

***Infant and Young Child Feeding  
Counselling:  
An Integrated Course***

**Participant's Manual**





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**World Health  
Organization**

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Other contributors include staff of WHO and UNICEF regional and country offices, many individuals from the countries where the Course was field-tested namely South Africa, Jamaica and Ghana.

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## **COUNSELLING SKILLS**

### **Listening and Learning Skills**

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

### **Building Confidence and Giving Support Skills**

- Accept what a caregiver thinks and feels
- Recognize and praise what a mother/caregiver and child are doing right
- Give practical help
- Give relevant information
- Use simple language
- Make one or two suggestions, not commands

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Total time for sessions 1 – 39 = 34 hours + 35 minutes



## Introduction to the Course

### Why this course is needed

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

However, many children are not fed in the recommended way. Many mothers, who initiate breastfeeding satisfactorily, often start complementary feeds or stop breastfeeding within a few weeks of delivery. In addition, many children, even those who have grown well for the first six months of life, do not receive adequate complementary feeds. This may result in malnutrition, which is an increasing problem in many countries. More than one-third of under-five children are malnourished – whether stunted, wasted, or deficient in vitamin A, iron or other micronutrients – and malnutrition contributes to more than half of the 10.6 million deaths each year among young children in developing countries.

Messages about infant feeding have become confused over recent years with the HIV pandemic. In some countries, HIV infection amongst children is now one of the main causes of childhood death. In 90% of cases, children acquire the infection from their mothers, before or during delivery, or through breastfeeding. In 1997, WHO, UNICEF and UNAIDS issued a joint policy statement, indicating that HIV-positive women should be enabled to make a fully informed decision about feeding their infants, and supported to carry out the method of their choice. Guidelines set out several feeding options to suggest to HIV-positive women. These guidelines also emphasized the need to protect, promote and support breastfeeding for those who are HIV-negative or untested, and to prevent spillover of artificial feeding to infants of uninfected mothers.

This course contains some sessions, which address the issue of HIV and infant feeding – these are clearly marked in your Manual. These sessions will be included if they are relevant to the situation in which you live and work. If HIV is not a problem in your area these sessions will be omitted and more time will be spent on other sessions.

Health workers and counsellors, such as yourself, can help mothers and caregivers to make appropriate choices about infant feeding and to feed their children successfully. It is important that you give this help during the whole of the first and second year of a child's life. You can give mothers good advice about feeding their babies at all times, when they are well and when they are sick.

You may feel that you have not been adequately trained to give this kind of help. In the past, counselling and support skills have seldom been included in the curricula of either doctors, nurses, or midwives. This course aims to give you training in basic counselling skills, which should enable you to give mothers the support and encouragement that they need to feed their children optimally.

During the course you will be asked to work hard. You will be given a lot of information, and you will be asked to do a number of exercises and practical sessions to develop your counselling skills. Hopefully you will find the course interesting and enjoyable, and the skills that you learn will make your work with mothers and babies in future more helpful for them, and more rewarding for you.

## Course Objectives

After completing this course, participants will be able to counsel and support mothers to carry out WHO/UNICEF recommended feeding practices for their infants and young children from birth up to 24 months of age, and to counsel and support HIV-infected mothers to choose and carry out an appropriate feeding method for the first two years of life.

## The Course and the Manual

*Infant and Young Child Feeding Counselling: An Integrated Course* consists of 39 sessions, which can be arranged in different ways to suit the local situation. Your Course Director will plan the course that is most suitable for your needs, and will give you a timetable.

This Manual, the *Participant's Manual*, is your main guide to the course, and you should keep it with you at all times, except during practical sessions. In the following pages, you will find a summary of the main information from each session, including descriptions of how to do each of the skills that you will learn. You do not need to take detailed notes during the sessions, though you may find it helpful to make notes of points of particular interest, for example from discussions. Keep your Manual after the course, and use it as a source of reference as you put what you have learnt into practice.

Your manual also contains:

- . Copies of the key slides that you might want to memorize
- . Forms, lists and checklists for exercises and practical sessions
- . Written exercises that you will be asked to do individually.

You will receive separate copies of the forms, lists and checklists to use for the practical sessions, so that you do not have to carry your Manual at these times.

You will receive Answer Sheets for each written exercise after you have done the exercise. These enable you to check your answers later, and to study any questions that you may not have had time to complete.

## Session 1

# An Introduction to Infant and Young Child Feeding

### Objectives

After completing this session participants will be able to:

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

### The Global Strategy for Infant and Young Child Feeding

The Global Strategy for Infant and Young Child Feeding was developed by WHO and UNICEF jointly, and launched in 2002, to revitalize world attention to the impact that feeding practices have on the nutritional status, growth, development and health, and thus the very survival of infants and young children.

Malnutrition has been responsible, directly or indirectly, for over 50% of the 10.6 million deaths annually among children under five. Well over two-thirds of these deaths, which are often associated with inappropriate feeding practices, occur during the first year of life.

The Global Strategy was built on previous initiatives such as the International Code of Marketing of Breast-milk Substitutes in 1981, the Innocenti Declaration in 1990 and the Baby-friendly Hospital Initiative in 1991.

The Global Strategy is designed for use by governments and other concerned parties, such as health professional bodies, non-governmental organizations, commercial enterprises and international organizations.

The Strategy lists the WHO/UNICEF recommendations for appropriate feeding of infants and young children, explains the obligations and responsibilities of governments and concerned parties, and describes the actions they could take to protect, promote and support mothers to follow recommended feeding practices.

## Operational targets of the Global Strategy for Infant and Young Child Feeding

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

All governments are urged to:

#### A. Follow up previous targets from Innocenti Declaration:

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

#### B. Introduce these five NEW targets:

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

## Breastfeeding for the first six months of life

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants. As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health.

### DEFINITION OF EXCLUSIVE BREASTFEEDING

Exclusive breastfeeding means giving a baby only breast milk, and no other liquids or solids, not even water. Drops or syrups consisting of vitamins, mineral supplements or medicines are permitted.

Mothers need skilled practical help from people like yourself, who can help to build a mother's confidence, improve feeding technique and prevent or resolve breastfeeding problems, if they are to succeed in breastfeeding exclusively.

### Complementary feeding

After six months of age, all babies require other foods to complement breast milk – we call these **complementary foods**. When complementary foods are introduced breastfeeding should still continue for up to two years of age or beyond.

Complementary foods should be:

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

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

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

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

### Feeding in exceptionally difficult circumstances

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

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## Session 2

# Why Breastfeeding is Important

### Objectives

After completing this session participants will be able to:

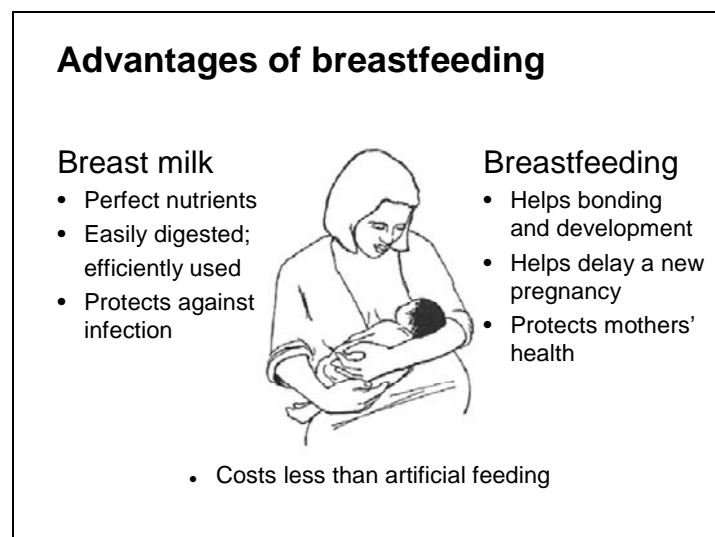
- state the advantages of exclusive breastfeeding
- list the disadvantages of artificial feeding
- describe the main differences between breast milk and artificial milks

### Introduction

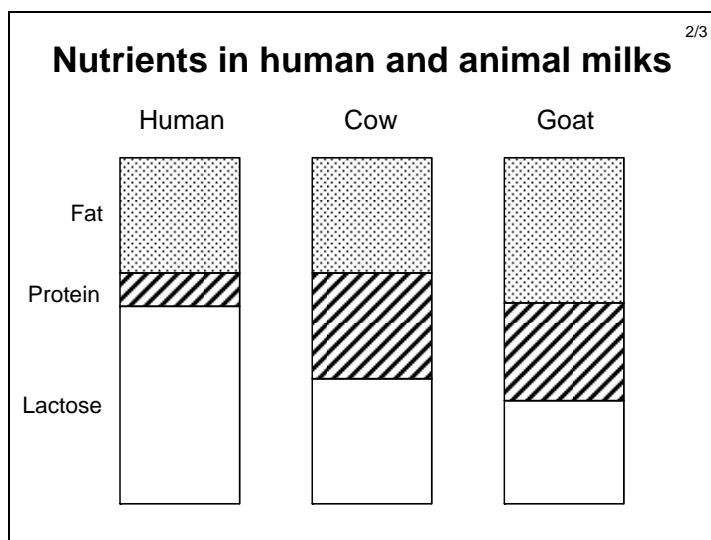
The Global Strategy for Infant and Young Child Feeding recommends that infants are exclusively breastfed for the first six months of life. You need to understand why breastfeeding is important so you can help to support mothers who may have doubts about the value of breast milk. You also need to know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

### The advantages of breastfeeding

This diagram summarizes the main advantages of breastfeeding. It is useful to think of the advantages of both breast milk (listed on the left) and breastfeeding (listed on the right).



## Nutrients in human and animal milks



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

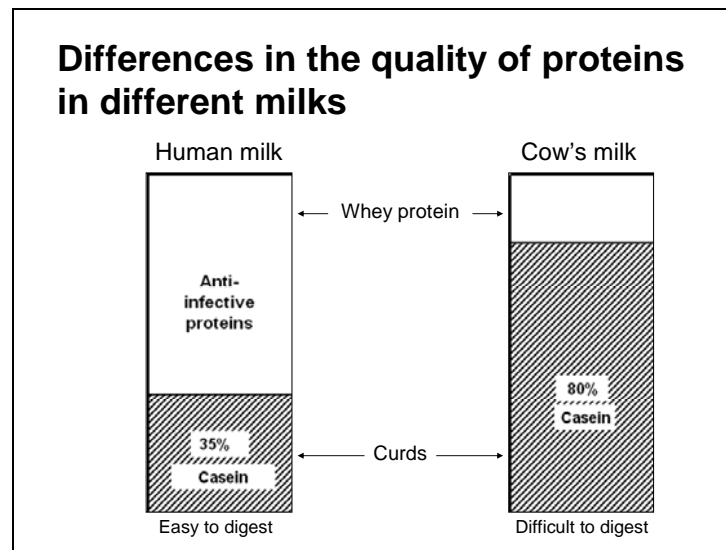
In order to understand the composition of formula milk we need to understand the differences between animal and human milk and how animal milks need to be modified to produce formula milk.

This chart compares the nutrients in breast milk with the nutrients in fresh cow's and goat's milk. All the milks contain fat which provides energy, protein for growth and a milk sugar called lactose which also provides energy.

The animal milk contains more protein than human milk. It is difficult for a baby's immature kidneys to excrete the extra waste from the protein in animal milks.

Human milk also contains essential fatty acids that are needed for a baby's growing brain and eyes, and for healthy blood vessels. These fatty acids are not present in animal milks, but may have been added to formula milk.

## Quality of protein in different milks



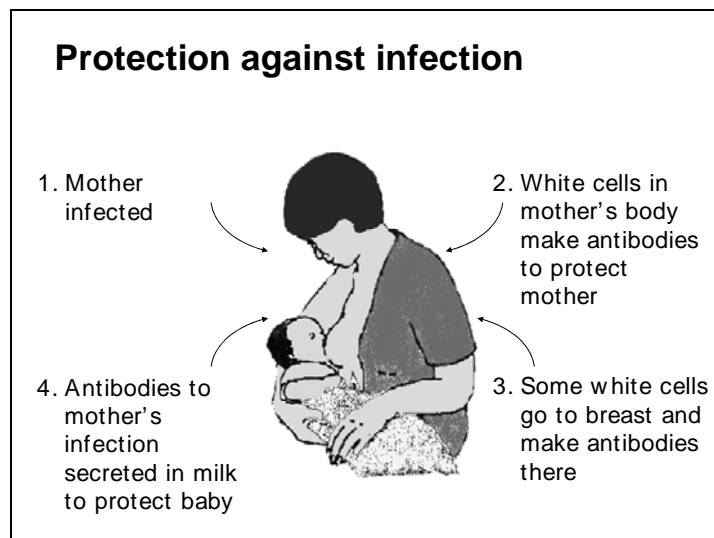
The protein in different milks varies in quality, as well as in quantity. Whilst the quantity of protein in cow's milk can be modified to make formula, the quality of proteins cannot be changed.

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

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

Artificially fed babies may develop intolerance to protein from animal milk. They may develop diarrhoea, abdominal pain, rashes and other symptoms when they have feeds that contain the different kinds of protein.

## Protection against infection



Breast milk contains white blood cells, and a number of anti-infective factors, which help to protect a baby against many infections. Breastfeeding protects babies against diarrhoeal and respiratory illness and also ear infections, meningitis and urinary tract infections.

This diagram shows that when a mother develops an infection (1), white cells in her body become active, and make antibodies against the infection to protect her (2). Some of these white cells go to her breasts and make antibodies (3) which are secreted in her breast milk to protect her baby (4).

So a baby should not be separated from his mother when she has an infection, because her breast milk protects him against the infection.

## Variations in the composition of breast milk

**Colostrum** is the breast milk that women produce in the first few days after delivery. It is thick and yellowish or clear in colour. It contains more protein than mature milk.

**Mature milk** is the breast milk that is produced after a few days. The quantity becomes larger, and the breasts feel full, hard and heavy. Some people call this the breast milk 'coming in'.

**Foremilk** is the milk that is produced early in a feed.

**Hindmilk** is the milk that is produced later in a feed.

Hindmilk looks whiter than foremilk, because it contains more fat. This fat provides much of the energy of a breastfeed. This is an important reason not to take a baby off a breast too quickly. The baby should be allowed to continue until he has had all that he wants.

Foremilk looks thinner than hindmilk. It is produced in larger amounts, and it provides plenty of protein, lactose, and other nutrients. Because a baby gets large amounts of foremilk, he gets all the water that he needs from it. Babies do not need other drinks of water before they are six months old, even in a hot climate. If they satisfy their thirst on water, they may take less breast milk.

## Colostrum

Colostrum	
Property	Importance
• Antibody rich	- protects against allergy & infection
• Many white cells	- protects against infection
• Purgative	- clears meconium - helps to prevent jaundice
• Growth factors	- helps intestine to mature - prevents allergy, intolerance
• Rich in Vitamin A	- reduces severity of infection

Colostrum contains more antibodies and other anti-infective proteins than mature milk. It contains more white blood cells than mature milk. Colostrum helps to prevent the bacterial infections that are a danger to newborn babies and provides the first immunization against many of the diseases that a baby meets after delivery.

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

Colostrum contains many growth factors which help a baby's immature intestine to develop after birth. This helps to prevent the baby from developing allergies and intolerance to other foods.

Colostrum is rich in vitamin A which helps to reduce the severity of any infections the baby might have.

So it is very important for babies to have colostrum. Colostrum is ready in the breasts when a baby is born. Babies should not be given any drinks or foods before they start breastfeeding. Artificial feeds given before a baby has colostrum are likely to cause allergy and infection.

## Psychological benefits of breastfeeding

Breastfeeding helps a mother and baby to form a close, loving relationship, which makes mothers feel deeply satisfied emotionally. Close contact from immediately after delivery helps this relationship to develop. This process is called bonding.

Babies tend to cry less if they are breastfed and may be more emotionally secure. Some studies suggest that breastfeeding may help a child to develop intellectually. Low-birth-weight babies fed breast milk in the first weeks of life perform better on intelligence tests in later childhood than children who are artificially fed.

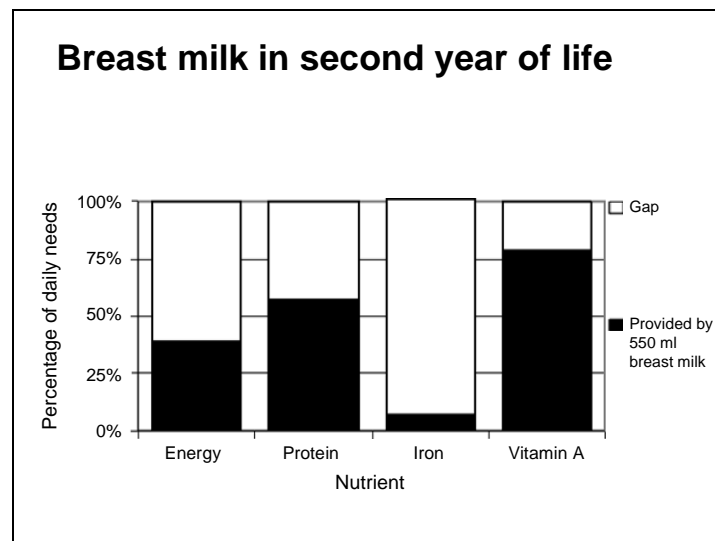
## Disadvantages of artificial feeding

This chart summarizes the main disadvantages of artificial feeding.

### Disadvantages of artificial feeding

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

## Breast milk in the second year of life



For the first six months of life, exclusive breastfeeding can provide all the nutrients and water that a baby needs. From the age of six months, breast milk is no longer sufficient by itself. In Session 1 we learnt that all babies need complementary foods from six months, in addition to breast milk. However, breast milk continues to be an important source of energy and high quality nutrients beyond six months of age.

## Notes

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## Session 3

# How Breastfeeding Works

### Objectives

After completing this session participants will be able to:

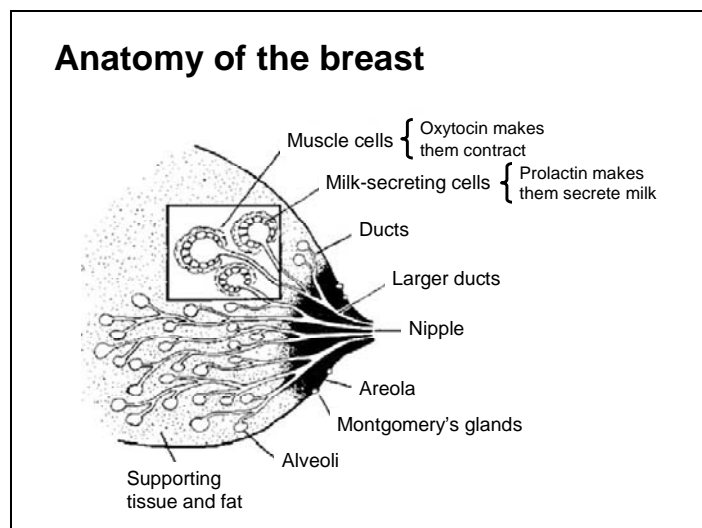
- name the main parts of the breast and describe their function
- describe the hormonal control of breast milk production and ejection
- describe the difference between good and poor attachment of a baby at the breast
- describe the difference between effective and ineffective suckling

### Introduction

In this session, you will learn about the anatomy and physiology of breastfeeding. In order to help mothers, you need to understand how breastfeeding works.

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

### Anatomy of the breast



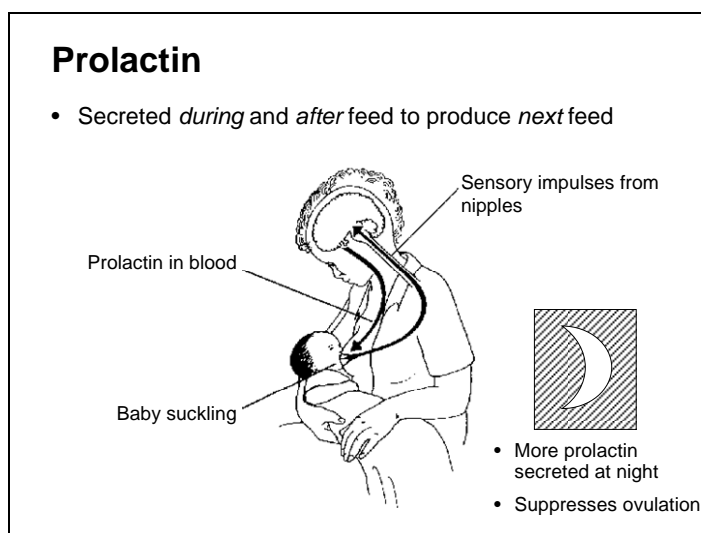
This diagram shows the anatomy of the breast.

The dark skin around the nipples is called the areola. In the areola are small glands called Montgomery's glands which secrete an oily fluid to keep the skin healthy. Inside the breast are the alveoli, which are very small sacs made of milk-secreting cells. There are millions of alveoli – the diagram shows only a few. The box shows three of the alveoli enlarged. A hormone called prolactin makes these cells produce milk.

Around the alveoli are muscle cells, which contract and squeeze out the milk. A hormone called oxytocin makes the muscle cells contract. Small tubes, or ducts, carry milk from the alveoli to the outside. Milk is stored in the alveoli and small ducts between feeds. The larger ducts beneath the areola dilate during feeding and hold the breast milk temporarily during the feed.

The secretory alveoli and ducts are surrounded by supporting tissue, and fat. It is the fat and other tissue which give the breast its shape, and which makes most of the difference between large and small breasts. Small breasts and large breasts both contain about the same amount of gland tissue, so they can both make plenty of milk.

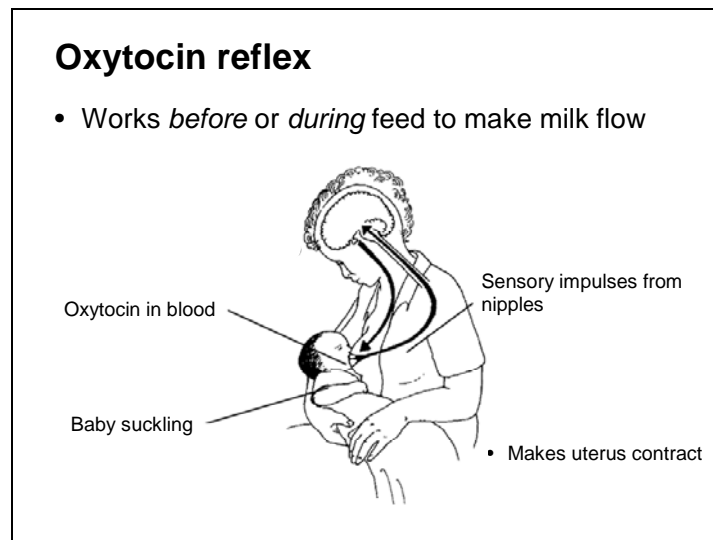
## Prolactin



When a baby suckles at the breast, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes prolactin. Prolactin goes in the blood to the breast, and makes the milk-secreting cells produce milk. The more a baby suckles the more milk the breasts produce.

Most of the prolactin is in the blood about 30 minutes after the feed – so it makes the breast produce milk for the next feed. For this feed, the baby takes the milk which is already in the breast.

## Oxytocin



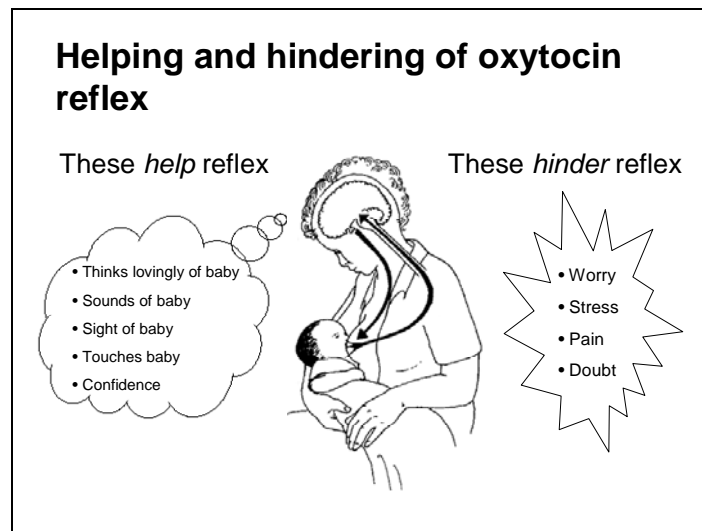
When a baby suckles, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes the hormone oxytocin. Oxytocin goes in the blood to the breast, and makes the muscle cells around the alveoli contract.

This makes the milk which has collected in the alveoli flow along the ducts to the larger ducts beneath the areola. Here the milk is stored temporarily during the feed. This is the oxytocin reflex, the milk ejection reflex or the 'let-down' reflex.

Oxytocin is produced more quickly than prolactin. It makes the milk in the breast flow for *this* feed. Oxytocin can start working before a baby suckles, when a mother learns to expect a feed. If the oxytocin reflex does not work well, the baby may have difficulty in getting the milk. It may seem as if the breasts have stopped producing milk. However, the breasts are producing milk, but it is not flowing out.

Oxytocin makes a mother's uterus contract after delivery. This helps to reduce bleeding, but it sometimes causes uterine pain and a rush of blood during a feed for the first few days. The pains can be quite strong.

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



## SIGNS AND SENSATIONS OF AN ACTIVE OXYTOCIN REFLEX

### A mother may notice:

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

### Control of breast milk production within the breast.

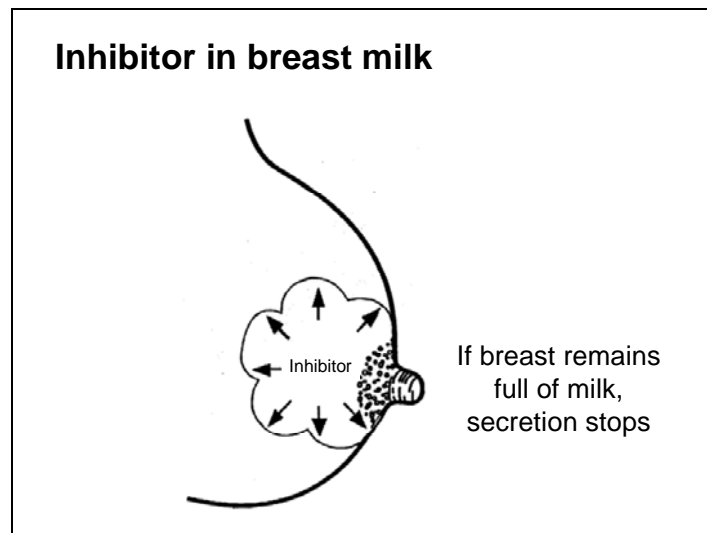
You may wonder why sometimes one breast stops making milk, while the other breast continues to make milk – although oxytocin and prolactin go equally to both breasts. The following diagram shows why.

There is a substance in breast milk which can reduce or inhibit milk production.

