over 6 months of age 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.

Ask: What other recommendations have we discussed in previous sessions for children over 6 months of age who are not receiving breastmilk?
Wait for a few replies and then continue by displaying the next slide.

Show **Slide 30/7. Recommendations for feeding the non-breastfed child from 6 to 24 months,** and make the points that follow:



- 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.

6 Infant formula if affordable, acceptable and available

Outline the quantity of complementary food to be offered
Make these points:

- When a child starts to eat complementary foods, he needs time to get accustomed to the new taste and texture of the foods. A child needs to learn the skill of eating. Encourage families to start with 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.

Ask: What amounts of food do the families in the area give to their young children?
Wait for a few replies and then continue.

Show **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.

Ask a participant to read out the first age group. Then ask another participant to read out the next age group until all the age groups are read out.

AMOUNTS OF FOODS TO OFFER			
Age	**Texture**	**Frequency**	**Amount of food an average child will usually eat at each meal[7]**
6–8 months	Start with thick porridge, well mashed foods Continue with mashed family foods	2–3 meals per day plus frequent breastfeeds Depending on the child's appetite 1–2 snacks may be offered	Start with 2–3 tablespoonfuls per feed increasing gradually to ½ of a 250 ml cup
9–11 months	Finely chopped or mashed foods, and foods that baby can pick up	3–4 meals plus breastfeeds Depending on the child's appetite 1–2 snacks may be offered	½ of a 250 ml cup/bowl
12–23 months	Family foods, chopped or mashed if necessary	3–4 meals plus breastfeeds Depending on the child's appetite 1–2 snacks may be offered	$^3/_4$ 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.			

Continue with these points:

- As you can see in this chart, as the child gets older, the amount of food offered increases. Give as much as the child will eat with active encouragement.[8]
- When you are talking with families, give this key message:

[7] Adapt the chart to use a suitable local cup/bowl to show the amount. The amounts assume an energy density of 0.8 to 1 Kcal/g.

[8] Active encouragement of feeding is discussed in Session 34.

Show **Slide 30/9. Key Message 8: Amount of food,** and read out the key message.

Make the following points:

- As you talk with caregivers, a frequent question you are asked may be how much and how often to give food. To practise these amounts, we will now do a drill. A drill is not a test. It is a way to help you learn to recall the amounts with speed and confidence.
- I will say an age of a child. The first person I call on will say how often to feed and how much food to give at the main meal.
- If the person cannot answer or answers incorrectly, we go to the next person. When the correct answer is given, I say a different age of child and we continue.
- Before we start take 2 minutes to look again at the box in your ***Participant's Manual***.

Keep the pace lively and the mood cheerful. Congratulate participants as they improve in their ability to answer correctly or more quickly. If the group is very large, this drill can be conducted in the smaller groups with the trainer for each group asking the questions.

EXERCISE 30. 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	¾ 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	¾ of a cup
21 months	3 meals plus 2 snacks	Full cup
3 months	A trick question!	Only breastfeeding

The drill ends when all the participants have had an opportunity to answer and when you feel they are answering with confidence. You can repeat the ages if needed to give everyone enough opportunities to practice. Thank participants for their participation.

Summarise the session

Ask participants if they have any questions or if there are points that you can clarify.

Point to the flip -hart page and read out the two Key Messages:

- ***Key Message 7: A growing child needs two to four meals plus one to two snacks if hungry: give a variety of foods.***
- ***Key Message 8: A growing child needs increasing amounts of food.***

Trainer's notes

The amounts of food included in the table are recommended when the energy density of the meals is about 0.8 to 1.0 Kcal/g.

If the energy density of the meals is about 0.6 Kcal/g, recommend the mother to increase energy density of the meal (adding special foods) or increase the amount of food per meal. For example:

- For 6 to 8 months; increase gradually to 2/3 of cup.
- For 9 to 11 months give ¾ of cup.
- For 12 to 23 months give a full cup.

Find out what the energy content of complementary foods is in your setting and adapt the table according to this information.

Counsel the mother/caregiver to feed the child using the principles of responsive feeding, recognising the signs of hunger and satiety. These signs should guide the amount of food given at each meal and the need for snacks.

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 to 24 months.

Materials and preparation

- Counselling observation checklists for each group.
- Make sure that the participants have their copies of the counselling cards.
- Cut out slips of paper with the scenarios listed at the end of the session.

Time: 40 minutes

Session guide

Remind participants of the earlier sessions where we practiced counselling skills and giving support, specifically how to:

- Accept what a mother thinks.
- Accept what a mother feels.
- Praise what a mother and baby are doing right.
- Give a little, relevant information.
- Use simple language.
- Make one or two suggestions, not commands.

Demonstrate how to use Counselling Cards 13 to 15 on complementary feeding. Be sure to demonstrate the counselling and support skills mentioned above. After the demonstration, ask participants if they have any questions.

Divide participants into groups of three to role play using Counselling Cards 13 to 15, ask one to be the health worker, one to be the mother, and one to observe. Pass out copies of the Counselling Observation Checklist for the observer to use. Pass out copies of the scenarios to the participants playing the mother. Ask each group to do a role play similar to the one demonstrated using the counselling cards based on their scenario. Hand out the slips of paper containing the 11 different scenarios.

Circulate among the participants and give them the assistance they need. (All facilitators.) After 15 to 20 minutes, ask the group to come back to plenary. Facilitate a brief discussion about their role plays:

- Was there a particular step that was challenging? If yes, why? Does anyone have suggestions for overcoming these challenges?
- What techniques for listening and learning were demonstrated during the exercise?
- What could ‘health workers’ do differently to improve this counselling session?

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.

Scenario 9: A 15-month-old child is breastfeeding and having thin porridge and sometimes tea and bread. He has not gained weight for 6 months, and is thin and miserable.

Scenario 10: Mother with a 12-month-old baby who thinks that the baby is too old to breastfeed any longer.

Scenario 11: Mother with a 15-month-old baby who is getting two meals per day.