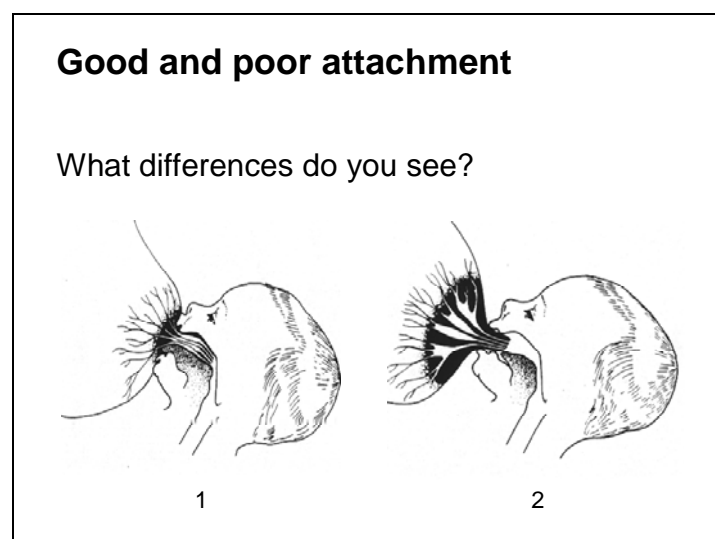
If a lot of milk is left in a breast, the inhibitor stops the cells from secreting any more. This helps to protect the breast from the harmful effects of being too full. It is obviously necessary if a baby dies or stops breastfeeding for some other reason. If breast milk is removed, by suckling or expression, the inhibitor is also removed. Then the breast makes more milk.

This helps you to understand why if a baby stops suckling from one breast, that breast stops making milk. If a baby suckles more from one breast, that breast makes more milk and becomes larger than the other.

It also helps you to understand why for a breast to continue to make milk, the milk must be removed. If a baby cannot suckle from one or both breasts, the breast milk must be removed by expression to enable production to continue.

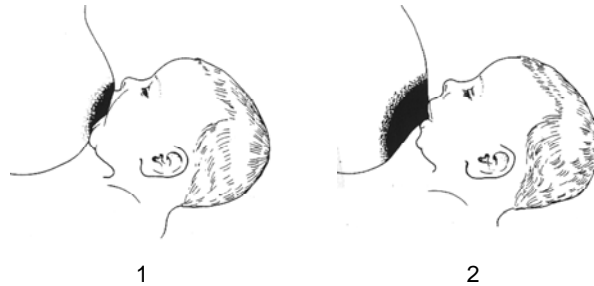


### Attachment to the breast



### Attachment (outside appearance)

What differences do you see?



The 4 key points of attachment are:

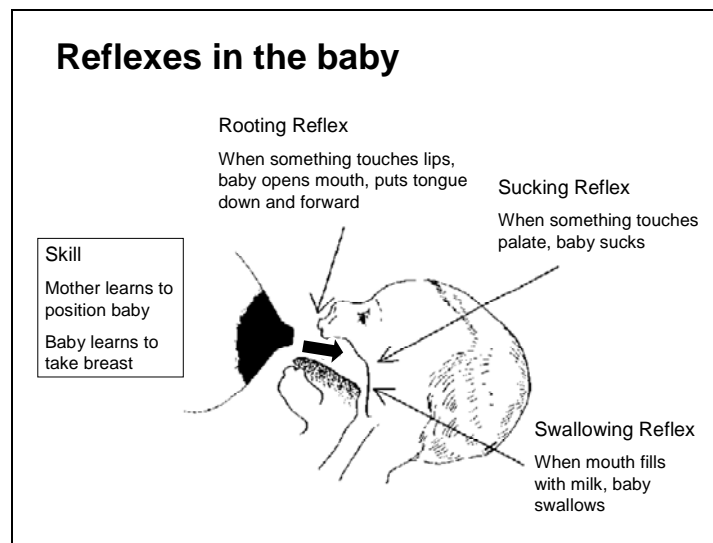
1. More areola above baby's top lip than below bottom lip
2. Baby's mouth wide open
3. Lower lip turned outwards
4. Baby's chin touches breast

### Results of poor attachment

If a baby is poorly attached and he 'nipple sucks', it is painful for his mother. Poor attachment is the most important cause of sore nipples. As the baby sucks hard to try to get the milk, he pulls the nipple in and out. This makes the nipple skin rub against his mouth. If a baby continues to suck in this way, he can damage the nipple skin and cause cracks (also known as fissures). As the baby does not remove breast milk effectively the breasts may become engorged, the baby may be unsatisfied and cry a lot. Eventually, if breast milk is not removed the breasts may make less milk. A baby may fail to gain weight and the mother may feel she is a breastfeeding failure.

To prevent this all mothers need skilled help to position and attach their babies. Babies should not be given feeding bottles, especially before breastfeeding is established.

## Reflexes in the baby



There are three main reflexes - the **rooting reflex**, the **sucking reflex**, and the **swallowing reflex**.

When something touches a baby's lips or cheek, he opens his mouth and may turn his head to find it. He puts his tongue down and forward. This is the 'rooting' reflex. It should normally be the breast that he is 'rooting' for. When something touches a baby's palate, he starts to suck it. This is the sucking reflex. When his mouth fills with milk, he swallows. This is the swallowing reflex. All these reflexes happen automatically without the baby having to learn to do them.

[illegible]



## Session 4

# Assessing a Breastfeed

### Objectives

After completing this session participants will be able to:

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

### Introduction

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

## BREASTFEED OBSERVATION JOB AID

Mother's name \_\_\_\_\_

Date \_\_\_\_\_

Baby's name \_\_\_\_\_

Baby's age \_\_\_\_\_

### Signs that breastfeeding is going well:

### Signs of possible difficulty:

#### GENERAL

##### *Mother:*

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

##### *Mother:*

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

##### *Baby:*

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

##### *Baby:*

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

#### BREASTS

- ☐ Breasts look healthy
- ☐ No pain or discomfort
- ☐ Breast well supported with fingers away from nipple

- ☐ Breasts look red, swollen, or sore
- ☐ Breast or nipple painful
- ☐ Breast held with fingers on areola

#### BABY'S POSITION

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

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

#### BABY'S ATTACHMENT

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

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

#### SUCKLING

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

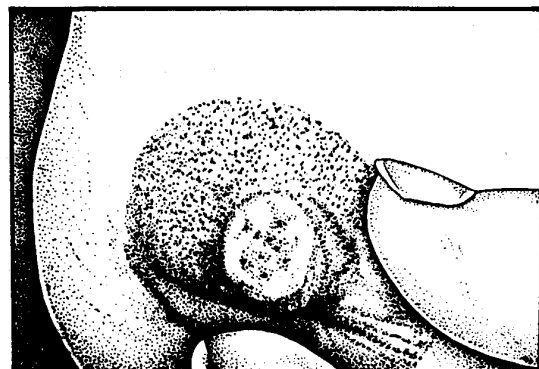
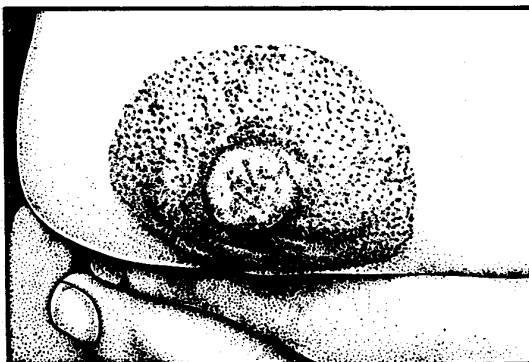
- ☐ Rapid shallow sucks
- ☐ Cheeks pulled in when suckling
- ☐ Mother takes baby off the breast
- ☐ No signs of oxytocin reflex noticed

**Fig. 4.1 How does the mother hold her baby?**

- a. Baby's body close, facing breast  
Face to face attention from mother
- b. Baby's body away from mother, neck twisted  
No mother baby eye contact

**Fig. 4.2 How does the mother hold her breast?**

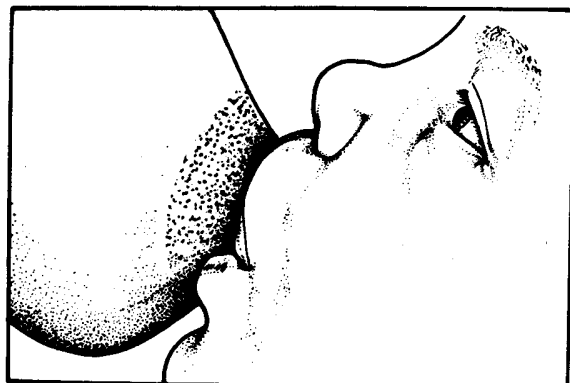
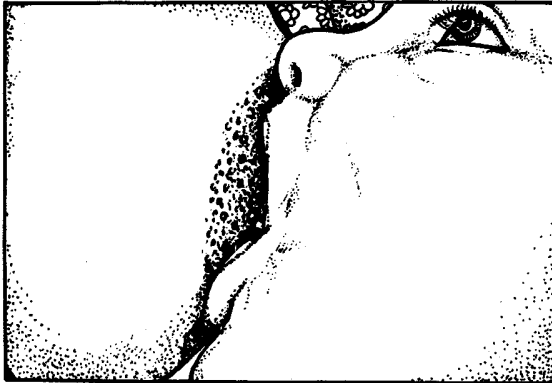
- a. Resting her fingers on her chest wall so that her first finger forms a support at the base of the breast
- b. Holding her breast too near the nipple



**Fig. 4.3 How is the baby attached to the breast?**

a. A baby well attached to his mother's breast

b. A baby poorly attached to his mother's breast



#### **Exercise 4.a. Using the BREASTFEED OBSERVATION JOB AID**

In this exercise, you practise recognizing the signs of good and poor attachment in some slides of babies breastfeeding. In some of the photographs you will also see signs of good and poor positioning.

With Slides 4/8-4/9, use your observations to practise filling in one of the BREASTFEED OBSERVATION JOB AIDS on the following pages. There are two forms. Fill in one form for each slide.

- If you see a sign, make a ✓ in the box next to the sign.
- If you do not see a sign, leave the box empty.

## BREASTFEED OBSERVATION JOB AID – SLIDE 4/8

Mother's name \_\_\_\_\_

Date \_\_\_\_\_

Baby's name \_\_\_\_\_

Baby's age \_\_\_\_\_

### Signs that breastfeeding is going well:

### Signs of possible difficulty:

#### GENERAL

##### *Mother:*

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

##### *Mother:*

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

##### *Baby:*

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

##### *Baby:*

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

#### BREASTS

- ☐ Breasts look healthy
- ☐ No pain or discomfort
- ☐ Breast well supported with fingers away from nipple

- ☐ Breasts look red, swollen, or sore
- ☐ Breast or nipple painful
- ☐ Breast held with fingers on areola

#### BABY'S POSITION

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

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

#### BABY'S ATTACHMENT

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

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

#### SUCKLING

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

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

## BREASTFEED OBSERVATION JOB AID – SLIDE 4/9

Mother's name \_\_\_\_\_

Date \_\_\_\_\_

Baby's name \_\_\_\_\_

Baby's age \_\_\_\_\_

### Signs that breastfeeding is going well:

### Signs of possible difficulty:

#### GENERAL

##### *Mother:*

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

##### *Mother:*

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

##### *Baby:*

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

##### *Baby:*

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

#### BREASTS

- ☐ Breasts look healthy
- ☐ No pain or discomfort
- ☐ Breast well supported with fingers away from nipple

- ☐ Breasts look red, swollen, or sore
- ☐ Breast or nipple painful
- ☐ Breast held with fingers on areola

#### BABY'S POSITION

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

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

#### BABY'S ATTACHMENT

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

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

#### SUCKLING

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

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

## Session 5

# Listening and Learning

### Objectives

After completing this session participants will be able to:

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

### Introduction

Counselling is a way of working with people in which you understand how they feel, and help them to decide what they think is best to do in their situation. In this session we will discuss mothers who are feeding young children and how they feel.

Counselling mothers about feeding their infants is not the only situation in which counselling is useful. Counselling skills are useful when you talk to patients or clients in other situations. You may also find them helpful with your family and friends, or your colleagues at work. Practise some of the techniques with them – you may find the result surprising and helpful.

The first two counselling skills sessions are about ‘listening and learning’. A mother may not talk about her feelings easily, especially if she is shy, and with someone whom she does not know well. You need the skill to listen, and to make her feel that you are interested in her. This will encourage her to tell you more. She will be less likely to ‘turn off’, and say nothing.

### Skill 1. Use helpful non-verbal communication

‘Non-verbal communication’ means showing your attitude through your posture, your expression, everything except through speaking. Helpful non-verbal communication makes a mother feel that you are interested in her, so it helps her to talk to you.

### Skill 2. Ask open questions

Open questions are very helpful. To answer them a mother must give you some information. Open questions usually start with ‘How? What? When? Where? Why?’  
For example: “How are you feeding your baby?”

Closed questions are usually less helpful. They tell a mother the answer that you expect, and she can answer them with a 'Yes' or 'No'. They usually start with words like 'Are you?', 'Did he?', 'Has he?', 'Does she?' For example: "Did you breastfeed your last baby?" If a mother says "Yes" to this question, you still do not know if she breastfed exclusively, or if she also gave some artificial feeds.

To start a conversation, general open questions are helpful.

For example: "Tell me about your baby?"

To continue a conversation, a more specific open question may be helpful.

For example: "How old is your baby now?"

Sometimes it is helpful to ask a closed question, to make sure about a fact.

For example: "Are you giving him any other food or drink?"

If she says "Yes", you can follow up with an open question, to learn more.

For example: "What made you decide to do that?"

### **Skill 3. Use responses and gestures which show interest**

Another way to encourage a mother to talk is to use gestures such as nodding and smiling, and simple responses such as "Mmm", or "Aha". They show a mother that you are interested in her.

### **Skill 4. Reflect back what the mother says**

'Reflecting back' means repeating back what a mother has said to you, to show that you have heard, and to encourage her to say more. Try to say it in a slightly different way. For example, if a mother says: "I don't know what to give my child, she refuses everything."

You could say: "Your child is refusing all the food you offer her?"

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

Empathy or empathizing means showing that you understand how a person feels.

For example, if a mother says: "My baby wants to feed very often and it makes me feel so tired," you could say: "You are feeling very tired all the time then?"

This shows that you understand that she feels tired, so you are empathizing.

If you respond with a factual question, for example, "How often is he feeding? What else do you give him?" you are not empathizing.

### **Skill 6. Avoid words which sound judging**

'Judging words' are words like: right, wrong, well, badly, good, enough, properly. If you use these words when you ask questions, you may make a mother feel that she is wrong, or that there is something wrong with her baby. However, sometimes you need to use the 'good' judging words to build a mother's confidence (see Session 10 'Building confidence and giving support').



**HELPFUL NON-VERBAL COMMUNICATION**

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

**LISTENING AND LEARNING SKILLS**

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

## Notes

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

## Session 6

# Listening and Learning Exercises

### Exercise 6.a Asking open questions

**How to do the exercise:**

Questions 1-4 are 'closed' and it is easy to answer 'yes' or 'no'.

Write a new 'open' question, which requires the mother to tell you more.

**Example:****'Closed' Questions**

Do you breastfeed your baby?

**'Open' Questions**

*How are you feeding your baby?*

**To answer:****'Closed' Questions**

1. Does your baby sleep with you?

**'Open' Questions**

2. Are you often away from your baby?

3. Does Sara eat porridge?

4. Do you give fruit to your child often?

**Exercise 6.b Reflecting back what a mother says****How to do the exercise:**

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

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

**Example:**

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

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

**To answer:**

1. Mika does not like to take thick porridge.

- a) Mika does not seem to enjoy thick foods?
- b) What foods have you tried?
- c) It is good to give Mika thick foods as he is over six months old.

2. He doesn't seem to want to suckle from me.

- a) Has he had any bottle feeds?
- b) How long has he been refusing?
- c) He seems to be refusing to suckle?

3. I tried feeding him from a bottle, but he spat it out.

- a) Why did you try using a bottle?
- b) He refused to suck from a bottle?
- c) Have you tried to use a cup?

4. "My husband says our baby is old enough to stop breastfeeding now."

<b>Exercise 6.c Empathizing - to show that you understand how she feels</b>
---

**How to do the exercise:**

Statements 1-4 are things that mothers might say.

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

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

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

**Example:**

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

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

**To answer:**

1. James has not been eating well for the past week. I am very worried about him.
  - a. You are anxious because James is not eating?
  - b. What did James eat yesterday?
  - c. Children often have times when they do not eat well.
  
2. My breast milk looks so thin - I am afraid it is not good.
  - a. That's the foremilk - it always looks rather watery.
  - b. You are worried about how your breast milk looks?
  - c. Well, how much does the baby weigh?

3. I feel there is no milk in my breasts, and my baby is a day old already.
  - a. You are upset because your breast milk has not come in yet?
  - b. Has he started suckling yet?
  - c. It always takes a few days for breast milk to come in.
  
4. I am anxious that if I breastfeed I will pass HIV on to my baby.
  - a. I can see you are worried about breastfeeding your baby?
  - b. Would you like me to explain to you about how the HIV virus is passed from mothers to babies?
  - c. What have you heard about other options for feeding your baby?
  
5. Angelique brings Sammy to see you. He is nine months old. Angelique is worried. She says: "Sammy is still breastfeeding and I feed him three other meals a day, but I am so upset, he still looks so thin." What would you say to Angelique to empathize with how she feels?
  
  
  
  
  
  
  
  
  
  
6. Catherine comes to the clinic. She is pregnant with her first baby and has found out she has HIV. She says: "I am so frightened that my mother-in-law might find out". What would you say to Catherine to empathize with how she feels?

**Exercise 6.d Translating judging words**

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

<b>USING AND AVOIDING JUDGING WORDS</b>			
<b>English</b>	<b>Local language</b>	<b>Judging question</b>	<b>Non-judging question</b>
Well		Does he suckle well?	
Normal		Are his stools normal?	
Enough		Is he gaining enough weight?	
Problem		Do you have any problems breastfeeding?	

## Notes

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.



## Session 7

### Practical Session 1

#### Listening and Learning Assessing a Breastfeed

##### Objectives

After completing this session participants will be able to:

- demonstrate appropriate listening and learning skills when counselling a mother on feeding her infant
- assess a breastfeed using the BREASTFEED OBSERVATION JOB AID

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session. During the practical session, you work in small groups, and take turns to talk to a mother, while the other members of the group observe.

##### What to take with you:

- two copies of the BREASTFEED OBSERVATION JOB AID
- one copy of LISTENING AND LEARNING SKILLS CHECKLIST
- pencil and paper to make notes
- you do not need to take books or manuals

##### If you are the one who talks to the mother:

Introduce yourself to the mother, and ask permission to talk to her. Introduce the group, and explain that you are interested in infant feeding. Try to find a chair or stool to sit on. If necessary, and if allowed in the facility, sit on the bed.

If the baby is feeding, ask the mother to continue as she is doing. If the baby is not feeding, ask the mother to give a feed in the normal way at any time that the baby seems ready. Ask the mother's permission for the group to watch the feed.

Before or after the breastfeed, ask the mother some open questions about how she is, how the baby is, and how feeding is going, to start the conversation. Encourage the mother to talk about herself and the baby. Practise as many of the listening and learning skills as possible.

**If you are observing:**

Stand quietly in the background. Try to be as still and quiet as possible. Do not comment, or talk among yourselves.

Make general observations of the mother and baby. Notice for example: Does she look happy? Does she have formula or a feeding bottle with her? Make general observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the mother talk freely, and seem to enjoy it?

Make specific observations of the participant's listening and learning skills, including her non-verbal communication. Mark a ✓ on your list of LISTENING AND LEARNING SKILLS CHECKLIST when she uses a skill, to help you to remember for the discussion. Notice if she makes a mistake, for example if she uses a judging word, or if she asks a lot of questions to which the mother says 'yes' and 'no'.

Stay quietly watching the mother and baby as the feed continues. While you observe, fill in a BREASTFEED OBSERVATION JOB AID. Write the name of the mother and baby; mark a ✓ beside each sign that you observe; add the time that the feed takes.

Thank the mother for her time and say something to praise and support her.

<b>MISTAKES TO AVOID</b>
<p><b>Do not say that you are interested in <u>breastfeeding</u>.</b> The mother's behaviour may change. She may not feel free to talk about bottle feeding. You should say that you are interested in "infant feeding" or in "how babies feed".</p> <p><b>Do not give a mother help or advice.</b> In Practical Session 1, if a mother seems to need help, you should inform your trainer, and a member of staff from the ward or clinic.</p> <p><b>Be careful that the forms do not become a barrier.</b> The participant who talks to the mother should not make notes while she is talking. She needs to refer to the forms to remind her what to do, but if she wants to write, she should do so afterwards. The participants who are observing can make notes.</p>

## Session 8

# Positioning a Baby at the Breast

## Practical Session: Positioning a Baby Using Dolls

### Objectives

After completing this session participants will be able to:

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

### Introduction

Always observe a mother breastfeeding before you help her. Take time to see what she does, so that you can understand her situation clearly. Do not rush to make her do something different.

Give a mother help only if she has difficulty. Some mothers and babies breastfeed satisfactorily in positions that would make difficulties for others. This is especially true with babies more than about two months old. There is no point trying to change a baby's position if he is getting breast milk effectively, and his mother is comfortable.

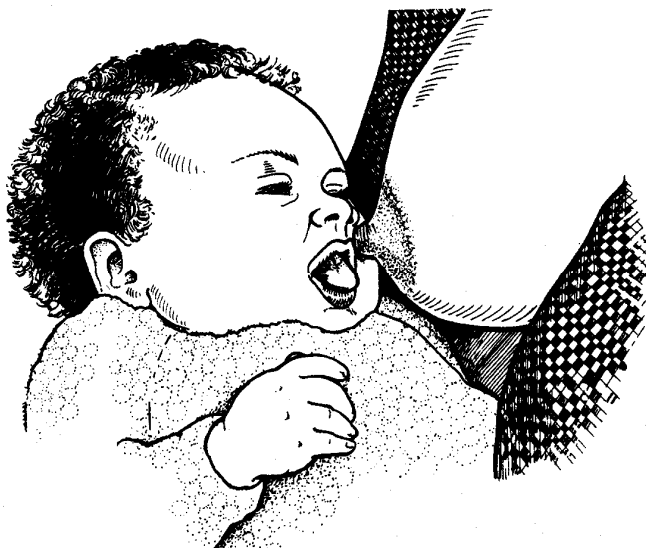
Let the mother do as much as possible herself. Be careful not to 'take over' from her. Explain what you want her to do. If possible, demonstrate on your own body to show her what you mean.

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

## How to help a mother to position her baby

### HOW TO HELP A MOTHER TO POSITION HER BABY

- Greet the mother and ask how breastfeeding is going.
- Assess a breastfeed.
- Explain what might help, and ask if she would like you to show her.
- Make sure that she is comfortable and relaxed.
- Sit down yourself in a comfortable, convenient position.
- Explain how to hold her baby, and show her if necessary.  
The **four key points** are:
  - Baby's head and body in line
  - Baby held close to mother's body
  - Baby's whole body supported
  - Baby approaches breast, nose to nipple.
- Show her how to support her breast:
  - With her fingers against her chest wall below her breast
  - With her first finger supporting the breast
  - With her thumb above
  - Her fingers should not be too near the nipple.
- Explain or show her how to help the baby to attach:
  - Touch her baby's lips with her nipple
  - Wait until her baby's mouth is opening wide
  - Move her baby quickly onto her breast, aiming his lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment. If the attachment is not good, try again.



**Fig. 8.1**

The mother's nipple is touching her baby's lips. He is opening his mouth and putting his tongue forward ready to take the breast.

## HOW TO HELP A MOTHER WHO IS SITTING

Greet the mother, introduce yourself, and ask her name and her baby's name. Ask her how she is and ask one or two open questions about how breastfeeding is going.

Assess a breastfeed. Ask if you may see how her baby breastfeeds, and ask her to put him to her breast in the usual way. (If the baby has had a feed recently, you may have to arrange to come back later). Observe the breastfeed.

If you decide that the mother needs help to improve her baby's attachment: First say something encouraging, like: "He really wants your breast milk, doesn't he?"

Then explain what might help and ask if she would like you to show her. For example, say something like: "Breastfeeding might be more comfortable for you if (baby's name) took a larger mouthful of breast when he suckles. Would you like me to show you how?" If she agrees, you can start to help her.

Make sure that she is sitting in a comfortable, relaxed position. Sit down yourself, so that you also are comfortable and relaxed, and in a convenient position to help.

Explain to the mother how to hold her baby. Show her what to do if necessary.

Make these four key points about positioning a baby clear:

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

Show her how to support her breast with her hand to offer it to her baby:

- She should rest her fingers on her chest wall under her breast, so that her first finger forms a support at the base of the breast (see Fig. 4.2, page 25).
- She can use her thumb to press the top of her breast slightly. This can improve the shape of the breast so that it is easier for her baby to attach well.
- She should not hold her breast too near to the nipple.
- Explain how she should touch her baby's lips with her nipple, so that he opens his mouth.
- Explain that she should wait until her baby's mouth is opening wide, before she moves him onto her breast. His mouth needs to be wide open to take a large mouthful of breast.

Explain or show her how to quickly move her baby to her breast, when he is opening his mouth wide. She should bring her baby to her breast. She should not move herself or her breast to her baby. She should aim her baby's lower lip below her nipple, so that his chin will touch her breast.

Notice how the mother responds. Does she seem to have pain? Does she say "Oh that feels better!" If she says nothing, ask her how her baby's suckling feels. Look for all the signs of good attachment. If the attachment is not good, try again.

## HOW TO HELP A MOTHER WHO IS LYING DOWN

Help the mother to lie down in a comfortable, relaxed position. It is better if she is not 'propped up' on her elbow, as this can make it difficult for the baby to attach to the breast.

Show her how to hold her baby. Exactly the same **four key points** are important, as for a mother who is sitting. She can support her baby with her lower arm. She can support her breast if necessary with her upper arm. If she does not support her breast, she can hold her baby with her upper arm.

## OTHER POSITIONS IN WHICH A MOTHER CAN BREASTFEED

Mothers breastfeed in many different positions.

Some useful positions that you may want to show mothers are:

- the underarm position
- holding the baby with the arm opposite the breast

**Fig. 8.2 A mother holding her baby  
In the underarm position**

Useful for:

- twins
- blocked duct
- difficulty attaching the baby



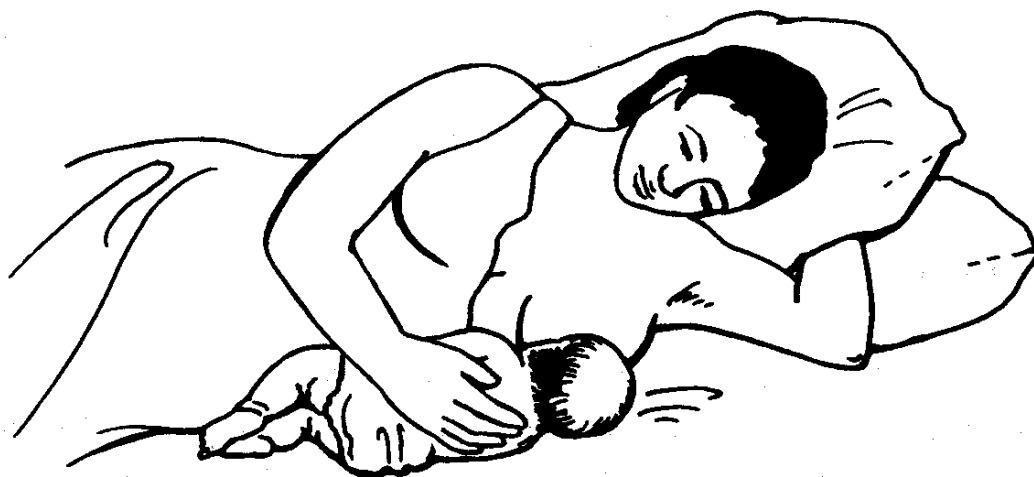
**Fig 8.3 A mother holding her baby with  
the arm opposite the breast**

Useful for:

- very small babies
- sick babies



**Fig. 8.4 A mother breastfeeding her baby lying down**





## Session 9

# Growth Charts

### Objectives

After completing this session participants will be able to:

- explain the meaning of the standard curves
- plot a child's weight on a growth chart
- interpret individual growth curves

### Introduction

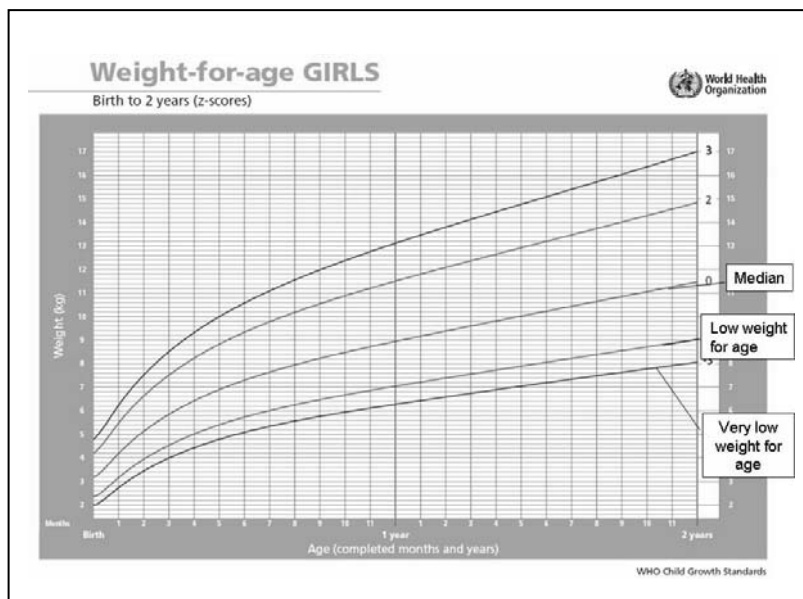
When counselling on infant feeding it is important to understand growth charts. If growth charts are not interpreted accurately, incorrect information can be given to a mother, leading to worry and loss of confidence.

Growth charts can reflect past and present conditions including food intake and health status. As well as weight, another measurement you may use is length or height. A child who is undernourished for a long time will show slow growth in length or height. This is referred to as stunting or very short height for age.

A shorter child weighs less than a taller child of the same age and so they may be on different lines on the growth chart for weight. This is normal. What is most important is to see that the curve follows a trend that indicates the child is growing normally and there is no risk of growth problem

Good feeding practices, both before the child is six months old and after complementary feeds have been introduced, can help prevent the growth faltering in both weight and length as well as tendency to overweight.

## Growth charts in assessment of feeding practices



This is a common weight chart for girls. The child's age in months is along the bottom and the weight is up the side.

There are five curves on this chart. The line labelled 0 is the median which is, generally speaking, the average. It is also called the 50<sup>th</sup> percentile because the weights of 50 percent of healthy children are below it and 50 percent are above it. Most healthy children are near this median curve, a little either above or below it.

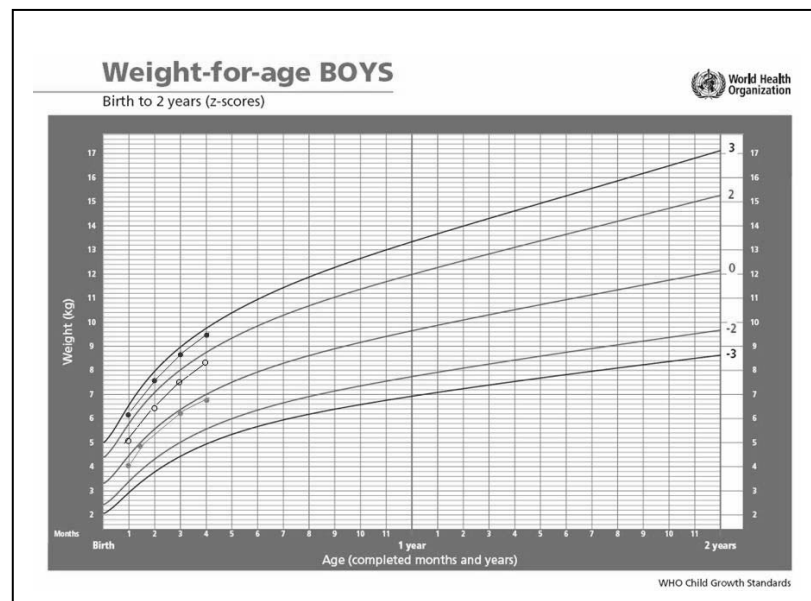
The other lines, called z-score lines, indicate distance from the average. A point or trend which is far from the median, such as 3 or -3, usually indicates a growth problem. The growth curve of a normally growing child will usually follow a track that is roughly parallel to the median.

A child whose weight-for-age is below the -2 z-score line (fourth line from the top) is underweight. A genetically or naturally small child may be near this curve but still be growing well. The bottom line (-3) indicates very low weight for age or severe underweight. A child near this line is probably not healthy and needs attention..

In some places, the charts have a more different number of lines on them or use colour bands to show the ranges or sometimes there is one chart for both boys and girls. Check your local growth charts.

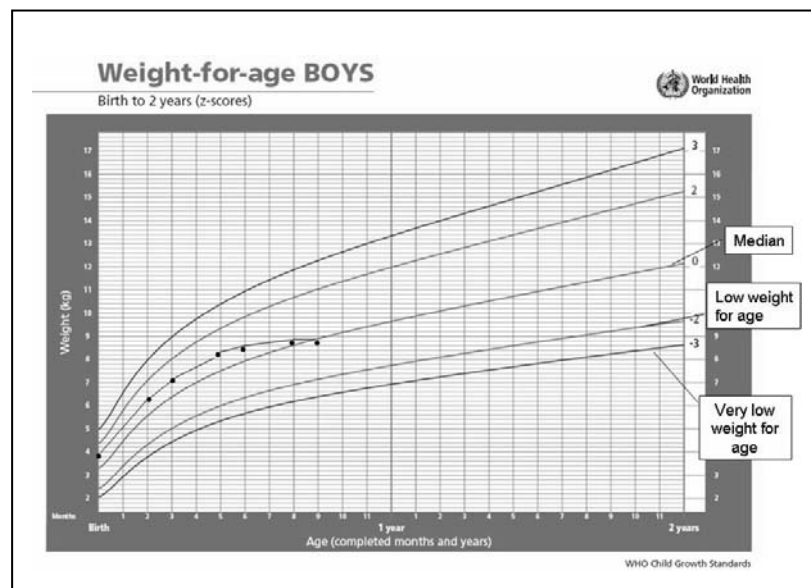
One weight on its own does not give you much information. You need a pattern of marks before you can judge the tendency of growth.

Here we have the growth chart for boys that shows the curves of three children who were weighed regularly.



The growth lines on the chart show a similar shape to the standard curves. However, each child is growing along his individual path. Notice that they all had different birth weights from the beginning.

Here we have the growth chart of Manuel who was weighed regularly.



Manuel grew well for the first few months but has not grown at all in the last three months. His weight is now static. You would need to ask the mother some questions.

Some questions you might ask are:

- How was Manuel fed for the first six months of life?
- What milk does Manuel have now?
- What feeds does Manuel receive now? How often does he eat? How much does he eat? What types of food does he eat?
- How has Manuel's health been over the past few months?

You find out that Manuel was exclusively breastfed for the first six months of life and that his mother is still breastfeeding him frequently by day and that he sleeps with his mother at night and breastfeeds during the night. At six months his mother started to give him thin cereal porridge twice a day. He is not gaining weight because he needs more frequent, nutrient-rich complementary foods each day.

Here we have the growth chart of Ana who has attended the clinic regularly.



This child is growing slowly. You would need to ask the mother some questions to find out how Ana is being fed.

Some questions you might ask are:

- How is Ana?
- How is Ana feeding?
- How often does Ana feed?
- Where does Ana sleep?
- If the mother says she is breastfeeding – How is breastfeeding going for you and Ana?

You would want to assess a breastfeed, looking at positioning, attachment and the length of feed.

Her mother tells you that Ana is well and a good baby who cries little. She only wants to feed 4-5 times each day, which her mother finds helpful as she is busy during the day. Ana sleeps with her mother at night. Ana is gaining weight slowly because she is not breastfeeding often enough.

## Session 10

# Building Confidence and Giving Support

### Objectives

After completing this session participants will be able to:

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

### Introduction

This counselling skills session is about 'building confidence and giving support'. A mother easily loses confidence in herself. This may lead her to feel that she is a failure and give in to pressure from family and friends. You may need these skills to help her to feel confident and good about herself.

It is important not to make a mother feel that she has done something wrong. A mother easily believes that there is something wrong with herself, how she is feeding her child, or with her breastmilk if she is breastfeeding. This reduces her confidence.

It is important to avoid telling a mother what to do. Help each mother to decide for herself what is best for her and her baby. This increases her confidence.

### Skill 1. Accept what a mother thinks and feels

Sometimes a mother has a *mistaken idea* that you do not agree with. If you disagree with her, or criticize, you make her feel that she is wrong. This reduces her confidence. If you agree with her, it is difficult later to suggest something different.

It is more helpful to *accept* what she thinks. Accepting means responding in a neutral way, and not agreeing or disagreeing. 'Reflecting back' and 'responses and gestures which show interest' are both useful ways to show acceptance, as well as being useful listening and learning skills.

Sometimes a mother feels very upset about something that you know is not a serious problem. If you say something like "Don't worry, there is nothing to worry about!" you make her feel that she is wrong to feel the way that she does. This makes her feel that you do not understand, and it reduces her confidence. If you accept that she is upset, it makes her feel that it is alright to feel the way she does, so it does not reduce her confidence. Empathizing is one useful way to show acceptance of how a mother feels.

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

As health workers, we are trained to look for problems. We see only what we think people are doing wrong, and we try to correct them. As counsellors, we must learn to look for and recognize what mothers and babies do right. Then we should praise or show approval of the good practices.

Praising good practices has these benefits:

- It builds a mother's confidence.
- It encourages her to continue those good practices.
- It makes it easier for her to accept suggestions later.

## Skill 3. Give practical help

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

- when a mother feels tired or dirty or uncomfortable
- when she is hungry or thirsty
- when she has had a lot of information already
- when she has a clear practical problem.

Some ways to give practical help are these:

- Help to make her clean and comfortable
- Give her a drink, or something to eat
- Hold the baby yourself while she gets comfortable, or washes, or goes to the toilet.

Practical help also includes showing caregivers how to prepare feeds rather than just giving them a list of instructions. It also includes practical help with breastfeeding such as helping a mother with positioning and attaching, expressing breast milk, relieving engorgement or preparing complementary feeds.



*Which response is more appropriate?*

“You should let the baby suckle now, to help your breastmilk to come in.”

“Let me try to make you more comfortable, and then I'll bring you a drink.”

#### **Skill 4. Give a little, relevant information**

Relevant information is information that is useful for a mother **now**.

When you give a mother information, remember these points:

- Tell her things that she can do today, not in a few weeks time
- Explaining the reason for a difficulty is often the most relevant information when it helps a mother to understand what is happening.
- Try to give only one or two pieces of information at a time, especially if she is tired, and has already received a lot of advice.
- Wait until you have built her confidence, by accepting what she says, and praising what she and her baby do right. You do not need to give new information or to correct a mistaken idea immediately.
- Give information in a positive way, so that it does not sound critical. This is especially important if you want to correct a mistaken idea.

#### **Skill 5. Use simple language**

Use simple familiar terms to explain things to mothers. Remember that most people do not understand the technical terms that health workers use.

#### **Skill 6. Make one or two suggestions, not commands**

Be careful not to tell or command a mother to do something. This does not help her to feel confident.

Instead, when you counsel a mother, suggest what she could do differently. Then she can decide if she will try it or not. This leaves her feeling in control, and helps her to feel confident.

### **CONFIDENCE AND SUPPORT SKILLS**

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

## This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.



## Session 11

# Building Confidence and Support Exercises – Part 1

### Exercise 11.a Accepting what a mother THINKS

#### How to do the exercise:

Examples 1-2 are mistaken ideas which mothers might hold.

Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.

Beside each response write whether the response agrees, disagrees or accepts.

#### Example:

Mother of a six-month-old baby:

"My baby has diarrhoea so it is not good to breastfeed now".	good	"You do not like to give him breast milk just now?"	<i>Accepts</i>
--	------	---	----------------

"It is quite safe to breastfeed a baby when he has diarrhoea."	<i>Disagrees</i>
--	------------------

"It is often better to stop breastfeeding a baby when he has diarrhoea."	<i>Agrees</i>
--	---------------

#### Examples 1 and 2:

#### To answer:

1. Mother of a one-month-old baby:

"I give him drinks of water, because the weather is so hot now."

"Oh, that is not necessary! Breast milk contains plenty of water."

"Yes, babies may need extra drinks of water in this weather."

"You feel that he needs drinks of water sometimes?"

2. Mother of a nine-month-old baby:

"I have not been able to breastfeed for two days, so my milk is sour."

"Breast milk is not very nice after a few days."

"You are worried that your breast milk may be sour?"

"But milk never goes sour in the breast!"

**How to do the exercise:**

Examples 3-5 are some more mistaken ideas which mothers might hold.

Make up one response that accepts what the mother says, without disagreeing or agreeing.

**Example:**

Mother of a one-week-old baby:

"I don't have enough milk because my breasts are so small".

**Possible responses to accept what the mother thinks are:**

*"Mm. Mothers often worry about the size of their breasts?"*

*"I see you are worried about the size of your breasts."*

*"Ah ha"*

**To answer:**

3. "The first milk is not good for a baby - I cannot breastfeed until it has gone."

4. "I don't let him suckle for more than ten minutes, because it would make my nipples sore."

5. "I need to give him formula now that he is two months old. My breast milk is not enough for him now".

**Exercise 11.b Accepting what a mother FEELS****How to do the exercise:**

After the Stories A and B below, there are three responses.

Mark with a ✓ the response that shows acceptance of how the mother feels.

**Example:**

Purla's baby boy has a cold and a blocked nose, and is finding it difficult to breastfeed. As Purla tells you about it, she bursts into tears.

Mark with a ✓ the response which shows that you accept how Purla feels.

- a. Don't worry - he is doing very well.
- b. You don't need to cry - he will soon be better.
- ✓ c. It's upsetting when a baby is ill, isn't it?

**To answer:****Story A.**

Marion is in tears. She says that her breasts have become soft again, so her milk must be less, but the baby is only three weeks old.

- a. Don't cry - I'm sure you still have plenty of milk.
- b. You are really upset about this, I know.
- c. Breasts often become soft at this time - it doesn't mean that you have less milk!

**Story B.**

Dora is very bothered. Her baby sometimes does not pass a stool for one or two days. When he does pass a stool, he pulls up his knees and goes red in the face. The stools are soft and yellowish brown.

- a. You needn't be so bothered - this is quite normal for babies.
- b. Some babies don't pass a stool for four or five days.
- c. It really bothers you when he does not pass a stool, doesn't it?

**Exercise 11.c Praising what a mother and baby are doing right****How to do the exercise:**

For Story C below, there are three responses. They are all things that you might want to say to the mother.

Mark with a ✓ the response which praises what the mother and baby are doing right, to build the mother's confidence.

For Story D make up your own response to praise the mother.

**Example:**

A mother is breastfeeding her three-month-old baby, and giving drinks of fruit juice. The baby has slight diarrhoea.

**Mark the response which praises what she is doing right.**

- a. You should stop the fruit juice - that's probably what is causing the diarrhoea.
- ✓ b. It is good that you are breastfeeding - breast milk should help him to recover
- c. It is better not to give babies anything but breast milk until they are about six months old.

**To answer:****Story C.**

The mother of a three-month-old baby says that he is crying a lot in the evenings, and she thinks that her milk supply is decreasing. The baby gained weight well last month.

- a. Many babies cry at that time of day - it is nothing to worry about.
- b. He is growing very well - and that is on your breast milk alone.
- c. Just let him suckle more often - that will soon build up your milk supply.

**Story D.**

A four-month-old baby is completely fed on replacement feeds from a bottle. He has diarrhoea. The growth chart shows that he weighed 3.5 kilos at birth, and that he has only gained 200 grams in the last two months. The bottle smells very sour.

### Exercise 11.d Giving a little, relevant information

#### How to do the exercise:

Below is a list of six mothers with babies of different ages.

Beside them are six pieces of information (a, b, c, d, e and f) that those mothers may need; but the information is not opposite the mother who needs it most.

Match the piece of information with the mother and baby in the same set for whom it is MOST RELEVANT AT THAT TIME.

After the description of each mother there are six letters.

Put a circle round the letter which corresponds to the information which is most relevant for her. As an example, the correct answer for Mother 1 is already marked in brackets.

#### To answer:

Mothers 1-6		Information
1. Mother returning to work	a b c d (e) f	a. Foremilk normally looks watery, and hindmilk is whiter
2. Mother with a 12-month-old baby	a b c d e f	b. Exclusive breastfeeding is best until a baby is six months old
3. Mother who thinks that her milk is too thin	a b c d e f	c. More suckling makes more milk
4. Mother who thinks that she does not have enough breast milk	a b c d e f	d. Colostrum is all that a baby needs at this time
5. Mother with a two-month-old baby who is exclusively breastfed	a b c d e f	e. Night breastfeeds are good for a baby and help to keep up the milk supply
6. A newly delivered mother who wants to give her baby prelacteal feeds	a b c d e f	f. Breastfeeding is valuable for two years or more

**Exercise 11.e Using simple language****How to do the exercise:**

Below are two pieces of information that you might want to give to mothers.

The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

**Example:****Information:**

Colostrum is all that a baby needs in the first few days.

**Using simple language:**

*The first yellowish milk that comes is exactly what a baby needs for the first few days.*

**To answer:****Information:**

1. Exclusive breastfeeding is best up to six months of age.

**Using simple language:**

2. To suckle effectively, a baby needs to be well attached to the breast.

### Exercise 11.f Making one or two suggestions, not commands

#### How to do the exercise:

Below are some commands which you might want to give to a breastfeeding mother.

Rewrite the commands as suggestions.

The box below gives some examples of ways to make suggestions, not commands. You may find this helpful when doing the exercises below.

#### MAKING SUGGESTIONS, NOT COMMANDS

**Commands** use the imperative form of verbs (give, do, bring) and words like *always*, *never*, *must*, *should*.

**Suggestions** include:

Have you considered....?

Would it be possible....?

What about trying...to see if it works for you?

Would you be able to?

Have you thought about....? Instead of....?

You could choose between....and....and....

It may not suit you, but some mothers..... a few women....

Perhaps....might work.

Usually....Sometimes....Often....

#### Example:

Command: "Keep the baby in bed with you so that he can feed at night!"

Suggestions: *"It might be easier to feed him at night if he slept in bed with you."*

*"Would it be easier to feed him at night if he slept with you?"*

**To answer:**

1. Command: “Do not give your baby any drinks of water or glucose water, before he is at least six months old!”

Suggestions:

2. Command: “Feed him more often, whenever he is hungry, then your milk supply will increase!”

Suggestions:



## Session 12

### Practical Session 2

#### Building Confidence and Giving Support Positioning a Baby at the Breast

##### Objectives

After completing this session participants will be able to:

- demonstrate the appropriate confidence and support skills when counselling a mother on feeding her infant
- demonstrate how to help a mother to position and attach her baby at the breast

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session. During the practical session, you work in small groups, and take turns to talk to a mother, while the other members of the group observe.

What to take with you:

- one copy of the list of COUNSELLING SKILLS CHECKLIST
- two copies each of the BREASTFEED OBSERVATION JOB AID
- pencil and paper to make notes.

How to do the clinical practice:

- Talk to and observe mothers and babies as for Practical Session 1.
- Continue to practise 'assessing a breastfeed' and 'listening and learning'.

In addition, practise as many of the six confidence and support skills as possible. Try to do these things:

- Praise two things that the mother and baby are doing right
- Give the mother two pieces of relevant information that are useful to her now.

The participant who observes marks a ✓ on the COUNSELLING SKILLS CHECKLIST for every skill that her partner uses.

It is important that you practise helping a mother to position her baby at the breast, or to overcome any other difficulty. Often you will find that babies are sleepy. In this case you could say to the mother something like: "I see your baby seems to be sleepy now, but can we just go through the way to hold him when he is ready". Then go through the 4 key points of positioning with the mother, holding her baby. If you do this quite a few babies will wake up and want another feed when their nose is opposite the nipple.

## Notes

[illegible]

## Session 13

# Taking a Feeding History

### Objectives

After completing this session participants will be able to:

- take a feeding history of an infant 0-6 months
- demonstrate appropriate use of the FEEDING HISTORY JOB AID, 0-6 MONTHS

### Introduction

In this session we will learn how to take a feeding history of a child aged 0-6 months. The baby may be breastfeeding or receiving another form of milk and may, or may not, be receiving complementary feeds.

The FEEDING HISTORY JOB AID, 0-6 MONTHS will help you to remember the main questions to ask for any infant.

## HOW TO TAKE A FEEDING HISTORY, 0-6 MONTHS

**Greet the woman in a kind and friendly way.**

**Use the mother's name and the baby's name (if appropriate).**

**Ask her to tell you about herself and her baby in her own way, starting with the things that she feels are important.**

**Look at the child's growth chart.**

It may tell you some important facts and save you asking some questions.

**Ask the questions that will tell you the most important facts.**

The FEEDING HISTORY JOB AID, 0-6 MONTHS is a guide to the facts that you may need to learn about. Decide what you need to know from each of the six sections.

**Be careful not to sound critical.**

Use confidence and support skills.

**Try not to repeat questions.**

If you do need to repeat a question, first say: "Can I make sure that I have understood clearly?" and then, for example "You said that (name) had both diarrhoea and pneumonia last month?"

**Take time to learn about more difficult, sensitive things.**

For example:

- . What does the baby's father say? Her mother? Her mother-in-law?
- . Is she happy about having the baby now? About the baby's sex?

Some mothers tell you these things spontaneously. Others tell you when you empathize, and show that you understand how they feel. Others take longer. If a mother does not talk easily, wait, and ask again later, or on another day, perhaps somewhere more private.

<b>FEEDING HISTORY JOB AID, 0-6 MONTHS</b>	
Age of child Particular concerns about feeding of child	
<b>Feeding</b>	Milk (breast milk, formula, cow's milk, other) Frequency of milk feeds Length of breastfeeds/quantity of other milks Night feeds Other foods in addition to milk (when started, what, frequency) Other fluids in addition to milk (when started, what, frequency) Use of bottles and how cleaned Feeding difficulties (breastfeeding/other feeding)
<b>Health</b>	Growth chart (birth weight, weight now) Urine frequency per day (6 times or more), if less than 6 months Stools (frequency, consistency) Illnesses
<b>Pregnancy, birth, early feeds (where applicable)</b>	Antenatal care Feeding discussed at ante-natal care Delivery experience Rooming-in Prelacteal feeds Postnatal help with feeding
<b>Mother's condition and family planning</b>	Age Health – including nutrition and medications Breast health Family planning
<b>Previous infant feeding experience</b>	Number of previous babies How many breastfed and how long for If breastfed – exclusive or mixed fed Other feeding experiences
<b>Family and social situation</b>	Work situation Economic situation Family's attitude to infant feeding practices

## The FEEDING HISTORY JOB AID, 0-6 MONTHS

The FEEDING HISTORY JOB AID, 0-6 MONTHS is a guide to organize your thoughts, so that you do not get lost when you talk with a mother who has an infant or young child.

It is a good idea to ask a mother something from each section to make sure you are clear about any difficulties she may be having. If at any time a mother wants to tell you something that is important to her, let her tell you that first. Ask about the other things afterwards.

Remember to use your counselling skills when you are taking a history from a mother. Try to ask questions in an open way, although you may also have to ask some closed questions if you need specific information. Remember to use other counselling skills, such as reflecting back, empathy, and praise, in between questions so that the mother is encouraged to talk more and to feel confident.

### DEMONSTRATION 13.A TAKING A FEEDING HISTORY, 0-6 MONTHS

<i>Health Worker:</i>	"Good morning, I am Nurse Jane. May I ask your name, and your baby's name?"
<i>Mother:</i>	"Good morning, nurse; I am Mrs Green and this is my daughter Lucy."
<i>Health Worker:</i>	"She is lovely – how old is she?"
<i>Mother:</i>	"She is 5 months now."
<i>Health Worker:</i>	"Yes – and she is taking an interest in what is going on, isn't she? Tell me, what milk have you been giving her?"
<i>Mother:</i>	"Well, I started off breastfeeding her, but she is so hungry and I never seemed to have enough milk so I had to give her bottle feeds as well."
<i>Health Worker:</i>	"Oh dear, it can be very worrying when a child is always hungry. You decided to start bottle feeds? What are you giving her?"
<i>Mother:</i>	"Well, I put some milk in the bottle and then mix in a spoonful or two of cereal."
<i>Health Worker:</i>	"When did she start these feeds?"
<i>Mother:</i>	"Oh, when she was about 2 months old."
<i>Health Worker:</i>	"About 2 months. How many bottles do you give her each day?"
<i>Mother:</i>	"Oh, usually two – I mix up one in the morning and one in the evening, and then she just sucks it when she wants to – each bottle lasts quite a long time."
<i>Health Worker:</i>	"So she just takes the bottle little by little? What kind of milk do you use?"
<i>Mother:</i>	"Yes – well, if I have formula, I use some of that; or else I just use cow's milk and mix in some water, or sweetened milk, because they are cheaper. She likes the sweet milk!"
<i>Health Worker:</i>	"Formula is very expensive isn't it? Tell me more about the breastfeeding. How often is she doing that now?"
<i>Mother:</i>	"Oh she breastfeeds when she wants to – quite often in the night, and about 4 or 5 times in the day – I don't count. She likes it for comfort."
<i>Health Worker:</i>	"She breastfeeds at night?"
<i>Mother:</i>	"Yes she sleeps with me."
<i>Health Worker:</i>	"Oh that makes it easier, doesn't it? Did you have any other difficulties with breastfeeding, apart from worrying about not having enough?"

<i>Mother:</i>	"No, it wasn't difficult at all."
<i>Health Worker:</i>	"Do you give her anything else yet? Any other foods or drinks?"
<i>Mother:</i>	"No – I won't give her food for a long time yet. She is quite happy with the bottle feeds."
<i>Health Worker:</i>	"Can you tell me how you clean the bottles?"
<i>Mother:</i>	"I just rinse them out with hot water. If I have soap I use that, but otherwise just water."
<i>Health Worker:</i>	"OK. Now can you tell me about how Lucy is. Has she got a growth chart? Can I see it? [mother hands over growth chart] Thank you, now let me see.... She was 3.5 kilograms when she was born, she was 5.5 kilograms when she was 2 months old, and now she is 6.0 kilograms. You can see that she gained weight fast for the first two months, but it is a bit slower since then. Can you tell me what illnesses she has had?"
<i>Mother:</i>	"Well, she had diarrhoea twice last month, but she seemed to get better. Her stools are normal now."
<i>Health Worker:</i>	"Can I ask about the earlier days – how was your pregnancy and delivery?"
<i>Mother:</i>	"They were normal."
<i>Health Worker:</i>	"What did they tell you about feeding her when you were pregnant, and soon after she was born? Did anyone show you what to do?"
<i>Mother:</i>	"Nothing – they told me to breastfeed her, but that was all. The nurses were so busy, and I came home after one day."
<i>Health Worker:</i>	"They just told you to breastfeed?"
<i>Mother:</i>	"Yes – but I didn't have any milk in my breasts even then, so I gave her some glucose water until the milk started."
<i>Health Worker:</i>	"It is confusing isn't it when your breasts feel soft after delivery? You need help then, don't you?"
<i>Mother:</i>	"Yes."
<i>Health Worker:</i>	"Can I ask about you? How old are you?"
<i>Mother:</i>	"Sure – I am 22."
<i>Health Worker:</i>	"And how is your health?"
<i>Mother:</i>	"I am fine."
<i>Health Worker:</i>	"How are your breasts?"
<i>Mother:</i>	"I have had no trouble with my breasts."
<i>Health Worker:</i>	"May I ask if you are thinking about another pregnancy at any time? Have you thought about family planning?"
<i>Mother:</i>	"No – I haven't thought about it – I thought that you can't get pregnant when you are breastfeeding."
<i>Health Worker:</i>	"Well, it is possible if you are also giving other feeds. We will talk about it more later if you like. Is Lucy your first baby?"
<i>Mother:</i>	"Yes. And I do not want another one just yet."
<i>Health Worker:</i>	"Tell me about how things are at home – are you going out to work?"
<i>Mother:</i>	"No – I am a housewife now. I may try to find a job later when Lucy is older."
<i>Health Worker:</i>	"Who else do you have at home to help you?"
<i>Mother:</i>	"Lucy's father is with me. He has a job as a driver and he is very fond of Lucy, but he thinks she should not breastfeed at night – he thinks she breastfeeds too much and he wants her to sleep in another bed. But I am not sure..... He says that too much breastfeeding is what gives her diarrhoea."

[illegible]



## Session 14

# Common Breastfeeding Difficulties

### Objectives

After completing this session participants will be able to identify the causes of, and help mothers with, the following difficulties:

- 'not enough milk'
- a crying baby
- breast refusal

In previous sessions we have looked at ways to find out how mothers are managing with breastfeeding.

These include:

- good counselling skills to encourage a mother to tell you what is worrying her
- assessing a breastfeed, using your skills of observation to see if a baby is well positioned and well attached
- taking a detailed feeding history.

There are many reasons why mothers stop breastfeeding or start to mix feed, even if they decided, antenatally, to breastfeed exclusively.

When helping mothers with difficulties you will need to use all the skills you have learnt so far. Lay counsellors and community health workers have important roles to support mothers through these difficulties, as mothers may not visit a health facility to seek help.

### 'NOT ENOUGH MILK'

One of the commonest reasons for a mother to stop breastfeeding is that she thinks she does not have enough milk. Almost all mothers can produce enough breast milk for one or even two babies. Usually, even when a mother thinks that she does not have enough breast milk, her baby is in fact getting all that he needs.

Sometimes a baby does not get enough breast milk. But it is usually because he is not suckling enough, or not suckling effectively (see Session 3 'How breastfeeding works'). It is rarely because his mother cannot produce enough.

So it is important to think not about *how much milk a mother can produce*, but about *how much milk a baby is getting*.

**Reliable signs that a baby is not getting enough milk**

Poor weight gain

- less than 500 grams per month

Small amount of concentrated urine

- less than 6 times per day

For the first six months of life, a baby should gain at least 500g in weight each month. One kilogram is not necessary, and not usual. If a baby does not gain 500g in a month he is not gaining enough weight.

An exclusively breastfed baby who is getting enough milk usually passes dilute urine at least 6-8 times in 24 hours. If a baby is having other drinks, for example water, as well as breast milk, you cannot be sure he is getting enough milk if he is passing lots of urine.

**Possible signs that a baby is not getting enough breast milk**

- Baby not satisfied after breastfeeds
- Baby cries often
- Very frequent breastfeeds
- Very long breastfeeds
- Baby refuses to breastfeed
- Baby has hard, dry, or green stools
- Baby has infrequent small stools
- No milk comes out when mother expresses
- Breasts did not enlarge (during pregnancy)
- Milk did not 'come in' (after delivery)

There are several **possible** signs that a baby is not getting enough milk. Although these signs may worry a mother, there may be other reasons for them, so they are not reliable. For example, a baby may cry often because he has colic, although he might be getting plenty of milk.

REASONS WHY A BABY MAY NOT GET ENOUGH BREAST MILK			
BREASTFEEDING FACTORS	MOTHER: PSYCHOLOGICAL FACTORS	MOTHER: PHYSICAL CONDITION	BABY'S CONDITION
Delayed start	Lack of confidence	Contraceptive pill, diuretics	Illness
Feeding at fixed times	Worry, stress	Pregnancy	Abnormality
Infrequent feeds	Dislike of breastfeeding	Severe malnutrition	
No night feeds	Rejection of baby	Alcohol	
Short feeds	Tiredness	Smoking	
Poor attachment		Retained piece of placenta (rare)	
Bottles, pacifiers		Poor breast development (very rare)	
Other foods			
Other fluids (water, teas)			
These are COMMON		These are NOT COMMON	

The reasons in the first two columns ('Breastfeeding factors' and 'Mother: psychological factors') are common. The reasons in the second two columns ('Mother: physical condition' and 'Baby's condition') are not common. So it is not common for a mother to have a physical difficulty in producing enough breast milk.

### How to help mothers with 'not enough milk'

Firstly find out whether the baby is really getting enough breast milk or not (using the reliable signs). If the baby is not getting enough breast milk you need to find out WHY so that you can help the mother. If the baby is getting enough breast milk, but the mother thinks that he isn't, you need to find out WHY she doubts her milk supply so that you can build her confidence.

**Babies who are not getting enough breast milk: Low milk intake**

Use your counselling skills to take a good feeding history. Assess a breast feed to check positioning and attachment and to look for bonding or rejection. Use your observation skills to look for illness or physical abnormality in the mother or baby. Make suggestions depending on the cause of the insufficient milk. Always arrange to see the mother again soon. If possible see the mother and baby daily until the baby is gaining weight and the mother feels more confident. It may take 3-7 days for the baby to gain weight.

**Babies who are getting enough milk but the mother thinks they are not: Apparent milk insufficiency**

Use your counselling skills to take a good feeding history. Try to learn what may be causing the mother to doubt her milk supply. Explore the mother's ideas and feelings about her milk and pressures she may be experiencing from other people regarding breastfeeding. Assess a breastfeed to check positioning and attachment and to look for bonding or rejection. Praise the mother about good points about breastfeeding technique and good points about her baby's development. Correct mistaken ideas without sounding critical. Always arrange to see the mother again soon. These mothers are at risk of introducing other foods and fluids and need a lot of support until their confidence is built up again.



**Fig. 14.1** If a baby passes plenty of urine it usually means that he is getting plenty of breast milk

Mrs Singh says she does not have enough milk. Her baby is three months old and crying “all the time”. Her baby gained 200g last month. Mrs Singh manages the family farm by herself, so she is very busy. She breastfeeds her baby about 2-3 times at night, and about twice during the day when she has the time. She does not give her baby any other food or drink.

*What could you say to empathize with Mrs Singh?*

*Mrs Singh says she does not have enough breast milk – do you think her baby is getting enough milk?*

*What do you think is the cause of Mrs Singh’s baby not getting enough milk?*

*Can you suggest how Mrs Singh could give her baby more breast milk?*

## CRYING BABY

We will now look at another common reason for a mother to stop breastfeeding – the crying baby. Many mothers start unnecessary foods or fluids because they think that their baby ‘cries too much’. They think that their babies are hungry, and that they do not have enough milk. These additional foods and drinks do not make a baby cry less. Sometimes a baby cries more.

A baby who cries a lot can upset the relationship between him and his mother, and can cause tension among other members of the family. An important way to help a breastfeeding mother is to counsel her about her baby's crying.

REASONS WHY BABIES CRY	
▪ Discomfort	(dirty, hot, cold)
▪ Tiredness	(too many visitors)
▪ Illness or pain	(changed pattern of crying)
▪ Hunger	(not getting enough milk, growth spurt)
▪ Mother's food	(any food, sometimes cow's milk)
▪ Drugs mother takes	(caffeine, cigarettes, other drugs)
▪ Colic	
▪ ‘High needs’ babies	

## Causes of crying

### Hunger due to growth spurt:

A baby seems very hungry for a few days, possibly because he is growing faster than before. He demands to be fed very often. This is commonest at the ages of about two weeks, six weeks and three months, but can occur at other times. If he suckles often for a few days, the breast milk supply increases, and he breastfeeds less often again.

### Mother's food:

Sometimes a mother notices that her baby is upset when she eats a particular food. This is because substances from the food pass into her milk. It can happen with any food, and there are no special foods to advise mothers to avoid, unless she notices a problem.

### Colic:

Some babies cry a lot without one of the above causes. Sometimes the crying has a clear pattern. The baby cries continuously at certain times of day, often in the evening. He may pull up his legs as if he has abdominal pain. He may appear to want to suckle, but it is very difficult to comfort him. Babies who cry in this way may have a very active gut, or wind, but the cause is not clear. This is called ‘colic’. Colicky babies usually grow well, and the crying usually becomes less after the baby is three months old.

**'High needs' babies:**

Some babies cry more than others, and they need to be held and carried more. In communities where mothers carry their babies with them, crying is less common than in communities where mothers like to put their babies down to leave them, or where they put them to sleep in separate cots.

**How to help mothers whose babies cry a lot**

As with 'not enough' milk, you have to try to find the cause of the crying so that you can help the mother. Use your counselling skills to take a good feeding history. Help the mother to talk about how she feels and empathize with her. She may be tired, frustrated and angry.

Accept her ideas about the cause of the problem and how she feels about the baby. Try to learn about pressures from other people and what they think the cause of the crying is.

Assess a breastfeed to check baby's suckling position and the length of a feed. Make sure the baby is not ill or in pain. Check the growth and refer if necessary. Where relevant, praise the mother that her baby is growing well and it not ill or bad or naughty.

Demonstrate way to carry and comfort a crying baby. Give relevant information where appropriate.

Give relevant information where appropriate.

**Fig. 14.2 Some different ways to hold a colicky baby**

a. Holding the baby along your forearm



b. Holding the baby round his abdomen, on your lap



c. Father holding the baby against his chest



Mrs Biyela's baby is three month's old. She says that for the last few days he has suddenly started crying to be fed very often. She thinks that her milk supply has suddenly decreased. Her baby has breastfed exclusively until now and has gained weight well.

*What can you say to empathize with Mrs Biyela?*

*What can you praise to build Mrs Biyela's confidence?*

*What relevant information can you give to Mrs Biyela?*



## REFUSAL TO BREASTFEED

Refusal by the baby is a common reason for stopping breastfeeding. However, it can often be overcome. Refusal can cause great distress to the baby's mother. She may feel rejected and frustrated by the experience.

There are different kinds of refusal:

- Sometimes a baby attaches to the breast, but then does not suckle or swallow, or suckles very weakly.
- Sometimes a baby cries and fights at the breast, when his mother tries to breastfeed him.
- Sometimes a baby suckles for a minute and then comes off the breast choking or crying. He may do this several times during a single feed.
- Sometimes a baby takes one breast, but refuses the other.

You need to know why a baby is refusing to breastfeed, before you can help the mother and baby to enjoy breastfeeding again.

Most reasons why babies refuse to breastfeed fall into one of these categories.

- Baby ill, in pain or sedated
- Difficulty with breastfeeding technique
- Change which upsets baby
- Apparent, not real, refusal.

**Fig. 14.3 A baby may be unable to suckle because he is sick.**



CAUSES OF BREAST REFUSAL	
Illness, pain or sedation	Infection Brain damage Pain from bruise (vacuum, forceps) Blocked nose Sore mouth (thrush, teething)
Difficulty with breastfeeding technique	Use of bottles and pacifiers whilst breastfeeding Not getting much milk (e.g. poor attachment) Pressure on back of head when positioning Mother shaking breast Restricting length of feeds Difficulty co-ordinating suckle
Change which upsets baby (especially aged 3-12 months)	Separation from mother (e.g. if mother returns to work) New carer or too many carers Change in the family routine Mother ill Mother has breast problem e.g. mastitis Mother menstruating Change in smell of mother
Apparent refusal	Newborn - rooting Age 4-8 months - distraction Above one year - self-weaning

**Fig. 14.4 Sometimes a baby refuses because breastfeeding has become unpleasant or frustrating**



### How to help mothers whose babies refuse the breast

#### HELPING A MOTHER AND BABY TO BREASTFEED AGAIN

##### Help the mother to do these things:

- Keep her baby close - no other carers  
Give plenty of skin-to-skin contact at all times, not just at feeding times  
Sleep with her baby  
Ask other people to help in other ways.
- Offer her breast whenever her baby is willing to suckle  
When her baby is sleepy, or after a cup feed  
When she feels her ejection reflex working.
- Help her baby to take the breast  
Express breast milk into his mouth  
Position him so that he can attach easily to the breast – try different positions  
Avoid pressing the back of his head or shaking her breast.
- Feed her baby by cup  
Give her own expressed breast milk if possible; if necessary give artificial feeds  
Avoid using bottles, teats, pacifiers.

Mrs Barlow delivered a baby by vacuum extraction two days ago. He has a bruise on his head. When Mrs Barlow tries to feed him, he screams and refuses. She is very upset and feels that breastfeeding will be too difficult for her. You watch her trying to feed her baby, and you notice that her hand is pressing on the bruise.

*What could you say to empathize with Mrs Barlow?*

*What praise and relevant information can you give to build Mrs Barlow's confidence?*

*What practical help can you give to Mrs Barlow?*

## Summary

Notice how all the skills you have learnt so far can be used to help mothers in different situations: listening and learning skills; confidence and support skills; assessing a breastfeed; helping a mother to position and attach her baby; taking a detailed feeding history.

In many situations there may be no treatment, so giving the mother relevant information and suggestions is very important.

## Notes

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This image shows a full page of white paper with horizontal dotted lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Session 15

# Expressing Breast Milk

### Objectives

After completing this session participants will be able to:

- list the situations when expressing breast milk is useful
- explain how to stimulate the oxytocin reflex
- rub a mother's back to stimulate the oxytocin reflex
- demonstrate how to select and prepare a container for expressed breast milk
- describe how to store breast milk
- explain to a mother the steps of expressing breast milk by hand

### Introduction

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

Expressing milk is useful to:

- leave breast milk for a baby when his mother goes out or goes to work
- feed a low-birth-weight baby who cannot breastfeed
- feed a sick baby, who cannot suckle enough
- keep up the supply of breast milk when a mother or baby is ill
- prevent leaking when a mother is away from her baby
- help a baby to attach to a full breast
- help with breast health conditions, e.g. engorgement (see Session 20)
- facilitate the transition to another method of feeding or to heat-treat breast milk (see Sessions on HIV and infant feeding)

All mothers should learn how to express their milk, so that they know what to do if the need arises. Certainly all those who care for breastfeeding mothers should be able to teach mothers how to express their milk.

Many mothers are able to express plenty of breast milk using rather strange techniques. If a mother's technique works for her, let her do it that way. But if a mother is having difficulty expressing enough milk, teach her a more effective technique.

Breast milk can be stored for about eight hours at room temperature or up to 24 hours in a refrigerator.

## Stimulating the oxytocin reflex

The oxytocin reflex may not work as well when a mother expresses as it does when a baby suckles. A mother needs to know how to help her oxytocin reflex, or she may find it difficult to express her milk.

### HOW TO STIMULATE THE OXYTOCIN REFLEX

- Help the mother **psychologically**:

Build her confidence

Try to reduce any sources of pain or anxiety

Help her to have good thoughts and feelings about the baby.

- Help the mother **practically**. Help or advise her to:

**Sit quietly and privately or with a supportive friend.**

Some mothers can express easily in a group of other mothers who are also expressing for their babies.

**Hold her baby with skin-to-skin contact if possible.**

She can hold her baby on her lap while she expresses. If this is not possible, she can look at the baby. If this is not possible, sometimes even looking at a photograph of her baby helps.

**Warm her breasts.**

For example, she can apply a warm compress, or warm water, or have a warm shower. Warn her that she should test the temperature to avoid burning herself.

**Stimulate her nipples.**

She can gently pull or roll her nipples with her fingers.

**Massage or stroke her breasts lightly.**

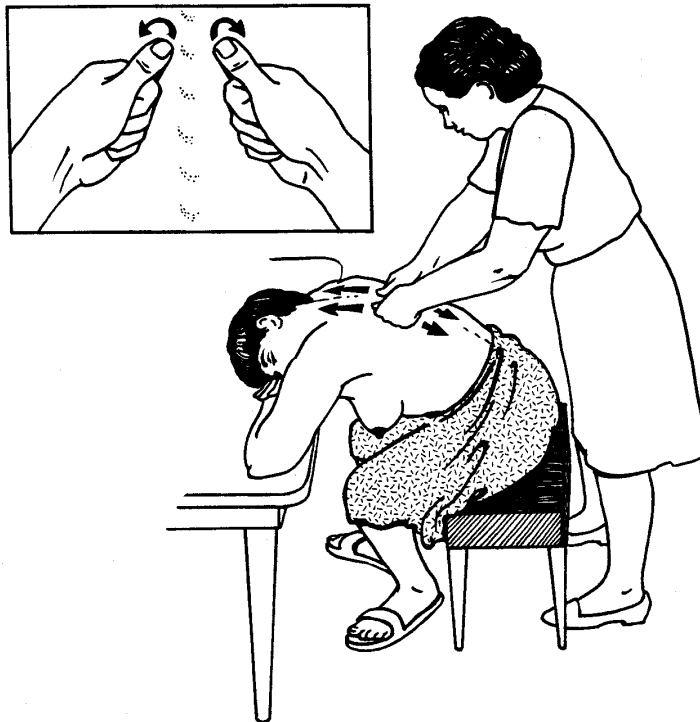
Some women find that it helps if they stroke the breast gently with finger tips or with a comb.

Some women find that it helps to gently roll their closed fist over the breast towards the nipple.

**Ask a helper to rub her back.**



**Fig. 15.1 A helper rubbing a mother's back to stimulate the oxytocin reflex**



### **How to express breast milk by hand**

Hand expression is the most useful way to express milk. It needs no appliance, so a woman can do it anywhere, at any time.

A woman should express her own breast milk. The breasts are easily hurt if another person tries.

If you are showing a woman how to express, show her on your own body as much as possible, while she copies you. If you need to touch her to show her exactly where to press her breast, be very gentle.

#### **HOW TO PREPARE A CONTAINER FOR EXPRESSED BREAST MILK (EBM)**

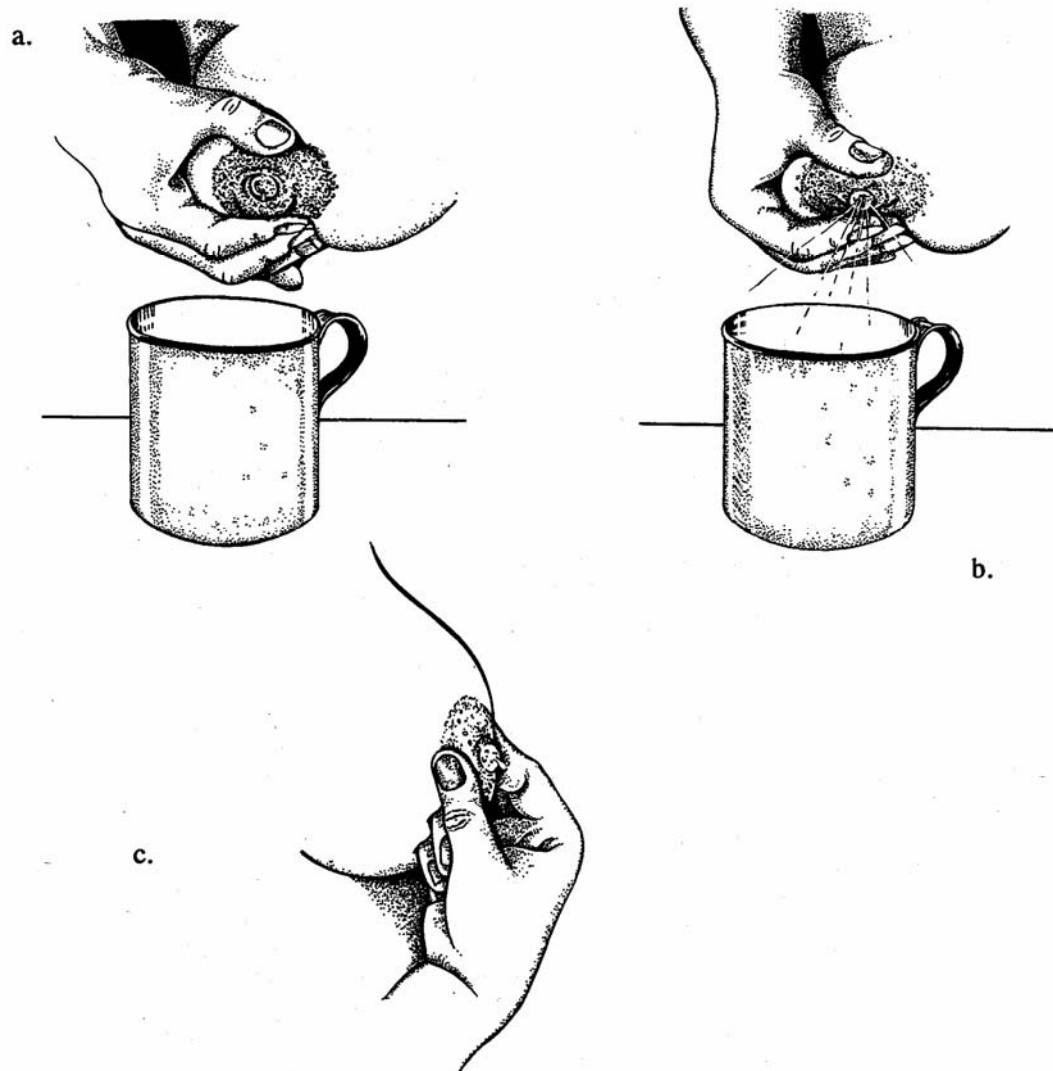
- Choose a cup, glass, jug or jar with a wide mouth.
- Wash the cup in soap and water (She can do this the day before).
- Pour boiling water into the cup, and leave it for a few minutes. Boiling water will kill most of the germs.
- When ready to express milk, pour the water out of the cup.

### HOW TO EXPRESS BREAST MILK BY HAND

- Teach a mother to do this herself. Do not express her milk for her. Touch her only to show her what to do, and be gentle. Teach her to:
- Wash her hands thoroughly.
- Sit or stand comfortably, and hold the container near her breast.
- Put her thumb on her breast ABOVE the nipple and areola, and her first finger on the breast BELOW the nipple and areola, opposite the thumb. She supports the breast with her other fingers (see Fig.15.2).
- Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far or she may block the milk ducts.
- Press her breast behind the nipple and areola between her finger and thumb. She should press on the larger ducts beneath the areola. Sometimes in a lactating breast it is possible to feel the ducts. They are like pods, or peanuts. If she can feel them, she can press on them.
- Press and release, press and release. This should not hurt - if it hurts, the technique is wrong. At first no milk may come, but after pressing a few times, milk starts to drip out. It may flow in streams if the oxytocin reflex is active.
- Press the areola in the same way from the SIDES, to make sure that milk is expressed from all segments of the breast.
- Avoid rubbing or sliding her fingers along the skin. The movement of the fingers should be more like rolling.
- Avoid squeezing the nipple itself. Pressing or pulling the nipple cannot express the milk. It is the same as the baby sucking only the nipple.
- Express one breast for at least 3-5 minutes until the flow slows; then express the other side; and then repeat both sides. She can use either hand for either breast, and change when they tire.
- Explain that to express breast milk adequately takes 20-30 minutes, especially in the first few days when only a little milk may be produced. It is important not to try to express in a shorter time.

**Fig. 15.2 How to express breast milk.**

- a. Place finger and thumb each side of the areola and press inwards towards the chest wall.
- b. Press behind the nipple and areola between your finger and thumb.
- c. Press from the sides to empty all segments.



### How often a mother should express milk

How often a mother should express her milk depends on the reason for expressing the milk. Usually she should express as often as the baby would breastfeed.

**To establish lactation, to feed a low-birth-weight (LBW) or sick newborn** she should start to express milk on the first day, as soon as possible after delivery. She may only express a few drops of colostrum at first, but it helps breast milk production to begin, in the same way that a baby suckling soon after delivery helps breast milk production to begin.

She should express as much as she can as often as her baby would breastfeed. This should be at least every three hours, including during the night. If she expresses only a few times, or if there are long intervals between expressions, she may not be able to produce enough milk.

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

**To build up her milk supply, if it seems to be decreasing after a few weeks:** Express very often for a few days (every 2 hours or even every hour), and at least every three hours during the night.

**To leave milk for a baby while she is out at work:** Express as much as possible before she goes to work, to leave for her baby. It is also very important to express while at work to help keep up her supply.

**To relieve symptoms, such as engorgement, or leaking at work:** Express only as much as is necessary.

## Session 16

# Cup-Feeding

### Objectives

After completing this session participants will be able to:

- list the advantages of cup-feeding
- estimate the volume of milk to give to a baby according to weight
- demonstrate how to cup-feed safely

### The advantages of cup-feeding

- . Cups are easy to clean with soap and water, if boiling is not possible.
- . Cups are less likely than bottles to be carried around for a long time, giving bacteria time to breed.
- . Cup-feeding is associated with less risk of diarrhoea, ear infections and tooth decay.
- . A cup cannot be left beside a baby, for the baby to feed himself. The person who feeds a baby by cup has to hold the baby and look at him and give him some of the contact that he needs.
- . A cup does not interfere with suckling at the breast.
- . A cup enables a baby to control his own intake.

## HOW TO FEED A BABY BY CUP

- Wash your hands.
- Hold the baby sitting upright or semi-upright on your lap.
- Place the estimated amount of milk for one feed into the cup.
- Hold the small cup of milk to the baby's lips.
  - Tip the cup so that the milk just reaches the baby's lips.
  - The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.
- The baby becomes alert, and opens his mouth and eyes.
  - A low-birth-weight (LBW) baby starts to take the milk into his mouth with his tongue.
  - A full term or older baby sucks the milk, spilling some of it.
- DO NOT POUR the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself.
- When the baby has had enough, he closes his mouth and will not take any more. If he has not taken the calculated amount, he may take more next time, or you may need to feed him more often.
- Measure his intake over 24 hours - not just at each feed.

**Fig. 16.1 Feeding a baby by cup**



**AMOUNT OF MILK TO GIVE TO BABIES**

- Babies who weigh 2.5 kg or more  
150 ml milk per kg body weight per day  
Divide the total into eight feeds, and give 3-hourly
- Babies who weigh less than 2.5 kg (Low-birth-weight)  
Start with 60 ml/kg body weight  
Increase the total volume by 20 ml per kg per day, until the baby is taking a total of 200 ml per kg per day  
Divide the total into 8-12 feeds, to feed every 2-3 hours  
Continue until the baby weighs 1800 g or more, and is fully breastfeeding
- Check the baby's 24-hour intake. The size of individual feeds may vary.

**Amount of milk to give to babies**

The amount of milk that a baby takes at each feed varies with all methods of feeding. Let the baby decide when he has taken enough. If a baby takes a very small feed, offer extra at the next feed, or give the next feed early, especially if the baby shows signs of hunger.

If a mother produces only a small amount of breast milk, be sure to give it all to her baby. Help her to feel that this small amount is valuable, especially to prevent infection. This helps her confidence, and will help her to produce more milk.

Low-birth-weight (LBW) babies need only very small volumes during the early days. If the mother can express even a small amount of colostrum, it is often all that her baby needs.

**Example:**

Calculate the volume of milk, per feed, for a two-week-old baby who weighs 3.8 kg

The volume of milk the baby needs in 24 hours is 150 ml per kg

*How much milk will this baby need in 24 hours?*

*How much milk should the baby be offered each feed?*

Many mothers do not have equipment for measuring volumes. You could explain to the mother how much milk the cup holds, which she uses to feed the baby, and show her how much milk to offer each feed. For example: using the calculation above – if the mother has a cup which holds 150 ml, she should offer the baby approximately half a cup of milk per feed.



## Session 17

# Overview of HIV and Infant Feeding

### Objectives

After completing this session participants will be able to:

- explain the risk of mother-to-child transmission of HIV
- describe factors which influence mother-to-child transmission
- outline approaches that can prevent mother-to-child transmission through safer infant feeding practices
- state infant feeding recommendations for women who are HIV-positive and for women who are HIV-negative or do not know their status

The epidemic of HIV and AIDS has become a major problem in many countries. A very sad aspect of the epidemic is the number of young children who are infected. This is one cause of the increasing number of child deaths.

It is important to remember that the best way to prevent infection of children is to help their fathers and mothers to avoid becoming infected in the first place, and to avoid infecting each other. Men's responsibility for protecting their families must be emphasized.

### Defining HIV and AIDS

#### HIV

- Human immunodeficiency virus is the virus that causes AIDS

#### AIDS

- Acquired immunodeficiency syndrome is the active pathological condition that follows the earlier, non-symptomatic state of being HIV-positive

People infected with HIV feel well at first and usually do not know they are infected. They may remain healthy for many years as the body produces antibodies to fight HIV.

But the antibodies are not very effective. The virus lives inside the immune cells and slowly destroys them. When these cells are destroyed, the body becomes less able to fight infections. The person becomes ill and after a time develops AIDS. Eventually he or she dies.

A special blood test can be done to see if people have HIV antibodies in their blood. A positive test means that the person is infected with HIV. This is called HIV-positive or seropositive.

Once people have the virus in their body, they can give the virus to other people. HIV is passed from an infected man or woman to another person through:

- exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse
- HIV-infected blood transfusions or contaminated needles
- HIV can also pass from an infected woman to her child during pregnancy, at the time of birth or through breastfeeding. This is called *mother-to-child transmission* or MTCT.

## Risk of mother-to-child transmission of HIV

### **Mother-to-Child Transmission of HIV**

Most children who get HIV are usually infected through their mother

- during pregnancy across the placenta
- at the time of labour and birth through blood and secretions
- through breastfeeding

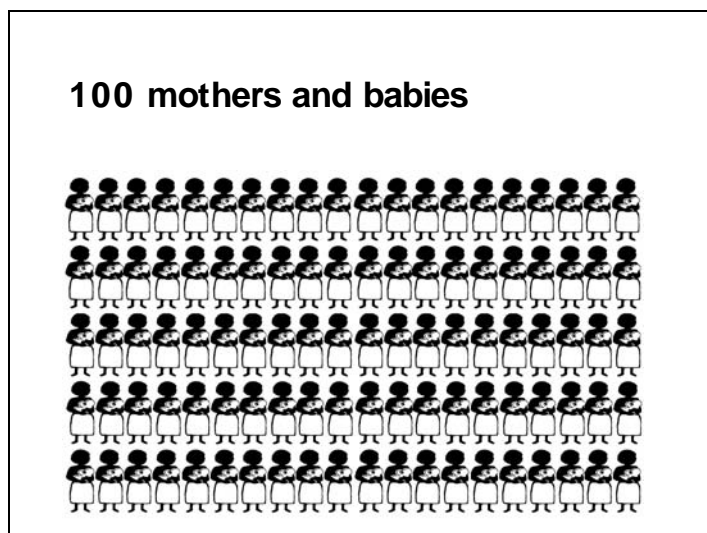
This is called mother-to-child transmission of HIV or MTCT

### **Estimated risk and timing of mother-to-child transmission of HIV in the absence of interventions**

Timing of MTCT of HIV	Transmission Rate
• During pregnancy	5-10%
• During labour and delivery	10-15%
• During breastfeeding	5-20%
• Overall without breastfeeding	15-25%
• Overall with breastfeeding to 6 months	20-35%
• Overall with breastfeeding to 18–24 months	30-45%

About two-thirds of infants born to HIV-infected mothers will not be infected, even with no intervention, such as anti-retroviral prophylaxis or caesarean section. Not all babies born to HIV-infected mothers become infected with HIV. Exclusive breastfeeding during the first few months of life carries a lower risk of HIV transmission than mixed feeding. Research has shown that the transmission risk at six months in exclusively breastfed babies is lower than in mixed fed babies.

If the prevalence of HIV infection among the women in your district is known to be 20% and you see 100 women, 20 of these 100 women are likely to be HIV-positive. The other 80 will probably be HIV-negative. We used a prevalence rate of 20% for this example. Use your local rates when talking with the mother.



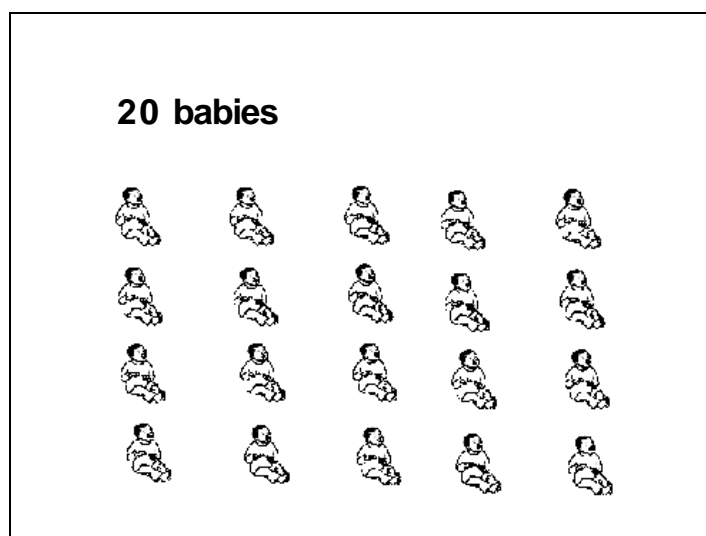
The mother-to-child transmission rate is about 15-25% during pregnancy or delivery. We use 20% for this example. Four infants of the 20 HIV-positive mothers will probably be infected during pregnancy or delivery.

The transmission rate through breastfeeding is about 5-20% of the infants who are breastfed for several months by mothers who are HIV-positive. Let us use 15% for this example. Assuming all the infants are breastfeeding, about three of the infants, of the HIV-positive mothers, are likely to be infected by breastfeeding.

In a group of 100 mothers in an area with a 20% prevalence of HIV infection among mothers, about three babies are likely to be infected with HIV through breastfeeding. If all HIV-positive mothers were breastfeeding exclusively, the number of infected infants would be less.

If pregnant women are not tested, you cannot predict which babies will be infected. So, if a mother does not know her HIV status, she should be encouraged to breastfeed. She should also be assisted to protect herself against infection with HIV.

When you are explaining the risk of transmission to an individual mother it may be easier to use a card with 20 babies.



This card shows 20 babies. All their mothers have been tested and found to be HIV-positive. The transmission rate during pregnancy and delivery (combined) is about 20% during pregnancy - four infants are likely to be infected before or during delivery. The transmission rate through breastfeeding is 5-20% if mothers breastfeed for several months. We will use 15% for this example. Three infants are likely to be infected if they all breastfeed.

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

There is a copy of these 20 babies in your set of Counselling Cards.

## Factors which affect MTCT of HIV through breastfeeding

### Factors which affect mother-to-child transmission of HIV

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

#### Recent infection with HIV

If a woman becomes infected with HIV during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent an HIV-negative woman from becoming infected at this time because then both the woman and her baby are at risk. All sexually active people need to know that unprotected extramarital sex exposes them to infection with HIV. They may then infect their partners, and their baby too will be at high risk, if the infection occurs during pregnancy or while breastfeeding.

#### Severity of HIV infection

If the mother is ill with HIV-related disease or AIDS and is not being treated with drugs for her own health, she has more virus in her body and transmission to the baby is more likely.

#### Duration of breastfeeding

The virus can be transmitted at any time during breastfeeding. In general, the longer the duration of breastfeeding the greater the risk of transmission.

#### Exclusive breastfeeding or mixed feeding

There is evidence that the risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding. The risk is less if breastfeeding is exclusive. Other foods or drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby's body.

#### Condition of the breast

Nipple fissure (particularly if the nipple is bleeding) mastitis or breast abscess may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions, and may also reduce transmission of HIV.

#### Condition of the baby's mouth

Mouth sores or thrush in the infant may make it easier for the virus to get into the baby through the damaged skin.

This list of factors suggest several strategies that would be useful for all women, whether they are HIV-positive or HIV-negative. They provide ways to reduce the risk of HIV transmission, which can be adopted for everyone, and they do not depend on knowing women's HIV status. Other strategies, such as the avoidance of breastfeeding, can be harmful for babies, so they should only be used if a women knows that she is HIV-positive.

Antiretroviral drugs (ARV) are used to reduce the amount of HIV in the body. It has been shown that if a short course of ARVs are given at the end of pregnancy and at the time of delivery, the risk of transmission at that time can be reduced by about half. There are several different short ARV regimens, which can be used in different ways.

We do not yet know how effective or safe ARVs are in preventing transmission through breastfeeding when given to either the baby or mother over a longer time period.

### **Approaches to prevent mother-to-child transmission**

Reducing HIV transmission to pregnant women, mothers and their children, including transmission by breastfeeding, should be part of a comprehensive approach both to HIV prevention, care and support, and to antenatal, perinatal and postnatal care and support.

Women who are HIV-negative or of unknown HIV status should be encouraged and supported to breastfeed.

#### **Policy of supporting breastfeeding**

“As a general principle, in all populations, irrespective of HIV infection rates, breastfeeding should continue to be protected, promoted and supported.”

HIV and Infant Feeding: a policy statement, developed collaboratively by UNAIDS, WHO and UNICEF, 1997.

### **Infant feeding recommendations for HIV-positive women**

- When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended
- Otherwise, exclusive breastfeeding is recommended during the first months of life

Feeding recommendations for women who have been tested and know they are HIV-positive are different.

To minimize HIV transmission risk, breastfeeding should be discontinued as soon as feasible, taking into account local circumstances, the individual woman's situation and the risks of replacement feeding. Remember, not breastfeeding has many disadvantages, including risks to the infant's health including malnutrition and diarrhoea.

When HIV-infected mothers choose not to breastfeed from birth or to stop breastfeeding early, they should be provided with specific guidance and support for at least the first two years of the child's life to ensure adequate replacement feeding.

Programmes should strive to improve conditions that will make replacement feeding safer for HIV-infected mothers and families.

All HIV-infected mothers should receive counselling, which includes provision of general information about the risks and benefits of various infant feeding options, and specific guidance in selecting the option most likely to be suitable for their situation.

Whatever a mother decides, she should be supported in her choice. Mixed feeding should be avoided because it brings both the risks of HIV infection and the risks of diarrhoea and other infectious diseases.



## Session 18

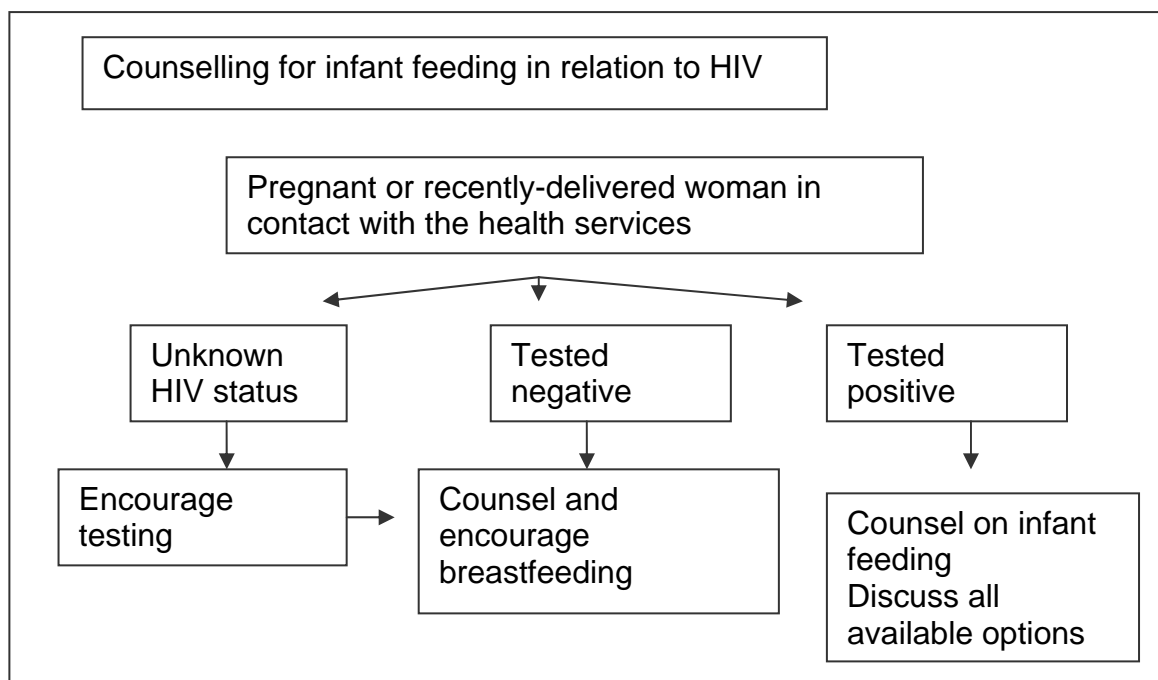
# Counselling for Infant Feeding Decisions

### Objectives

After completing this session participants will be able to:

- describe the elements to be considered for counselling on infant feeding in relation to HIV
- list the different feeding options available to HIV-positive mothers

### Counselling for infant feeding in relation to HIV



You may be giving infant feeding counselling to women who may or may not know their HIV-status. HIV testing may not be available everywhere. A woman may be aware that HIV can pass to her baby and worry about this, in particular about the possibility of transmission through breastfeeding.

**For women who have not been tested or do not know their results**

Talk to them of the advantages of HIV testing for them and their families. In the absence of a test result, provide counselling about their concerns and encourage them to feed their babies as if they were HIV-negative, that is to breastfeed exclusively for six months and to continue breastfeeding with adequate complementary feeding up to two years or beyond. If a woman does not know her HIV status, it is usually safer for her baby if she breastfeeds. Babies who do not breastfeed are at greater risk of illness.

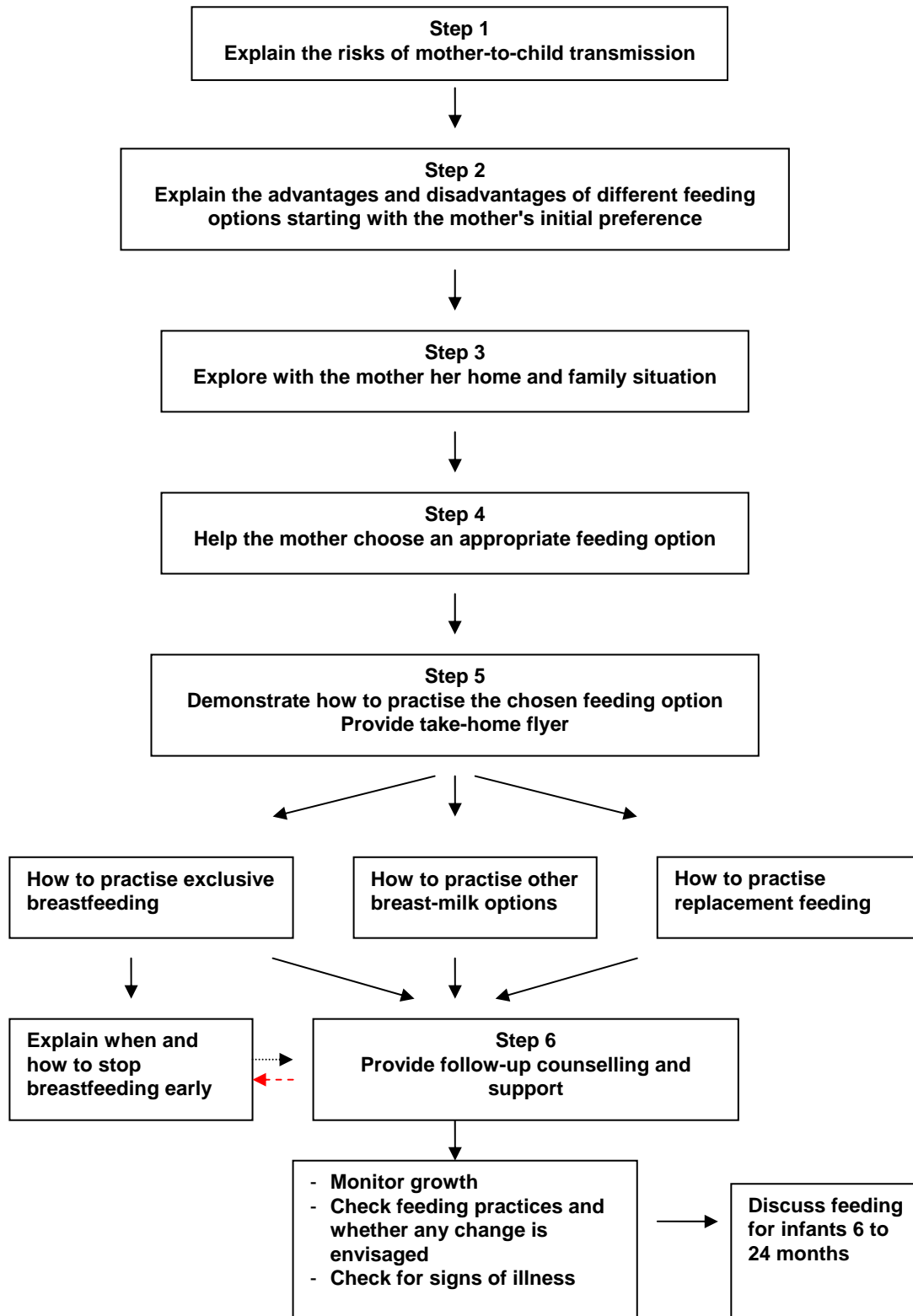
**For women who test negative**

Talk to them of the risks of becoming infected during pregnancy or while breastfeeding. Suggest that they have a repeat test if they think they have been exposed to HIV since the last test. Suggest that they feed their babies as per the general population recommendation, that is to breastfeed exclusively for six months and to continue breastfeeding with adequate complementary feeding up to two years or beyond.

**For women who test positive**

Discuss with the woman her possible feeding options.

## COUNSELLING FLOW CHART FOR HIV-POSITIVE WOMEN

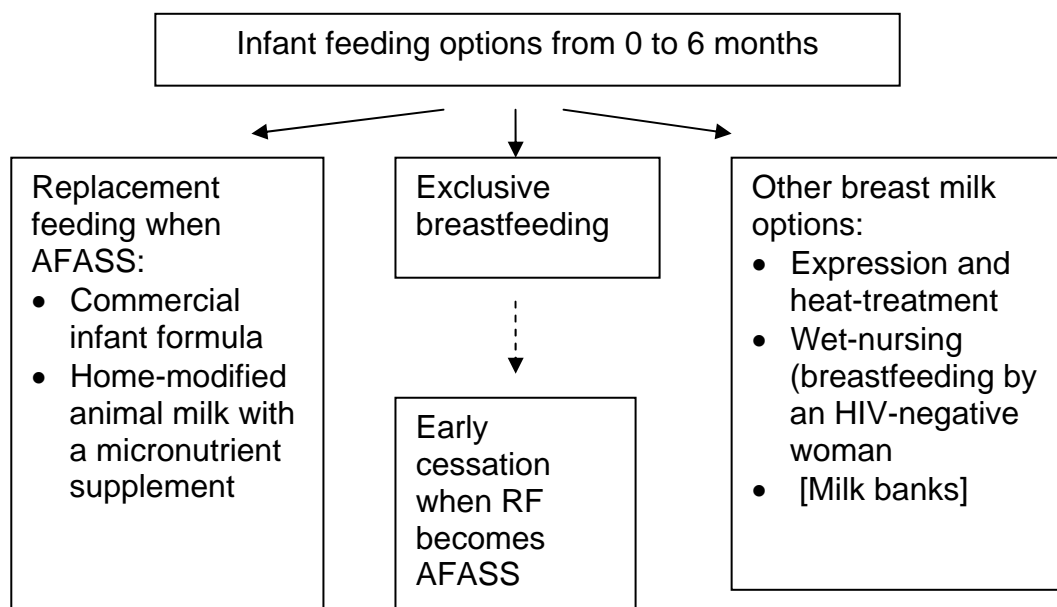


**Infant feeding counselling for HIV-positive women may be needed:**

- before a woman is pregnant
- during her pregnancy
- soon after her baby is born
- soon after receiving the results of her baby's HIV test
- when her baby is older
- when a woman fosters a baby whose mother is very sick or has died.

As her baby gets older or if her situation changes, an HIV-positive mother may need on-going infant feeding counselling. She may want to change her method of feeding.

Each woman's situation is different, so health workers need to be able to discuss all the various feeding options.



**DEFINITIONS OF ACCEPTABLE, FEASIBLE, AFFORDABLE, SUSTAINABLE AND SAFE****Acceptable:**

The mother perceives no barrier to replacement feeding. Barriers may have cultural or social reasons, or be due to fear of stigma or discrimination.

**Feasible:**

The mother (or family) has adequate time, knowledge, skills and other resources to prepare the replacement food and feed the infant up to 12 times in 24 hours.

**Affordable:**

The mother and family, with community or health-system support if necessary, can pay for the cost of purchasing/producing, preparing and using replacement feeding, including all ingredients, fuel, clean water, soap and equipment, without compromising the health and nutrition of the family.

**Sustainable:**

Availability of a continuous and uninterrupted supply, and dependable system of distribution for all ingredients and products needed for safe replacement feeding, for as long as the infant needs it, up to one year of age or longer.

**Safe:**

Replacement foods are correctly and hygienically prepared and stored and fed in nutritionally adequate quantities with clean hands and using clean utensils, preferably by cup.

**Replacement feeding**

is the process of feeding a child who is not breastfeeding with a diet that provides all the nutrients the child needs until the child is fully fed on family food

[illegible]

## Session 19

# Breastfeeding and Breast-Milk Options for HIV-infected Women

### Objectives

After completing this session participants will be able to:

- explain the advantages and disadvantages of breastfeeding and breast-milk feeding options for HIV-infected women
- explain the method of early cessation (stopping breastfeeding early)
- discuss wet-nursing and finding a wet-nurse
- demonstrate how to heat-treat expressed breast milk

We mentioned in Session 18 several breast-milk options that HIV-positive mothers may choose.

These include:

- . exclusive breastfeeding for the first few months followed by early cessation
- . expressing and heat-treating her breast milk
- . wet-nursing (breastfeeding by another woman, who is HIV-negative)

In this session we will discuss how to help a woman to use any of these options, and to do it as safely as possible.

### The Advantages of Breastfeeding

A mother who is HIV-positive may decide that breastfeeding is her best option and she should be supported to establish and maintain it.

### **ADVANTAGES AND DISADVANTAGES OF EXCLUSIVE BREASTFEEDING FOR AN HIV-INFECTED MOTHER**

#### **Advantages:**

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

#### **Disadvantages:**

- As long as the mother breastfeeds, her baby is exposed to HIV.
- People may pressurize her to give water, other liquids, or foods to the baby while she is breastfeeding. This practice, known as mixed feeding, may increase the risk of diarrhoea and other infections, and increases the risk of HIV transmission.
- The mother will need support to exclusively breastfeed until it is possible for her to use another feeding option.
- It may be difficult to do if the mother works outside the home and cannot take the baby with her.
- It may be difficult to do if the mother gets very sick.

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

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

An HIV-infected mother who chooses to breastfeed needs to use a good technique to prevent nipple fissure and mastitis, both of which may increase the risk of HIV transmission. Management of breast conditions will be covered in the next session.



## Early cessation of breastfeeding

HIV can be transmitted at any time during breastfeeding. Early cessation reduces the risk of transmission by reducing the length of time the infant is exposed to the virus in breast milk. However, stopping breastfeeding also increases the risk of other illnesses and death.

The most appropriate time to stop breastfeeding depends on the mother's particular situation, and may be at any time between 0-6 months. The most appropriate time is as soon as replacement feeding becomes acceptable, feasible, affordable, sustainable and safe for her and her baby.

The period of time during which a mother stops breastfeeding and changes to replacement feeding is known as the transition period. Preliminary experience indicates that mothers can stop breastfeeding in a period of 2-3 days to 2-3 weeks with counselling and support.

Some mothers may not be able to provide replacement feeding for an infant even from six months onwards. Among other factors, suitable replacement foods may not be available. In that case the mother should consider other breast-milk options such as expressing and heat-treating breast milk from six months onwards. For some infants, the risk of malnutrition and other morbidity may still be greater if they are not receiving breast milk, than the risk of HIV transmission through continued breastfeeding, even after six months.

### HOW TO STOP BREASTFEEDING EARLY

- While a mother is breastfeeding, teach her baby to drink expressed, unheated, breast milk from a cup (see Cards 10 and 13).
- This milk may be heat-treated to destroy the HIV (see Card 14).
- Once the baby is drinking comfortably, replace one breastfeed with one cup-feed using expressed breast milk.
- Increase the frequency of cup-feeding every few days and reduce the frequency of breastfeeding. Ask an adult family member to help cup-feed the baby.
- Stop putting her baby to the breast completely as soon as she and her baby are accustomed to frequent cup-feeding. From this point on, it is best to heat-treat her breast milk.
- If her baby is only receiving milk, check that he is passing enough urine - at least six wet nappies in every 24-hour period. This means that he is getting enough milk.
- Gradually replace the expressed heat-treated breast milk with formula or home-modified animal milk.
- If her baby needs to suck, give a clean finger instead of the breast.
- To avoid breast engorgement (swelling) express a little milk whenever her breasts feel too full. This will help her to feel more comfortable. Use cold compresses to reduce the inflammation. Wear a firm bra to prevent breast discomfort.
- Do not begin breastfeeding again once she has stopped. If she does, she can increase the chances of passing HIV to her baby. If her breasts become engorged, express the milk by hand and discard it.
- Begin using the family planning method of her choice, if she has not already done so, as soon as she start reducing breastfeeds.

You may have noticed that there is much information to provide. You may want to use the relevant take-home flyers to explain to the mother while showing her what to do. Card 17 talks about how to stop breastfeeding early. Remember to use your counselling skills when talking to a woman. Try to use suggestions rather than commands.

## Breastfeeding by another woman who is HIV-negative

Asking another woman who is HIV-negative to breastfeed the baby may be an option. When a woman breastfeeds a baby to whom she did not give birth, it is called *wet-nursing*.

### WET-NURSING (BREASTFEEDING BY ANOTHER WOMAN)

- To protect a baby from HIV, the wet-nurse must be HIV-negative. The only way for her to know for sure that she is negative is to be tested at least three months after the last time she had unprotected sex or any other possible exposure to HIV.
- The wet-nurse will need to protect herself from HIV infection the entire time that she is breastfeeding.
- This means:
  - not having sex, or
  - using a condom every time she has sex, or
  - having sex with only one partner who has tested negative for HIV and who is being faithful to her, and
  - not sharing any razors, needles or other piercing objects.
- The wet-nurse should be available to feed the baby on demand, both day and night.
- The wet-nurse should receive counselling about how to prevent cracked nipples, breast infections and engorgement.
- If a baby is already infected with HIV, there may be a very small chance that he can pass the virus to the wet-nurse through breastfeeding. The wet-nurse needs to know about this small risk and avoid breastfeeding while the baby has oral thrush or she has cracked nipples.

## How to heat-treat expressed breast milk

Expressing and heat-treating breast milk is another option to consider:

- if a mother wishes to give her baby her own milk - either in the first few months or later on
- if alternative milks are too expensive or difficult to get
- for sick or low-birth-weight infants who are more at risk from artificial feeding and may otherwise require special types of formula

According to available research, heat-treatment destroys HIV in breast milk making it safe to feed to the woman's own baby. Heat-treatment reduces the level of some anti-infective components of breast milk. However, heat-treated breast milk remains superior to breast-milk substitutes.

### HOW TO HEAT-TREAT AND STORE BREAST MILK

#### Before heating milk, gather the following:

- clean containers with wide necks and covers, enough to store the milk
- a small pot to heat the milk
- a large container of cool water
- a small cup for feeding the baby
- fuel to heat the milk
- soap and clean water to wash the equipment.

#### Follow these steps:

- Wash all the pots, cups and containers with soap and water.
- Only heat enough expressed milk for one feed.
- Heat your milk to boiling point and then place a small pot in a container of cool water so that it cools more quickly. If that is not possible, let the milk stand until it cools. Store the boiled milk in a clean covered container, in a cool place and use it within one hour.
- A mother can store unheated breast milk for about eight hours at room temperature or up to 24 hours in a refrigerator.

A mother may be able to follow her infant's sleeping pattern and prepare feeds ready for when she expects the infant to wake. If necessary, to avoid leaving the milk too long, or wasting it, she may sometimes have to wake her infant for a feed. To avoid having to use more fuel than necessary it may be possible to heat-treat the milk while cooking the family's meals.

## Session 20

# Breast Conditions

### Objectives

After completing this session participants will be able to recognize and manage these common breast conditions

- flat and inverted nipples
- engorgement
- blocked duct and mastitis
- sore nipples and nipple fissure.

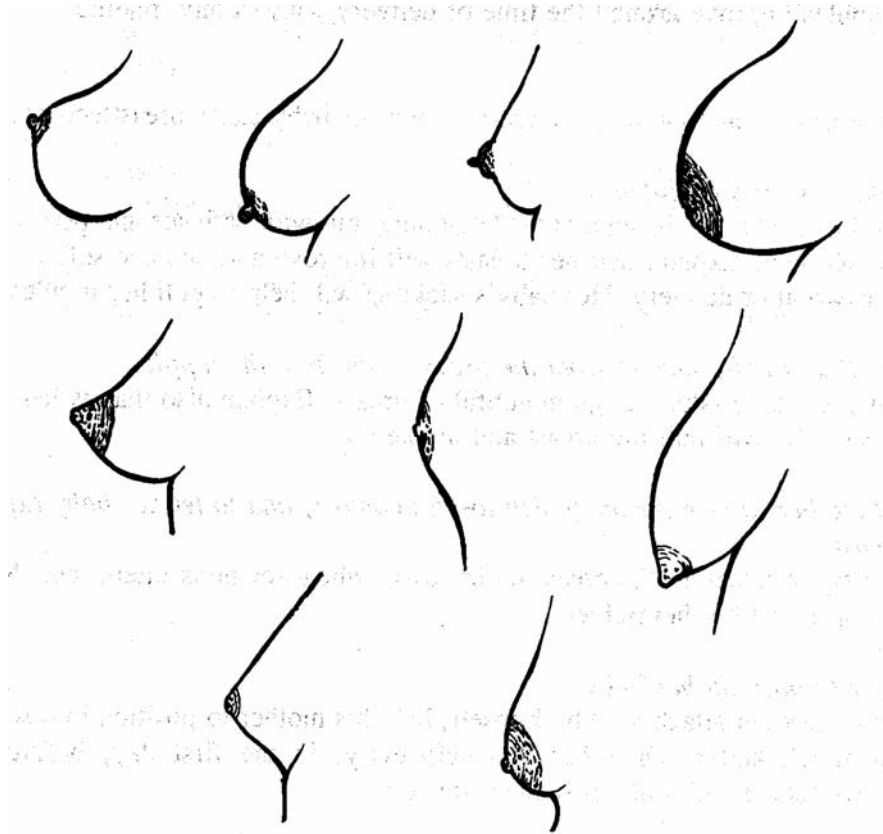
### Introduction

Recognition and management of these breast conditions are important both to relieve the mother, and to enable breastfeeding to continue. Treatment differs for some breast conditions if the woman is HIV-infected. We will discuss these during the session.

### Different breast shapes

Many mothers worry about the size of their breasts. Women with small breasts often worry that they cannot produce enough milk. Differences in the sizes of breasts are mostly due to the amount of fat, and not the amount of tissue that produces milk. It is important to reassure women that they can produce enough milk, whatever the size of their breasts.

**Fig. 20.1** There are many different shapes and sizes of breast. Babies can breastfeed from almost all of them.



## MANAGEMENT OF FLAT AND INVERTED NIPPLES

### ■ Antenatal treatment

Antenatal treatment is probably not helpful.

For example, stretching nipples, or wearing nipple shells does not help.

Most nipples improve around the time of delivery without any treatment.

Help is most important soon after delivery, when the baby starts breastfeeding.

### ■ Build the mother's confidence

Explain that it may be difficult at the beginning, but with patience and persistence she can succeed.

Explain that her breasts will improve and become softer in the week or two after delivery.

Explain that a baby suckles from the breast - not from the nipple. Her baby needs to take a large mouthful of breast.

Explain also that as her baby breastfeeds, he will stretch her nipple out.

Encourage her to give plenty of skin-to-skin contact, and to let her baby explore her breasts. We will be discussing skin-to-skin contact in Session 25.

Let him try to attach to the breast on his own, whenever he is interested.

Some babies learn best by themselves.

### ■ Help the mother to position her baby

If a baby does not attach well by himself, help his mother to position him so that he can attach better.

Give her this help early, in the first day, before her breast milk 'comes in' and her breasts are full.

Sometimes putting a baby to the breast in a different position makes it easier for him to attach.

For example, some mothers find that the underarm position is helpful.

Sometimes making the nipple stand out before a feed helps a baby to attach.

Stimulating her nipple may be all that a mother needs to do.

There is another method called the syringe method which we will discuss in this session.

Sometimes shaping the breast makes it easier for a baby to attach. To shape her breast, a mother supports it from underneath with her fingers, and presses the top of the breast gently with her thumb.

### ■ If a baby cannot suckle effectively in the first week or two, help his mother to try the following:

- express her milk and feed it to her baby with a cup.
- expressing milk helps to keep breasts soft, so that it is easier for the baby to attach to the breast; and it helps to keep up the supply of breast milk.

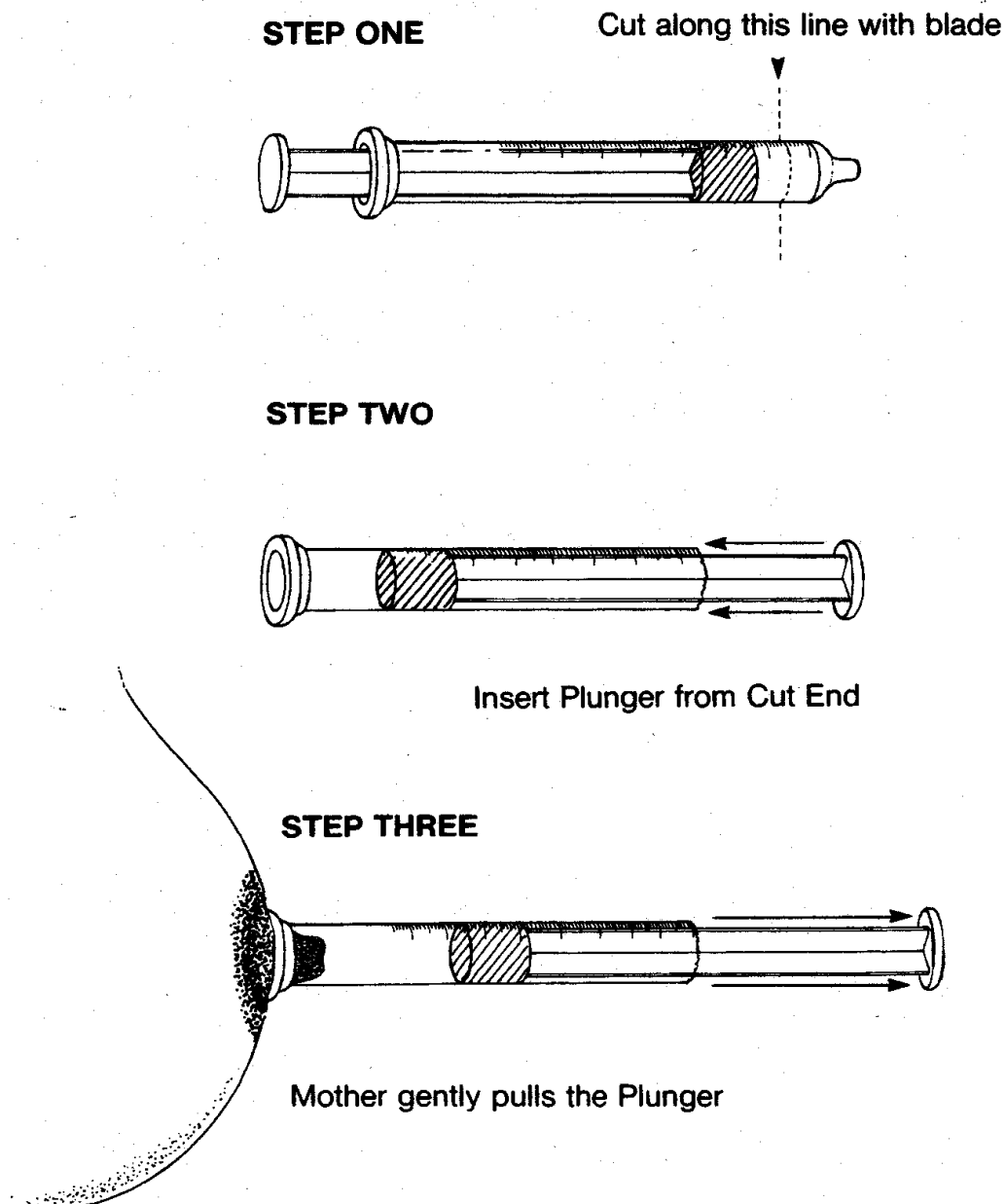
She should not use a bottle, because that makes it more difficult for her baby to take her breast.

Alternatively she could express a little milk directly into her baby's mouth.

Some mothers find that this is helpful. The baby gets some milk straight away, so he is less frustrated. He may be more willing to try to suckle.

She should continue to give him skin-to-skin contact, and let him try to attach to her breast on his own.

**Fig. 20.2** Preparing and using a syringe for treatment of inverted nipples.





## Full and engorged breasts

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

Breasts may become engorged if:

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

Engorgement may be prevented by letting babies feed as soon as possible after delivery, making sure the baby is well positioned and attached to the breast and encouraging unrestricted breastfeeding. Milk does not then build up in the breast.

### TREATMENT OF BREAST ENGORGEMENT

- Do not 'rest' the breast. To treat engorgement it is essential to remove milk. If milk is not removed, mastitis may develop, an abscess may form and breast milk production decreases.
- If baby is able to suckle he should feed frequently. This is the best way to remove milk. Help the mother to position her baby, so that he attaches well. Then he suckles effectively, and does not damage the nipple.
- If baby is not able to suckle help his mother to express her milk. Sometimes it is only necessary to express a little milk to make the breast soft enough for the baby to suckle.
- Before feeding or expressing, stimulate the mother's oxytocin reflex. Some things that you can do to help her, or she can do are:
  - put a warm compress on her breasts
  - massage her back and neck
  - massage her breast lightly
  - stimulate her breast and nipple skin
  - help her to relax
  - sometimes a warm shower or bath makes milk flow from the breasts so that they become soft enough for the baby to suckle.
- After a feed, put a cold compress on her breasts. This will help to reduce oedema.
- Build the mother's confidence. Explain that she will soon be able to breastfeed comfortably again.

### Engorgement in an HIV-infected woman who is stopping breastfeeding

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

Engorgement may also occur in a woman who wishes to stop breastfeeding – for example, an HIV-infected woman who is stopping breastfeeding early. When a woman is trying to stop breastfeeding she should only express enough milk to relieve the discomfort and not to increase the milk production. Milk may be expressed a few times per day when the breasts are overfull to make the mother comfortable. Pharmacological treatments to reduce milk supply are not recommended. However, a simple analgesic, for example, ibuprofen, may be used to reduce inflammation and help the discomfort while the mother's milk supply is decreasing. If ibuprofen is not available then paracetamol may be used.

## Mastitis

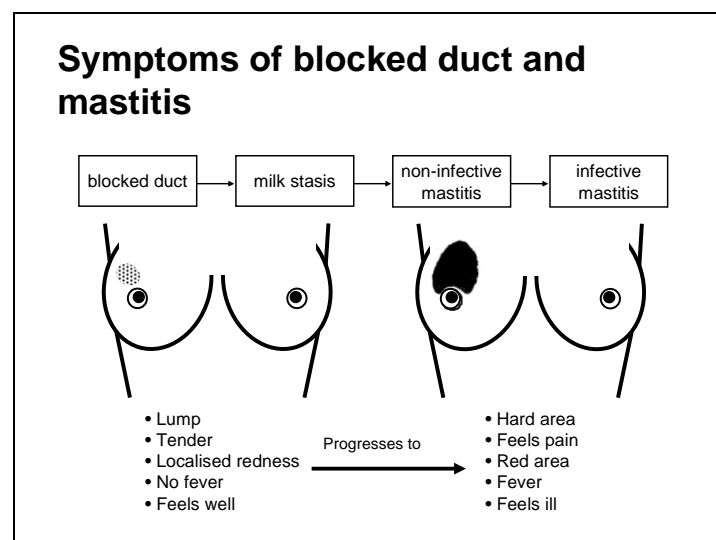
A woman with mastitis has severe pain, fever and she feels ill. Part of the breast is swollen and hard, with redness of the overlying skin.

Mastitis is sometimes confused with engorgement. However, engorgement affects the whole breast, and often both breasts. Mastitis affects part of the breast, and usually only one breast.

Mastitis may develop in an engorged breast, or it may follow a condition called **blocked duct**. Blocked duct occurs when the milk is not removed from part of a breast. Sometimes this is because the duct to that part of the breast is blocked by thickened milk. The symptoms are a lump, which is tender, and sometimes redness of the skin over the lump. The woman has no fever and feels well.

When milk stays in part of a breast, because of a blocked duct, or because of engorgement, it is called **milk stasis**. If the milk is not removed, it can cause inflammation of the breast tissue, which is called **non-infective mastitis**. Sometimes a breast becomes infected with bacteria, and this is called **infective mastitis**.

It is not possible to tell from the symptoms alone if mastitis is non-infective or infective. If the symptoms are all severe, however, the woman is more likely to need treatment with antibiotics.



Poor drainage of the **whole** breast may be due to infrequent breastfeeds or ineffective suckling. Infrequent breastfeeds may occur when a mother is very busy, when a baby starts feeding less often, for example when he starts to sleep through the night, or because of a changed feeding pattern for another reason, for example the mother returning to work. Ineffective suckling usually occurs when the baby is poorly attached to the breast.

Poor drainage of **part** of the breast may be due to ineffective suckling, pressure from tight clothes, especially a bra worn at night, or pressure of the mother's fingers which can block milk flow during a breastfeed.

If a baby is poorly attached and positioned and is suckling at the breast, this may cause a nipple fissure which provides a way for bacteria to enter the breast tissue and may lead to mastitis.

## TREATMENT OF BLOCKED DUCT AND MASTITIS

The most important part of treatment is to improve the drainage of milk from the affected part of the breast.

### **Look for a cause of poor drainage, and correct it:**

- Look for poor attachment.
- Look for pressure from clothes, usually a tight bra.
- Notice what the mother does with her fingers as she breastfeeds. Does she hold the areola, and possibly block milk flow?

Whether or not you find a cause, advise the mother to do these things:

### **Breastfeed frequently.**

The best way is to rest with her baby, so that she can respond to him and feed him whenever he is willing.

### **Gently massage the breast while her baby is suckling.**

Show her how to massage over the blocked area, and over the duct that leads from the blocked area, right down to the nipple. This helps to remove the block from the duct. She may notice that a plug of thick material comes out with her milk. (It is safe for the baby to swallow the plug).

### **Apply warm compresses to her breast between feeds.**

### **Sometimes it is helpful to do these things:**

#### **Start the feed on the unaffected breast.**

This may help if pain seems to be preventing the oxytocin reflex. Change to the affected breast after the reflex starts working.

#### **Breastfeed the baby in different positions at different feeds.**

This helps to remove milk from different parts of the breast more equally. Show the mother how to hold her baby in the underarm position, or how to lie down to feed him, instead of holding him across the front at every feed. However, do not make her breastfeed in a position that is uncomfortable for her.

Sometimes a mother is unwilling to feed her baby from the affected breast, especially if it is very painful. Sometimes a baby refuses to feed from an infected breast, possibly because the taste of the milk changes. In these situations, it is necessary to express the milk. If the milk stays in the breast, an abscess is more likely.

Usually, blocked duct or mastitis improves within a day when drainage to that part of the breast improves.

However, a mother needs additional treatment if there are any of the following:

- severe symptoms when you first see her, OR
- a fissure, through which bacteria can enter, OR
- no improvement after 24 hours of improved drainage.

Treat her, or refer her for antibiotics, analgesics (ibuprofen) and rest.

ANTIBIOTIC TREATMENT FOR INFECTIVE MASTITIS		
The commonest bacterium found in breast abscess is <b><i>Staphylococcus aureus</i></b> . Therefore it is necessary to treat breast infections with a penicillinase-resistant antibiotic such as either flucloxacillin or erythromycin.		
Drug	Dose	Instructions
Flucloxacillin	250 mg orally 6 hourly for 7-10 days	Take dose at least 30 minutes before food
Erythromycin	250-500 mg orally 6 hourly for 7-10 days	Take dose 2 hours after food

### Treatment of mastitis in an HIV-infected woman

In a woman who is HIV-positive, mastitis may increase the risk of HIV transmission. Therefore, the recommendation to increase the frequency and duration of feeds is not appropriate for these women.

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

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

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

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

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

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

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

## Nipple Fissure

The most common cause of sore nipples and a nipple fissure is poor attachment to the breast. If a baby is poorly attached, he pulls the nipple in and out as he sucks, and rubs the skin of the breast against his mouth. This is very painful for his mother. At first there is no fissure. The nipple may look normal; or it may look squashed with a line across the tip when the baby releases the breast. If the baby continues to suckle in this way it damages the nipple skin and causes a fissure.

If a mother has sore nipples or a fissure, help her to improve her baby's position so that he is well attached.

Suggest to the mother not to wash her breasts more than once a day and not to use soap or rub hard with a towel. Washing removes natural oils from the skin and makes soreness more likely. Do not recommend medicated lotions and ointments because these can irritate the skin. Suggest that after feeding she rubs a little expressed breast milk over the nipple and areola with her finger. This promotes healing.

## Candida Infection (Thrush)

The second commonest cause of sore nipples is infection with candida, also known as 'thrush'. Candida infection can make the skin sore and itchy. Candida infections often follow the use of antibiotics to treat mastitis and other infections.

Some mothers describe a burning or stinging which continues after a feed. Sometimes the pain shoots deep into the breast. A mother may say that it feels as though needles are being driven into her breast.

Suspect Candida if sore nipples persist even when the baby's attachment is good. Check the baby for thrush. He may have white patches inside his cheeks or on his tongue. He may have a rash on his bottom.

Treat both the mother and the baby with nystatin. Suggest to the mother to stop using pacifiers (dummies).

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

### TREATMENT OF CANDIDA OF THE BREAST

**Nystatin cream 100,000 IU/g:**

Apply to nipples 4 times daily after breastfeeds.

Continue to apply for 7 days after lesions have healed.

**Nystatin suspension 100,000 IU/ml:**

Apply 1 ml by dropper to child's mouth 4 times daily after breastfeeds for 7 days, or as long as mother is being treated.

**Stop using pacifiers, teats, and nipple shields.**

## Session 21

# Replacement Feeding in the First Six Months

### Objectives

After completing this session participants will be able to:

- describe breast-milk substitutes that can be used for replacement feeding
- list foods that are unsuitable in the first six months
- describe how milks can be modified for infant feeding

A mother who has been counselled on infant feeding options may decide to use replacement feeding. So, we need to discuss what this mother could use to feed her baby. Earlier we defined replacement feeding as:

### Replacement feeding

is the process of feeding a child who is not breastfeeding with a diet that provides all the nutrients the child needs until the child is fully fed on family food

Adequate replacement feeding is needed throughout the time the child is at greatest risk of malnutrition: that is until the child is at least two years old.

If an infant is not getting breast milk, milk in some other form is needed for at least the first six months. It is also useful if some kind of milk is part of the diet up to two years of age or more.

Replacement feeding must be acceptable, feasible, affordable, sustainable and safe.

In addition to a source of milk, the child's mother will need water, soap, fuel and utensils to prepare the replacement feeds. She will also need extra time.

## ADVANTAGES AND DISADVANTAGES OF COMMERCIAL INFANT FORMULA

### Advantages:

- Giving only formula carries no risk of transmitting HIV to the baby.
- Most of the nutrients a baby needs have already been added to the formula.
- Other responsible family members can help feed the baby. If a mother falls ill, others can feed the baby while she recovers.

### Disadvantages:

- Unlike breast milk, formula does not contain antibodies that protect a baby from infections.
- A formula-fed baby is more likely to get seriously sick from diarrhoea, chest infections, and malnutrition, especially if the formula is not prepared correctly.
- A mother should stop breastfeeding completely or the risk of transmitting HIV will continue.
- A mother needs fuel and clean water (boiled vigorously for 1 to 2 seconds) to prepare the formula, and soap to wash the baby's cup.
- People may wonder why a mother is using formula instead of breastfeeding, and this could cause them to suspect she is HIV-positive.
- Formula takes time to prepare and must be made fresh for each feed (unless the mother has a refrigerator).
- Formula is expensive, and you must always have enough on hand. Your baby needs forty (40) 500g tins for the first 6 months. This will cost about ----- per month (insert local cost).
- The baby will need to drink from a cup. Babies can learn how to do this even when they are young, but it may take time to learn.
- A mother may get pregnant again too soon.

Information on advantages and disadvantages of commercial infant formula is also on Counselling Card 2.



### **ADVANTAGES AND DISADVANTAGES OF HOME-MODIFIED ANIMAL MILK**

#### **Advantages:**

- There is no risk of transmitting HIV through home-modified animal milk.
- Home-modified animal milk may be cheaper than commercial infant formula and is easily available if a mother has milk-producing animals.
- Other responsible family members can help feed the baby.

#### **Disadvantages:**

- Animal milk is hard for babies to digest and does not contain all the nutrients that babies need. Both fresh and processed milk need to be mixed with water and sugar in exactly the right amounts. Babies also need to have a micronutrient supplement.
- A baby is more likely to get sick from diarrhoea, chest infections, and malnutrition if he is fed home-modified animal milk, especially if it is not prepared correctly.
- A mother should stop breastfeeding completely or the risk of transmitting HIV will continue.
- Home-modified animal milk takes time to prepare and must be made fresh each time a mother feeds her baby, unless she has a refrigerator.
- A baby needs about 15 litres of milk per month for the first 6 months. A mother also needs to buy sugar and a micronutrient supplement, which will cost approximately ----- (insert local cost).
- The baby will need to drink from a cup. Babies can learn how to do this even when they are young, but it may take time to learn.
- A mother will need fuel and clean water (boiled vigorously for 1 or 2 seconds) to prepare the formula, and soap to wash the baby's cup.
- People may ask why a mother is using home-prepared formula instead of breastfeeding, and this could cause them to suspect that she is HIV-positive.
- A mother may get pregnant again too soon.

Information on advantages and disadvantages of home-modified animal milk is also on Counselling Card 6.

## Locally available milks

Infants in the first six months can be fed on

- Commercial infant formula designed to meet the nutritional needs of an infant for the first six months of life.
- Home-prepared formula. For example, formula made from modified fresh liquid milk.

### WHEN YOU EXAMINE PACKETS OF MILK NOTICE:

- What is said about their constituents?
- What instructions are given for their use?
- Are these instructions clear and accurate?
- Does it explain how to mix the milk to make it equivalent to full strength fresh milk?
- Which milks do mothers already use for infants, which they might want to use?
- Are these milks possible or unsuitable for infants?

Among the 'possible' milks for infants are full cream milks, including fresh liquid milk, powdered milk, or tinned evaporated milk; and some commercial formulas.

In full strength full cream milk, the level of protein and some minerals is too high, and it is difficult for an infant's immature kidneys to excrete the extra waste. These milks require some modification to make the proportions more appropriate.

A commercial formula has been modified so that the proportions of different nutrients are appropriate for infant feeding, and micronutrients have been added. Formula needs only to be mixed with the correct amount of water.

It is important to remember however, that although the **proportions** of nutrients in either commercial or home-prepared formula can be altered, their **quality** cannot be made the same as breast milk. Also, the immune factors and growth factors present in breast milk are not present in animal milk or formula, and they cannot be added.

Check your local products regularly so that you are up-to-date with the constituents and directions and aware of any new products that become available.

The following page contains the recipes for home-prepared formula. Notice that in each recipe the milk is diluted with water, and sugar is added. If you are going to use these recipes you will need to have an accurate way to measure sugar, for example, special scoops.

## RECIPES FOR HOME-PREPARED FORMULA

### **Fresh cow's, goat's or camel's milk**

40 ml milk + 20 ml water + 4g sugar = 60 ml prepared formula  
 60 ml milk + 30 ml water + 6g sugar = 90 ml prepared formula  
 80 ml milk + 40 ml water + 8g sugar = 120 ml prepared formula  
 100 ml milk + 50 ml water + 10g sugar = 150 ml prepared formula

### **Sheep and buffalo milk**

30 ml milk + 30 ml water + 3g sugar = 60 ml prepared formula  
 45 ml milk + 45 ml water + 5g sugar = 90 ml prepared formula  
 60 ml milk + 60 ml water + 6g sugar = 120 ml prepared formula  
 75 ml milk + 75 ml water + 8g sugar = 150 ml prepared formula

### **Evaporated milk**

Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:

32 ml evaporated milk + 48 ml water to make 80 ml full strength milk  
 plus 40 ml water + 8 g sugar = 120 ml prepared formula

### **Powdered full-cream milk**

Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:

10 g powdered milk + 80 ml water to make 80 ml full strength milk  
 plus 40 ml water + 8 g sugar = 120 ml prepared formula

If mothers will use powdered full-cream milk or evaporated milk, provide a recipe specific to that brand. State the total amount of water to add both to reconstitute to the strength of milk and to dilute to make formula.

**Micronutrient supplements should be given with all these kinds of home-prepared infant formula.**

If you are suggesting to a mother that she uses home-prepared formula, make sure that she has an accurate method of weighing the sugar (e.g. a special scoop), and measuring the milk and water.

## Micronutrients

When making home-prepared formula, in addition to diluting, adding sugar and boiling animal milk, it is necessary to add **micronutrients**. Breast milk 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.

MICRONUTRIENTS TO GIVE WITH HOME-MODIFIED ANIMAL MILK PER DAY	
<b>Minerals:</b>	
Manganese	7.5 µg
Iron	1.5 mg
Copper	100 µg
Zinc	205 µg
Iodine	5.6 µg
<b>Vitamins:</b>	
Vitamin A	300 IU
Vitamin D	50 IU
Vitamin E	1 IU
Vitamin C	10 mg
Vitamin B1	50 µg
Vitamin B2	80 µg
Niacin	300 µg
Vitamin B6	40 µg
Folic acid	5 µg
Pantothenic acid	400 µg
Vitamin B12	0.2 µg
Vitamin K	5 µg
Biotin	2 µg

*Adapted from the Codex Standard for Infant Formula, Codex Standard 72-1981. The amount for each micronutrient was calculated by subtracting the amount found in cow's milk from the amount recommended by the Codex Standard.*

## Session 22

# Hygienic Preparation of Feeds

### Objectives

After completing this session participants will be able to:

- explain ways of assisting clean and safe feeding of young children
- demonstrate how to prepare a cup hygienically for feeding a baby

### Requirement for clean and safe feeding

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

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

After six months of age all children require complementary feeds. Clean, safe preparation and feeding of complementary foods are essential to reduce the risk of contamination and the illnesses that it causes.


The main points to remember for clean and safe preparation of feeds are:

- . Clean hands
- . Clean utensils
- . Safe water and food
- . Safe storage

## Safe water and food

### Safe water and food

- Treat water for drinking and baby's feeds
- Keep water in clean covered container
- Boil milk before use
- Give freshly prepared complementary foods



Water can be made safe for feeding babies by bringing the water to a rolling boil before use. This will kill most harmful micro-organisms. A rolling boil is when the surface of the water is moving vigorously. It only has to 'roll' for a second or two.

The water should then be stored in a clean, covered, container. The best kind of container has a narrow top, and a tap through which the water comes out. This prevents people from dipping their hands and cups into it.

If the water has been stored for more than 48 hours it is better to use it for something else, for example cooking or give to older children to drink.

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 giving it to a baby.


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

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

## Safe storage

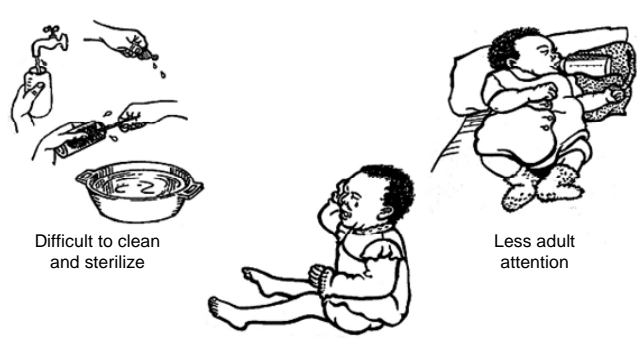
### Safe storage


- Keep foods in tightly covered containers
- Store foods dry if possible (e.g. milk powder, sugar)
- Use milk within one day if refrigerated
- Use prepared feeds within one hour




## Disadvantages of feeding bottles

### Disadvantages of feeding bottles






Difficult to clean  
and sterilize



Less adult  
attention



May cause illness

## Cleaning a cup

A cup does not need to be boiled. To clean a cup, wash it and scrub it in hot soapy water each time it is used. If possible, dip the cup into boiling water, or pour boiling water over it just before use, but this is not essential. An open, smooth surfaced cup is easiest to clean. Avoid tight spouts, lids or rough surfaces where milk could stick and allow bacteria to grow.

## Cleaning feeding bottles and teats

Bottles and teats are more difficult to clean than cups and you should discourage their use. However you need to know how to clean them in case a mother insists on using them.

A bottle and teat need to be rinsed immediately after use with cold water, and then scrubbed inside with a bottle brush and hot soapy water.

At least once a day they need to be sterilized. Ways of sterilizing washed bottles include:

- Boiling – the bottle needs to be completely covered in water. The water needs to be boiling with the surface actively rolling, for at least 10 minutes.
- Soaking in a diluted bleach solution for at least 30 minutes.

Teats need to be turned inside out and scrubbed using salt or abrasive. They should then be boiled or soaked as above to sterilize.

## FIVE KEYS TO SAFER FOOD

### Keep clean

- Wash your hands before handling food and often during food preparation.
- Wash your hands after going to the toilet, changing the baby or in contact with animals.
- Wash very clean all surfaces and equipment used for food preparation or serving.
- Protect kitchen areas and food from insects, pests and other animals.

### Separate raw and cooked foods

- Separate raw meat, poultry and seafood from other foods.
- Use separate equipment and utensils such as knives and cutting boards for handling raw foods.
- Store foods in covered containers to avoid contact between raw and prepared foods.

### Cook thoroughly

- Cook food thoroughly, especially meat, poultry, eggs and seafood.
- Bring foods like soups and stews to boiling point. For meat and poultry, make sure juices are clear not pink.
- Reheat cooked food thoroughly. Bring to the boil or heat until too hot to touch. Stir while re-heating.

### Keep food at safe temperatures

- Do not leave cooked food at room temperature for more than 2 hours.
- Do not store food too long, even in a refrigerator.
- Do not thaw frozen food at room temperature.
- Food for infants and young children should ideally be freshly prepared and not stored at all after cooking.

### Use safe water and raw materials

- Use safe water or treat it to make it safe.
- Choose fresh and wholesome foods.
- Use pasteurized milk.
- Wash fruits and vegetables in safe water, especially if eaten raw.
- Do not use food beyond its expiry date.



## Session 23

# Preparation of Milk Feeds - Measuring Amounts

### Objectives

After completing this session participants will be able to:

- specify amounts of milk needed for a baby who is not breastfed
- make measuring utensils for liquids
- translate measures into a mother's home utensils

HIV-positive mothers who choose not to give breast milk, and other caregivers, need to know how to prepare replacement feeds for their infants. Replacement feeds must be prepared in the safest possible way, to reduce the risk of illness.

Mothers need to practise this skill with a health worker present, either in the health facility or at home, so they can do it easily and in the same way every time.

When a mother makes replacement feeds, it is very important that the milk and water are mixed in the correct amounts. If she is preparing home-modified animal milk it is also important that sugar and micronutrients are added. Wrongly prepared feeds may make a baby ill, or he may be underfed.

### The amount of milk to give if a baby is not breastfeed

A baby who is cup-fed can control how much he takes, by refusing to take any more when he has had enough. The amount that a baby takes at each feed varies. But the mother must decide how much to put in a cup to offer the baby.

A term baby, weighing 2.5kg or more, needs an average of 150ml/kg body weight/day. This is divided into 6, 7 or 8 feeds according to the baby's age. The exact amount at one feed varies.

<b>APPROXIMATE AMOUNT OF MILK NEEDED TO FEED A BABY EACH DAY</b>			
<b>Baby's age</b>	<b>Number of feeds per day</b>	<b>Amount of milk or formula per feed</b>	<b>Total milk or formula per day</b>
Birth to 1 month	8	60 ml	480 ml
1 to 2 months	7	90 ml	630 ml
2 to 4 months	6	120 ml	720 ml
4 to 6 months	6	150 ml	900 ml

A newborn infant is fed small amounts frequently. The amount gradually increases as the infant grows.

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

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

<b>APPROXIMATE AMOUNTS OF COMMERCIAL INFANT FORMULA NEEDED BY MONTH</b>			
<b>Month</b>	<b>Number of 500g tins needed per month</b>	<b>Number of 450g tins needed per month</b>	<b>Number of 400g tins needed per month</b>
First month	4	5	5
Second month	6	6	8
Third month	7	8	9
Fourth month	7	8	9
Fifth month	8	8	10
Sixth month	8	9	10
Total for 6 months (approximately)	40 X 500g (20 kg)	44 X 450g (approx 20 kg)	51 X 400g (approx 20 kg)

This table shows approximately how much commercial formula milk a baby needs in the first six months. The numbers are rounded rather than exact. An individual baby may need more or less than the amount listed. This table is also found on Counselling Card 11.

## How to make measures for the mother

Commercial infant formula comes with a special measure (called a scoop) in the tin of powder. This should be used only for that brand of infant formula.

Different brands may have different size measures. Scoops always have to be levelled. Use a clean knife or the handle of a spoon. Do not use heaped scoops.

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

- easily available
- easy to clean and sterilize
- see-through
- able to be marked with paint, permanent marker, or by scratching a line on it.

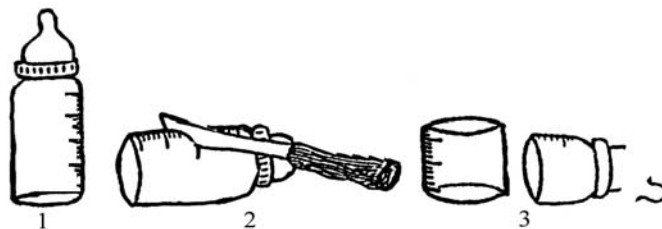
Alternatively the container could be used as a measure simply by filling it to the top.

Measure the correct amount of water or milk in your own measure, put it into the mother's measure, and make a mark at the level it reaches. If you have a measuring jug you can use that as your measure.

### CUT-OFF FEEDING BOTTLE

- You can make a measure from a feeding bottle by cutting off the top.

**Fig. 23.1 Making a Measure**



**Step 1.** Take a plastic feeding bottle which is straight up and down, and which has clear measures marked on the side.

**Step 2.** Cut off the top, at a place well above the mark for 100 ml.

**Step 3.** This leaves you with a straight-sided measure, which should be easy to keep clean. (No-one can be tempted to put a teat on it and use it to feed a baby. Cut up the teat and throw it away).

- The cut-off bottle is a way for a health worker to show appropriate amounts using a mother's own container. Then the mother does not have to buy her own bottle to use as a measure.

Decide what volume you are going to measure. This will depend on the type of milk you are preparing and the volume of the feed. For this example we will use 60 mls for a commercial infant formula feed for a baby from birth to one month.

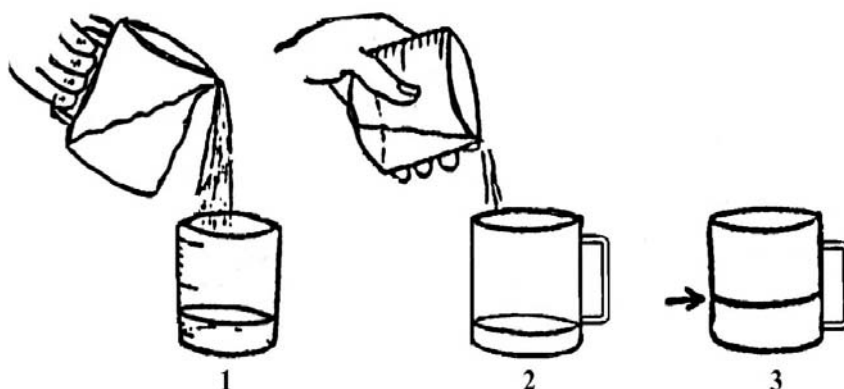
Put water into your measure, to reach the 60 ml mark.

Pour the 60 ml water from your measure into the mother's container.

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

Explain to the mother that to make up a feed of 60 ml from commercial formula, she needs to measure this amount of water and ----- scoops of commercial formula.

Fig. 23.2 Mark a measure



## Session 24

### Practical Session 3 Preparation of Milk Feeds

#### Objectives

After completing this session participants will be able to:

- demonstrate how to prepare replacement milks

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

Mothers have several options for 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 replacement feed that is appropriate 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?

You will follow the appropriate HIV and Infant Feeding Take Home Flyers as you prepare the milk feeds. You will use the recipes on page 140 of your Manuals if you are preparing home-modified animal milks.

## RECIPES FOR HOME-PREPARED FORMULA

### Fresh cow's, goat's or camel's milk

40 ml milk + 20 ml water + 4g sugar = 60 ml prepared formula  
60 ml milk + 30 ml water + 6g sugar = 90 ml prepared formula  
80 ml milk + 40 ml water + 8g sugar = 120 ml prepared formula  
100 ml milk + 50 ml water + 10g sugar = 150 ml prepared formula

### Sheep and buffalo milk

30 ml milk + 30 ml water + 3g sugar = 60 ml prepared formula  
45 ml milk + 45 ml water + 5g sugar = 90 ml prepared formula  
60 ml milk + 60 ml water + 6g sugar = 120 ml prepared formula  
75 ml milk + 75 ml water + 8g sugar = 150 ml prepared formula

### Evaporated milk

Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:

32 ml evaporated milk + 48 ml water to make 80 ml full strength milk  
plus 40 ml water + 8 g sugar = 120 ml prepared formula

### Powdered full-cream milk

Reconstitute with cooled, boiled water according to the label to the strength of fresh milk. Then modify as fresh milk by dilution and adding sugar. Check with specific brand. A typical recipe is:

10 g powdered milk + 80 ml water to make 80 ml full strength milk  
plus 40 ml water + 8 g sugar = 120 ml prepared formula

If mothers will use powdered full-cream milk or evaporated milk, provide a recipe specific to that brand. State the total amount of water to add both to reconstitute to the strength of milk and to dilute to make formula.

**Micronutrient supplements should be given with all these kinds of home-prepared infant formula.**

## **INFANT FEEDING COUNSELLING FLYER**

### **HOW TO PREPARE COMMERCIAL FORMULA**

#### **How to prepare commercial formula**

- Wash your hands before preparing the formula.
- Make..... ml for each feed. Feed the baby ..... times every 24 hours.
- Always use the marked cup or glass to measure water and the scoop to measure the formula powder. Your baby needs ..... scoops.
- Measure the exact amount of powder that you will need for one feed.
- Boil enough water vigorously for 1 or 2 second.
- Add the hot water to the powdered formula. The water should be added while it is still hot and not after it has cooled down.
- Only make enough formula for one feed at a time unless you have a refrigerator in good working condition. Do not keep milk in a thermos flask because it will become contaminated quickly.
- Feed the baby using a cup. Discard any unused formula, give it to an older child or drink it yourself.
- Wash the utensils.
- Come back to see me on..... .

## INFANT FEEDING COUNSELLING FLYER

### HOW TO PREPARE EVAPORATED MILK

#### How to prepare evaporated milk

- Wash your hands before preparing the feed.
- Make ..... ml for each feed. Feed the baby ..... times each day (24 hours).
- Always use the marked cup or glass to measure the milk and water.
- Fill the cup or glass to the "milk" mark with the milk. Put the milk into the pot. Fill the cup or glass to the "water" mark with the water. Add the water to the milk in the pot.
- Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one).
- Put in ..... spoonfuls.
- Add the sugar to the liquid. Stir well.
- Bring the liquid to a boil and then let it cool.
- Keep it covered while it cools.
- Feed the baby using a cup. Discard any unused formula, give it to an older child or drink it yourself.
- Wash the utensils.
- Give your baby a micronutrient supplement every day. You can get it from ..... or can buy it. It will cost ..... .
- Come back to see me on ..... .



## INFANT FEEDING COUNSELLING FLYER

### HOW TO PREPARE FRESH MILK

#### How to prepare fresh milk

- Wash your hands before preparing the formula.
- Always use the marked cup or glass to measure water and milk.
- Fill the cup or glass to the "water" mark with the water. Put the water into the pot. Fill the cup or glass to the "Milk" mark with the milk. Add the milk to the water in the pot.
- Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one). Put in ..... spoonfuls.
- Add the sugar to the liquid. Stir well.
- Bring the liquid to a boil and then let it cool. Keep it covered while it cools.
- Feed the baby using a cup.
- Discard any unused formula, give it to an older child or drink it yourself.
- Wash the utensils.
- Give your baby a micronutrient supplement every day. You can get it from ..... or can buy it. It will cost .....
- Come back to see me..... .

## INFANT FEEDING COUNSELLING FLYER

### HOW TO PREPARE POWDERED FULL-CREAM MILK

#### How to prepare powdered full-cream milk

- Wash your hands before preparing the formula.
- Always use the marked cup or glass to measure water and a spoon to measure the powdered milk.
- Boil enough water vigorously for 1-2 seconds and then let it cool. Keep it covered while it cools.
- Measure the powdered milk into the marked cup or glass. Measure the powder by filling the spoon as shown in the picture. Put in ..... spoonfuls.
- Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one). Put in ..... spoonfuls.
- Add the sugar to the feed. Stir well.
- Add a small amount of the boiled water and stir. Fill the cup or glass to the mark with the water.
- Feed the baby using a cup.
- Discard any unused formula, give it an older child or drink it yourself.
- Wash the utensils.
- Give your baby a micronutrient supplement every day. You can get it from..... or can buy it. It will cost ..... .
- Come back to see me on..... .

## Session 25

# Health Care Practices

### Objectives

After completing this session participants will be able to:

- list the TEN STEPS TO SUCCESSFUL BREASTFEEDING
- describe the health care practices summarized by 'THE TEN STEPS TO SUCCESSFUL BREASTFEEDING'
- explain why the Baby-friendly Hospital Initiative (BFHI) is important in areas with high HIV prevalence

### Introduction

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 to Successful Breastfeeding* are a summary of the main recommendations of the Joint Statement. They are the basis of the 'Baby-friendly Hospital Initiative', a world-wide effort launched in 1991 by WHO and UNICEF. If a maternity facility wishes to be designated 'Baby-friendly' it must follow all of the *Ten Steps*.

**Fig. 25.1 Skin-to-skin contact in the first hour after delivery helps breastfeeding and bonding**



## 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 a half-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 breast milk, unless medically indicated.
7. Practise rooming-in - allow mothers and infants to remain together - 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Since the launch of the Baby-friendly Hospital Initiative 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.

### Antenatal preparation for breastfeeding (Step 3)

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

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

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

## ANTENATAL PREPARATION FOR 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; 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.
- Examine her breasts only if she is worried about them.

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.

### Initiation of breastfeeding (Step 4)



This mother is holding her baby immediately after delivery. They are both naked, so that they have skin-to-skin contact. A mother should hold her baby like this as much as possible in the first two hours after delivery.

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 1-2 hours after delivery. Most babies want to feed between half to one hour after delivery, but there is no exact fixed time.

Try to delay non-urgent medical routines for at least one hour.

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

### The dangers of prelacteal feeds (Step 6)

Prelacteal feeds are artificial feeds or drinks given to a baby before breastfeeding is initiated.

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.

## The advantages of rooming-in (Step 7)

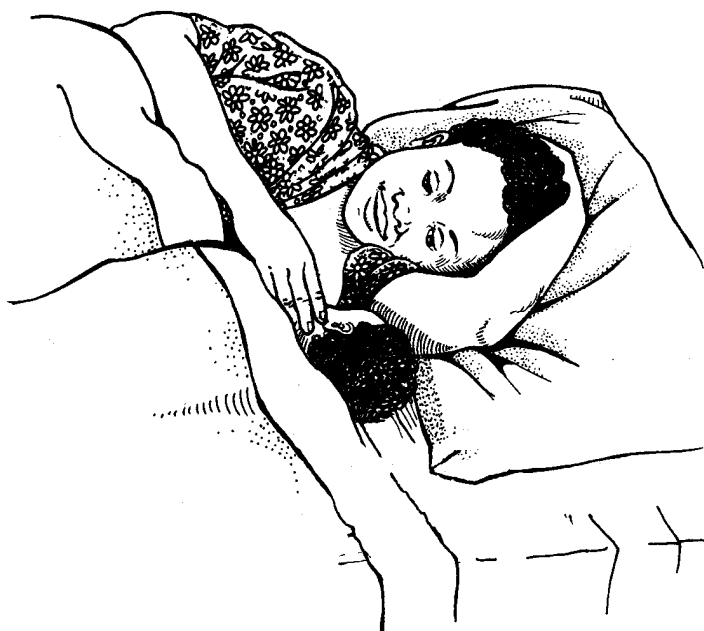


The advantages of rooming-in are:

- It enables a mother to respond to her baby and feed him whenever he is hungry. This helps both bonding and breastfeeding.
- Babies cry less so there is less temptation to give bottle feeds.
- Mothers become confident about breastfeeding.
- Breastfeeding continues longer after the mother leaves hospital.

All healthy babies benefit from being near their mother, rooming-in or bedding-in. Mothers who are HIV-positive do not need to be separated from their babies. General mother-to-child contact does not transmit HIV.

**Fig. 25.2 'Bedding-in' allows a mother to rest while breastfeeding**



## Advantages of breastfeeding on demand (Step 8)

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

The advantages are:

- . There is earlier passage of meconium.
- . The baby gains weight faster.
- . Breast milk '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.

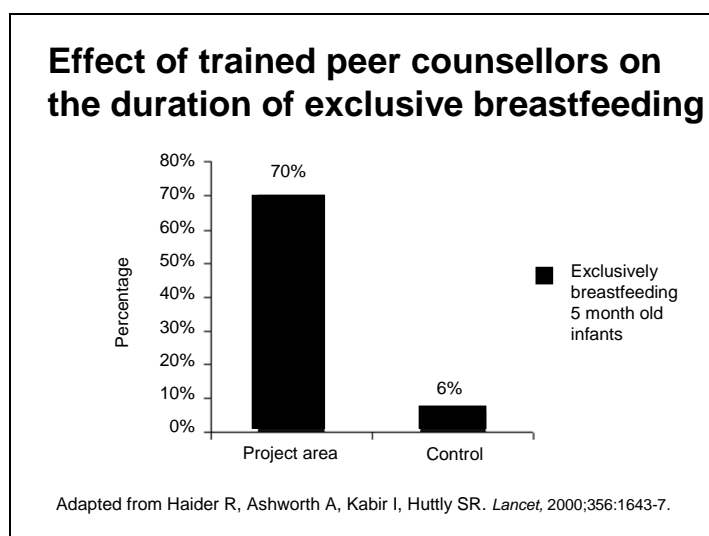
Let a baby suckle as long as he wants, provided he is well attached. Some babies take all the breast milk they want in a few minutes; other babies take half an hour to get the same amount of milk, especially in the first week or two. They are all behaving normally.

Let a 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.

## Effect of peer counsellors on the duration of exclusive breastfeeding

This graph shows how trained peer counsellors in Bangladesh increased the proportion of infants who were still exclusively breastfeeding at five months of age.

70% of those mothers who had received support from a peer counsellor were still exclusively breastfeeding at five months compared to 6% of those who had not had support.





**Fig. 25.3**

Talk to family members about a new mother's needs.  
Fathers can be an important source of support for breastfeeding.



## This image shows a full page of a notebook or worksheet. It features approximately 30 horizontal dotted lines spaced evenly down the page, providing a guide for handwriting practice. The background is plain white, and there are no margins, text, or other markings present.

## Session 26

# International Code of Marketing of Breast-milk Substitutes

### Objectives

After completing this session participants will be able to:

- explain how manufacturers promote formula milks
- summarize 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

### Introduction

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 breast milk, 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 International Code of Marketing of Breast-milk Substitutes

In 1981, the World Health Assembly (WHA) adopted The International Code of Marketing of Breast-milk Substitutes, which aims to regulate the 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 breast-milk substitutes – including infant formula, any other milks or foods, including water and teas and cereal foods which are sometimes marketed as suitable for infants under six months of age; and also feeding bottles and teats.

### SUMMARY OF THE MAIN POINTS OF THE INTERNATIONAL CODE

1. No advertising of breast-milk substitutes and other products to the public.
2. No free samples to mothers.
3. No promotion in the health service.
4. No company personnel to advise mothers.
5. No gifts or personal samples to health workers.
6. No pictures of infants, or other pictures idealizing artificial feeding, on the labels of the products.
7. Information to health workers should be scientific and factual.
8. Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
9. Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Some people are confused and think that The Code no longer applies where there are women living with HIV and 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 breast-milk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spillover to women who are breastfeeding.

### Difficulties with donations of formula

You may have heard that some manufacturers and distributors have offered to donate formula for women who are HIV-positive. This is what The Code says:

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

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

The health system if it wishes can provide free or subsidized 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 six 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.

In summary, 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

[illegible]

## Session 27

# Counselling Cards and Tools Counselling Scenarios

### Objectives

After completing this session participants will be able to:

- counsel HIV-positive women on infant feeding options, using the cards, flow chart and take-home flyers.

During this session you will practise counselling using a variety of tools:

- A **Flipchart**, that includes a flow chart illustrating the counselling process and Counselling Cards to be used during one-to-one sessions with pregnant women and/or mothers.
- A set of take-home **Flyers** for mothers on how to practise safely the chosen feeding options.
- A **Reference Guide** to provide additional information for you, the counsellors.
- The **Flow Chart** included in the flipchart helps you to work through options with a woman in a logical way. It is important that a woman is not overwhelmed with many choices and given little time to express her own feelings.

**Flipchart** The first page is a **Flow Chart** of the recommended steps to follow for HIV and infant feeding counselling. On the left-hand side there are some simple instructions for how to use the flow chart, depending on the type of session (first session, follow-up) and whether the woman is pregnant or her baby is already born. Each of the cards we will now look at has a step number which fits in with the steps on the flowchart.

**Cards 2 to 6** illustrate the feeding options discussed in earlier sessions. Each card shows the advantages and disadvantages of one option.

**Card 1** is called 'The risk of mother-to-child transmission'. Use this card to help you to explain to a woman the chances of her child being infected. Remember from Session 17, if all the mothers of the babies shown are HIV-positive three of the babies are likely to get HIV through breastfeeding.

**Card 2** is called 'Advantages and disadvantages of commercial infant formula'.

- Card 3** is called 'Advantages and disadvantages of exclusive breastfeeding'. Exclusive breastfeeding for the first few months is one option for a woman to consider when replacement feeding is not acceptable, feasible, affordable, sustainable or safe.
- Card 4** shows 'Advantages and disadvantages of expressing and heat-treating breast milk'.
- Card 5** shows 'Advantages and disadvantages of wet-nursing'. Another woman who must be HIV-negative breastfeeds the baby, while the mother carries out all other kinds of feeding and care for her baby.
- Card 6** shows the 'Advantages and disadvantages of home-modified animal milk'.

Note that each card has several sections which are: 'use with', 'ask', 'main information', 'ask to probe and check understanding'

- Card 7** The table shown in this card should be used with mothers who are pregnant or have infants under six months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose herself after learning the advantages and disadvantages of each method.

The first step is to ask the woman about all of the things in the first column. For example: *Where do you get your drinking water?*

Keep a mental note of the woman's responses to each question. You will use this information to help her choose a feeding option.

When you use the cards it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman and to support her in the choice she makes.

It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.

## Practise counselling skills

Two of the trainers will demonstrate using the Counselling Cards in the following demonstration. A pregnant woman has recently tested positive for HIV. She has come to see the counsellor to discuss her options for feeding her baby. Note how the counsellor uses counselling skills and does not tell the mother what to do.



**DEMONSTRATION 27.A COUNSELLING ON INFANT FEEDING CHOICES**

<i>Counsellor:</i>	"Hello (woman's name). Thank you for coming to talk to me about ways you could feed your baby. We want to help you to make a choice which is best for you, in your situation, and which gives the best chance for your baby to remain healthy."
<b>Comment:</b>	<p><b>Here the counsellor introduces the session, explaining that the purpose is to help the mother to make an appropriate feeding choice. The counsellor also emphasizes the idea that we want a healthy baby. In many cases we have to balance the risks of HIV transmission with the risk of a baby getting very sick from diarrhoea or pneumonia.</b></p> <p><b>Now we will see the counsellor moving to Step 1: "explain the risks of mother-to-child transmission."</b></p>
<i>Counsellor:</i>	"What have you heard about the ways in which HIV can be transmitted from a mother to her baby?"
<i>Woman:</i>	"Well, I know that the baby can be infected during birth, and if I choose to breastfeed."
<i>Counsellor:</i>	"It is true that babies may get HIV in these ways. Let me show you a picture which may help you to understand."
<b>Comment:</b>	<b>The counsellor shows Card #1.</b>
<i>Counsellor:</i>	"What do you see in this picture?"
<i>Woman:</i>	"I see some babies, and some of them have different coloured shirts on."
<i>Counsellor:</i>	"This card shows 20 babies born to HIV-positive women. As you mentioned HIV can be passed to the baby at three stages: during the time you are pregnant, during delivery and during breastfeeding. The babies with white shirts are the babies that will NOT be infected at all. The babies with black shirts were already infected with HIV through pregnancy and delivery. The babies with grey shirts are the ones who may be infected with HIV through breastfeeding."
<i>Woman:</i>	"So don't all babies get HIV through breastfeeding?"
<i>Counsellor:</i>	"No – as you see most of them will not be infected. Some things can increase the risk of passing HIV through breastfeeding. For example, there is a higher chance if you have been recently infected with HIV or if you breastfeed for a long time. There are ways of reducing the risk of transmission by practising a feeding option that is appropriate for your situation. What other questions do you have about what I have just told you?"
<i>Woman:</i>	"I think I understand. I am relieved to hear that not all babies are infected through breastfeeding"
<b>Comment:</b>	<p><b>How did the counsellor introduce the risk of mother-to-child transmission?</b></p> <p><b>She used an open question to assess the mother's understanding of the risk. She said: "What have you heard about the ways in which HIV can be transmitted from a mother to her baby?"</b></p> <p><b>This is a useful way to introduce the concept of risk.</b></p> <p><b>Now the counsellor moves to Step 2 of the Flow Chart. She will explain the advantages and disadvantages of different feeding options starting with the mother's initial preference.</b></p>

<i>Counsellor:</i>	"There are various ways you could feed your baby. Is there any particular way you have thought of?"
<i>Woman:</i>	"Well, now that I know not all babies are infected through breastfeeding, can we talk about that first, as I breastfed my other children?"
<i>Counsellor:</i>	"Yes, what do you see in this picture?"
<b>Comment:</b>	<b>At this point the counsellor shows Card #3 to the woman to help explain the next points.</b>
<i>Woman:</i>	"I see a mother breastfeeding her baby, and someone trying to give her baby a bottle. The mother seems to be refusing."
<i>Counsellor:</i>	"Yes, this is about exclusive breastfeeding. What do you think exclusive breastfeeding means?"
<i>Woman:</i>	"Well, I'm not sure, but I saw something about it on a poster once."
<i>Counsellor:</i>	"Yes, there are a lot of posters about exclusive breastfeeding these days. Exclusive breastfeeding means giving only breast milk and no other drinks or foods, not even water. Exclusive breastfeeding for the first few months may lower the risk of passing HIV, compared to mixed feeding. Breastfeeding is a perfect food because it protects against many illnesses. Also, it prevents a new pregnancy. On the other hand, as long as you breastfeed, there is some chance that your baby might get HIV."
<b>Comment</b>	<b>At this stage the counsellor would go through the other advantages and disadvantages of exclusive breastfeeding with the mother using Card #3.</b>
<i>Counsellor:</i>	"How do you feel about breastfeeding now?"
<i>Woman:</i>	"Oh, well, I could think about it. I'd still be worried about the baby getting HIV, though. Could you tell me about formula feeding?"
<b>Comment:</b>	<b>The counsellor will discuss the questions and messages on Card #2, using counselling skills. Let us imagine that she has done this.</b> <b>Note that the counsellor has discussed the two main options: exclusive breastfeeding and infant formula.</b>
<i>Counsellor:</i>	"How do you feel about infant formula?"
<i>Woman:</i>	"I'm not sure. My husband really wants me to breastfeed but I think I would like to try formula. If I start formula could I change back later?"
<i>Counsellor:</i>	"That is really difficult to do."

<b>Comment:</b>	<p><b>The counsellor would discuss the two main : infant formula and exclusive breastfeeding.</b></p> <p><b>If neither of these options is feasible, then the counsellor will discuss other options that are suitable and appropriate for the local area with the woman.</b></p> <p><b>It is important to be led by the mother's preferences, and not to overwhelm her with information in a series of lists. Leave time for a woman to ask questions and check she understands what is being discussed.</b></p> <p><b>Imagine the different feeding options have been discussed with the woman. Now the counsellor moves to Step 3: Explore with the woman her home and family situation.</b></p>
<i>Counsellor:</i>	"We have just discussed different feeding methods. After hearing all of this information, which method are you most interested in trying?"
<i>Woman:</i>	"I would like to use formula, since they give it for free here at the clinic."
<b>Comment:</b>	<b>Note that this is not the final decision by the woman. She may change her mind at a later stage.</b>
<i>Counsellor:</i>	"Let's think together about the things you will need in order for you to decide if formula is the best choice for you."
<i>Woman:</i>	"Yes, OK."
<b>Comment:</b>	<b>The counsellor shows the woman Card #7.</b>
<i>Counsellor:</i>	"Where do you get your drinking water from?"
<i>Woman:</i>	"We have a tap in our kitchen with clean water."
<i>Counsellor:</i>	"That's good – you need clean water to make formula. Can you prepare each feed with boiled water and clean utensils?"
<i>Woman:</i>	"That seems like too much work. Do I need to boil the water each time if we have clean water from the tap?"
<i>Counsellor:</i>	"Yes, it's recommended."
<i>Woman:</i>	"OK, well then....I guess I could manage. I could ask my niece to help me."
<i>Counsellor:</i>	"That's a good idea. What about preparing formula at night? Would you be able to do this two or three times each night?"
<i>Woman:</i>	"Can't I just prepare it before I go to bed and then just keep the bottle near the bed and use it all night?"
<i>Counsellor:</i>	"I understand why this might seem easier, but it's best to prepare the formula fresh for each feed. This will prevent your baby from getting sick....Perhaps we could talk about the cost of formula now?"
<i>Woman:</i>	"Oh, but I thought it was free?"
<i>Counsellor:</i>	"Even though you are getting the formula for free, you may run out before you can get more, or the clinic might temporarily run out. Formula costs about ----- per tin (INSERT LOCAL COST). If you had to buy 3 or 4 tins, could you afford do to this?"
<i>Woman:</i>	"Yes, my husband has steady work. We could find the money if we need to."
<i>Counsellor:</i>	"That's good. The cost is not too much of a problem if your husband is working. Does your husband know that you are HIV-positive?"
<i>Woman:</i>	"Yes, he does. He's HIV-positive too."

<i>Counsellor:</i>	"It must be difficult for you, but it can be helpful that you both know. What about the rest of your family?"
<i>Woman:</i>	"We haven't told anybody else. We are afraid of what they might say."
<i>Counsellor:</i>	"Oh, that must be a worry. In this case, how will your family feel if you don't breastfeed?"
<i>Woman:</i>	"My mother-in-law might get upset, since she breastfed all her children. She really thinks it's the best thing to do."
<i>Counsellor:</i>	"What reason do you think that you could give her for why you don't want to breastfeed?"
<i>Woman:</i>	"Maybe I could tell her that I am taking some medicine which will affect the breast milk. That happened to our neighbour last year."
<i>Counsellor:</i>	"Do you think that your mother-in-law would accept this explanation? Or would she insist that you breastfeed?"
<i>Woman:</i>	"I think that she would accept it. That neighbour is a friend of hers, and her baby is doing OK."
<b>Comment:</b>	<b>At this stage the counsellor would ask the woman if she would like to go through any other feeding options and whether she has any questions. The counsellor then moves to Step 4: "Help the woman choose an appropriate feeding option."</b>
<i>Counsellor:</i>	"We have talked about many things today. After all we have discussed, what are your thoughts about how you might like to feed your new baby?"
<i>Woman:</i>	"I am so confused. There seem to be good things and bad things about each feeding option for me. What would <b>you</b> suggest that I do?"
<i>Counsellor:</i>	"Well, let's think through the different ways, looking at your situation. You have breastfed your other children and your mother-in-law wants you to breastfeed."
<i>Woman:</i>	"Yes, she does."
<i>Counsellor:</i>	"Also, your husband knows that you are HIV-positive, so perhaps he could support you to exclusively breastfeed ... On the other hand, you do have all the things needed for you to be able to prepare formula feeds safely. You have clean water, fuel, and money to buy the formula."
<i>Woman:</i>	"That's right"
<i>Counsellor:</i>	"As your husband knows your status, he could help to support and to formula feed and perhaps talk to his mother."
<i>Woman:</i>	"Mmm. I would like to think more about this and discuss it with my husband. But I think I would like to give formula feed to this baby. I could explain to my husband about what you have said. I think he'll understand."
<b>Comment:</b>	<b>The counsellor did not tell the woman what to do. She summarized the reasons why the different feeding options would be suitable for her. The woman then made an initial choice, but will go home to discuss this with her husband. The counsellor would then go on to Step 5 – "Explain how to practise the chosen feeding options and provide a take-home flyer."</b>

You will use role-plays to practise counselling women on feeding choices.

You will work in groups of 3-4, taking turns to be a 'mother' or a 'counsellor' or an observer.

When you are the 'mother' use the story on the card you are given. The 'counsellor' counsels you about your situation. The other participants in the group observe. Give yourself a name and tell it to your 'counsellor'. Answer the counsellor's questions from your story. Do not give all the information at once. If your counsellor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the 'counsellor' greet the 'mother' and introduce yourself. Ask for her name and her baby's name, and use them. Ask one or two open questions to start the conversation and to find out why she is consulting you. Use each of the counselling skills to encourage her to talk to you. Use the Cards to help you to counsel the mother. Use the Table to help her to make her feeding choice based on her circumstances. If you feel comfortable, also use the relevant Cards and take-home Flyers on how to practise the chosen feeding option. When you use the Card, do not just read it. Use your skills to summarize the information without being prescriptive.

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

[illegible]

## Session 28

# Importance of Complementary Feeding

### Objectives

After completing this session participants will be able to:

- explain the importance of continuing breastfeeding
- define complementary feeding
- explain why there is an optimal age for children to start complementary feeding
- list the Key Messages from this session
- list their current complementary feeding activities

### Introduction

So far we have concentrated on the time from birth to six months of age. The time from six months of age until two years is also of critical importance in the child's growth and development. You have an important role in helping families during this time.

During the next few sessions we will develop a list of 10 Key Messages to discuss with caregivers about complementary feeds. The Key Messages are listed in the back of your Manual.

### Sustaining breastfeeding

Breast milk alone, **exclusive breastfeeding**, should continue for the first six months.

From 6-12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12-24 months, at least one-third of their nutritional needs. As well as nutrition, breastfeeding continues to provide protection to the child against many illnesses and provides closeness and contact that helps psychological development.

Feeding counsellors like you 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.

### Key Message 1

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

### Definition of complementary feeding

Complementary feeding means giving other foods in addition to breast milk.

These other foods are called complementary foods.

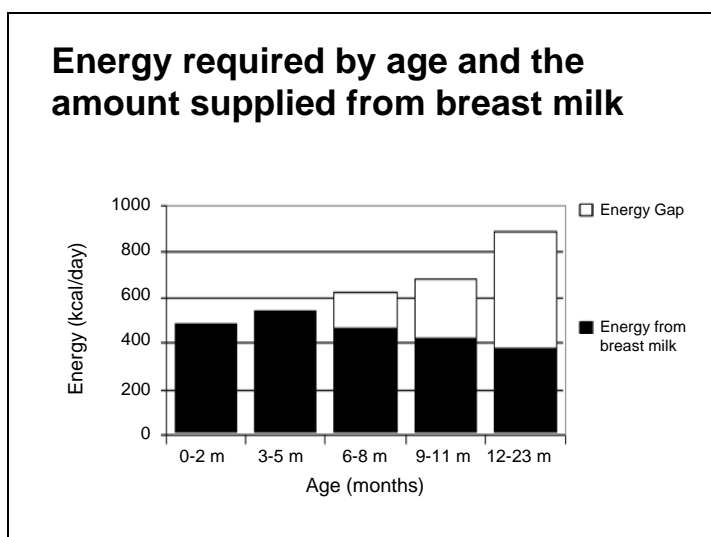
Additional foods and liquids are called complementary foods, as they are additional or complementary to breastfeeding, rather than adequate on their own as the diet. Complementary foods must be nutritious foods and in adequate amounts so the child can continue to grow.

During the period of **complementary feeding**, the young child gradually becomes accustomed to eating family foods, though breastfeeding continues to be an important source of nutrients and protective factors until the child is at least two years old.

### The optimal age to start complementary feeding

Our body uses food for energy to keep alive, to grow, to fight infection, to move around and be active. Food is like the wood for the fire – if we do not have enough good wood, the fire does not provide good heat or energy. In the same way, if young children do not have enough good food, they will not have the energy to grow and be active.

### Energy Gap





On this graph, each column represents the total energy needed at that age. The columns become taller to indicate that more energy is needed as the child becomes older, bigger and more active. The dark part shows how much of this energy is supplied by breast milk.

From about six months onwards there is a **gap** between the total energy needs and the energy provided by breast milk. The gap increases as the child gets bigger.

Therefore, for most babies, six months of age is a good time to start complementary foods. Complementary feeding from six completed months helps a child to grow well and be active and content.

### Key Message 2

Starting other foods in addition to breast milk at six completed months helps a child to grow well.

At six completed months, babies need to learn to eat thick porridge, puree and mashed foods as these foods fill the energy gap more than liquids.

At six completed months of age it becomes easier to feed thick porridge, puree 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.

Most babies do not need complementary foods before six months of age. If the baby is less than six months old, counsel the mother on how to breastfeed exclusively in a way that helps the baby to get enough breast milk.

If the baby is not receiving breast milk, continue using adequate replacement milk feeding until six months of age rather than add complementary foods early.

### RISKS TO STARTING COMPLEMENTARY FOODS TOO EARLY

Adding complementary foods **too soon** (before six months) may:

- take the place of breast milk, making it difficult to meet the child's nutritional needs
- result in a diet that is low in nutrients if thin, watery soups and porridges are used because these are easy for babies to eat
- increase the risk of illness because less of the protective factors in breast milk are consumed
- increase the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breast milk
- increase the risk of wheezing and other allergic conditions because the baby cannot yet digest and absorb non-human protein well
- increase the mother's risk of another pregnancy if breastfeeding is less frequent.

### RISKS TO STARTING COMPLEMENTARY 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
- the child grows and develops slower
- might not receive the nutrients to avoid malnutrition and deficiencies such as anaemia from lack of iron.

Most babies do not need complementary foods before six completed months of age.

All babies older than six completed months of age should receive complementary foods.

<b>EXERCISE 28.A ASSESS YOUR PRACTICES</b>				
Does this practice occur?	With all children	With some children	Does not occur	Comments
Weigh child				
Measure child's length				
Look at child's growth chart				
Discuss how the child is feeding				
Note on child's chart that feeding was discussed				
Carry out demonstrations of young children's food preparations and feeding techniques				
Make home visits to assess foods and feeding practices				
Other Activities				

Most frequent activities occurring in your health facility

Least frequent activities occurring in your health facility

## Summary

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.

## Notes

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## Session 29

# Foods to Fill the Energy Gap

### Objectives

After completing this session participants will be able to:

- list the local foods that can help fill this 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

### Foods that can fill the energy gap

All foods provide some energy. However, every community has at least one *staple* or main food. 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.

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



The stomach of a young child is small. At eight months of age the stomach can hold about 200 ml at one time. Thin foods and liquids fill it quickly.

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.

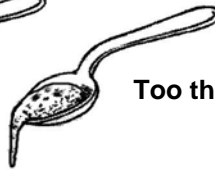
### Key Message 3

Foods that are thick enough to stay in the spoon give more energy to the child.

Just right



Too thin



### WAYS TO ENRICH A CHILD'S FOODS

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 or soured milk, coconut milk, or cream.
  - . Add a spoonful of milk powder after cooking.
  - . Mix legume, pulse or bean flour with the staple flour before cooking.
  - . Stir in a paste made from nuts or seeds such as groundnut paste (peanut butter) or sesame seed paste (tahini/sim sim).
  - . Add a spoonful of margarine, ghee or oil.

## Fats and oils

### FATS AND OILS

- Oils and fats are concentrated sources of energy. A little oil or fat, such as one-half teaspoon, added to the child's bowl of food, gives extra energy in a small volume. The addition of fatty/oily foods also makes thicker porridge or other staple softer and easier to eat.
- Fats and oils can also be used for frying foods, or spread on foods such as bread. The fat or oil should be fresh as it can go bad with storage.
- If a large amount of oil is added, 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, jaggery and honey are also energy-rich and can be added to foods in small quantities to increase the energy concentration. However, these foods do not contain any other nutrients.
- Caregivers need to watch that sugary foods do not replace other foods in the diet. For example, sweets, sweet biscuits and sugary drinks used instead of a meal for a young child.
- Essential fatty acids are needed for a child's growing brain and eyes, and for healthy blood vessels. These essential fatty acids are present in breast milk (see Session 2).
- For children over six months old, who are not breastfed, good sources of essential fatty acids are fish, avocado, nut pastes and vegetable oil. Animal-source foods also provide essential fatty acids (see Session 30).

**FERMENTED PORRIDGE OR GERMINATION OF GRAIN FOR FLOUR.****Fermented porridge**

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

**Germinated or sprouted flour**

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



## Session 30

# Foods to Fill the Iron and Vitamin A Gaps

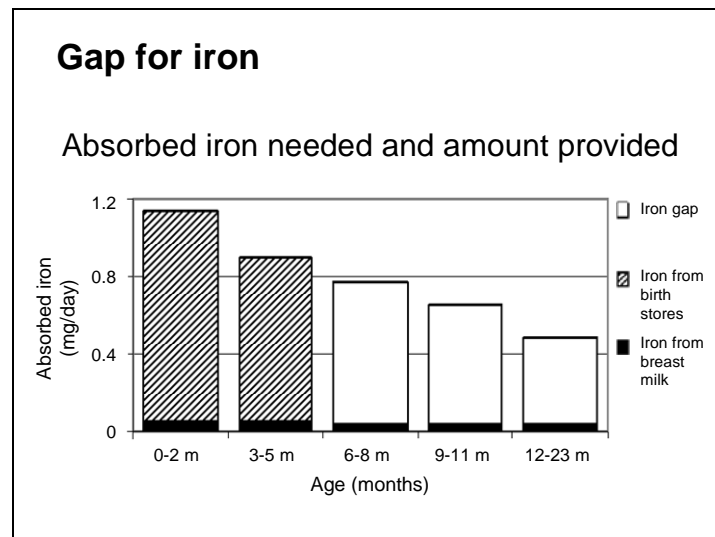
### Objectives

After completing this session participants will be able to:

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

### Iron Gap

Another nutrient gap to be filled is for iron. The young child needs iron to make new blood, to assist in growth and development and to help the body to fight infections.



In this graph, the top of each column represents the amount of absorbed iron that is needed per day by the child. A full-term baby is born with good stores of iron to cover his needs for the first six months (*This is the striped area*).

The black area along the bottom of the columns shows us that there is some iron provided by breast milk all the time breastfeeding continues.

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.

These iron stores are used up over this first six months, so after that time we see a gap between the child's needs and what they receive from breast milk. This gap needs to be filled by complementary foods (*The white area – this is the gap*).

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 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**

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

The flesh and organs of animals, birds and fish (included shell fish and tinned fish), as well as foods prepared with blood, 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.

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 so 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 store of nutrients and a rich source of vitamin A.

It can be hard for children to meet their iron needs without a variety of animal foods in their diet. Fortified or enriched foods such as fortified flours, pasta, cereals, or instant foods, helps 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.

**Key Message 4**

Animal-source foods are especially good for children,  
to help them grow strong and lively.

**The importance of legumes - pulses, nuts and seeds**

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.

**Key Message 5**

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

Some ways these foods could be prepared in a way that would be easier for the child to eat and digest are:

- . Soak beans before cooking and throw away the soaking water.
- . Remove skins by soaking raw seeds and then rubbing the skins off before cooking.
- . Boil beans then sieve to remove coarse skins.
- . Toast or roast nuts and seeds and pound to a paste.
- . Add beans/lentils to soups or stews.
- . Mash cooked beans well.

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

## Iron absorption

As well as pulses, dark-green leaves are also a source 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.

### IRON ABSORPTION

**The amount of iron that a child absorbs from food depends on:**

- the amount of iron in the food
- the type of iron (iron from meat and fish is better absorbed than iron from plants and eggs)
- the types of other foods present in the same meal (some *increase* iron absorption and others *reduce* absorption)
- whether the child has anaemia (more iron is absorbed if anaemic).

**Eating these foods at the same meal increases the amount of iron absorbed from eggs and plant foods such as cereals, pulses, seeds, and vegetables:**

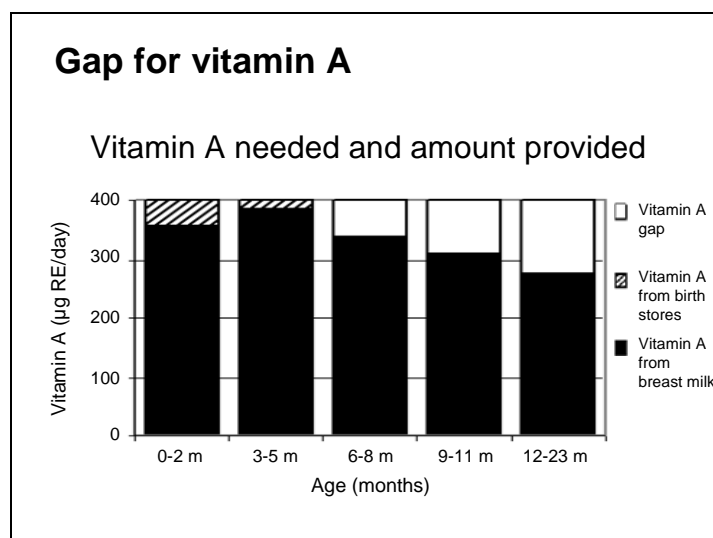
- foods rich in vitamin C such as tomato, broccoli, guava, mango, pineapple, papaya, orange, lemon and other citrus fruits
- small amounts of the flesh or organs/offal of animals, birds, fish and other sea foods.

**Iron absorption is decreased by**

- drinking teas and coffee
- foods high in fibre such as bran
- foods rich in calcium

## Foods that can fill the vitamin A gap

Another important nutrient is vitamin A, which is needed for healthy eyes and skin and to help the body fight infections.



Again, on this graph the top of each column represents the amount of vitamin A that the child needs each day. Breast milk supplies a large part of the vitamin needed provided the child continues to receive breast milk and the mother's diet is not deficient in vitamin A. As the young child grows, there is a gap for vitamin A that needs to be filled by complementary foods.

Good foods to fill this gap are dark-green vegetables and yellow-coloured vegetables and fruits. Other sources of vitamin A that we mentioned already were:

- organ foods/offal (liver) from animals
- milk and foods made from milk such as butter, cheese and yoghurt
- egg yolks
- margarine, dried milk powder and other foods fortified with vitamin A.

Unbleached red palm oil is also rich in vitamin A.

Vitamin A can be stored in a child's body for a few months. Encourage families to feed foods rich in vitamin A as often as possible when these foods are available, ideally every day. A variety of vegetables and fruits in the child's diet help to meet many nutrient needs.

Health workers need to be aware of the products that are available in the area. If the health worker knows about the products, they can discuss with an individual family if these products are useful for their child or not.

### Key Message 6

Dark-green leaves and yellow-coloured fruits and vegetables help a child to have healthy eyes and fewer infections.

In some countries, there are low priced processed complementary foods such as iron fortified flour and fortified baby cereals that are made locally. These are usually convenient and nutritious and families can be made aware of them.

### FORTIFIED COMPLEMENTARY FOODS

When discussing fortified complementary foods with caregivers, there are some points to consider:

**What are the main contents or ingredients?**

The food may be a staple or cereal product or a flour. It may have some vegetables, fruit or animal-source foods in it.

**Is the product fortified with micronutrients such as iron, vitamin A or other vitamins?**

Added iron and vitamins can be useful, particularly if there are few other sources of iron containing foods in the diet.

**Does the product contain ingredients such as sugar and/or oil to add energy?**

These added ingredients can make these products a useful source of energy, if the child's diet is low in energy. Limit use of foods that are high in sugar and oil/fat but with few other nutrients.

**What is the cost compared to similar home-produced foods?**

If processed foods are expensive, spending money on them may result in families being short of money.

**Does the label or other marketing imply that the product should be used before six months of age or as a breast-milk substitute?**

Complementary foods should not be marketed or used in ways that undermine breastfeeding. To do so is a violation of the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions and should be reported to the company concerned and the appropriate government authority.

## The fluid needs of the young child

The baby who is exclusively breastfeeding receives all the liquid he needs in the breast milk. When other foods are added to the diet, the baby may need extra fluids. Likewise, a baby who is under six months of age and only receiving replacement milks does not need extra water.

Offer fluids when the child seems thirsty. Extra fluid is needed if the child has a fever or diarrhoea.

### FLUID NEEDS OF THE YOUNG CHILD

- Water is good for thirst. A variety of pure fruit juices can be used also. Too much fruit juice may cause diarrhoea and may reduce the child's appetite for foods.
- Drinks that contain a lot of sugar may actually make the child thirstier as their body has to deal with the extra sugar. If packaged juice drinks are available in your area, find out which ones are pure juices and which ones have added sugar. Fizzy drinks (sodas) are not suitable for young children.
- Teas and coffee reduce the iron that is absorbed from foods. If they are given, they should not be given at the same time as food or within two hours before or after food.
- Sometimes a child is thirsty during a meal. A small drink will satisfy the thirst and they may then eat more of their meal.
- Drinks should not replace foods or breastfeeding. If a drink is given with a meal, give only small amounts and leave most until the end of the meal. Drinks can fill up the child's stomach so that they do not have room for foods.
- Remember that children who are not receiving breast milk need special attention and special recommendations. A non-breastfed child aged 6-24 months of age needs approximately 2-3 cups of water per day in a temperate climate and 4-6 cups of water per day in a hot climate. This water can be incorporated into porridges or stews, but clean water should also be offered to the child several times a day to ensure that the infant's thirst is satisfied.

**EXERCISE 30.A WHAT IS IN THE BOWL?**

Choose foods that are available to families in your area to form one meal for a young child, aged \_\_\_\_\_

What are Key Messages you could give for the foods that you have chosen?



## Session 31

# Quantity, Variety and Frequency of Feeding

### Objectives

After completing this session participants will be able to:

- explain the importance of using a variety of foods
- describe the frequency of feeding complementary foods
- outline the quantity of complementary foods to offer
- list the recommendations for feeding a non-breastfed child
- list the Key Messages from this session

### The importance of using a mixture or variety of foods

Most adults and older children eat a mixture of foods at mealtime. In the same way, it is important for young children to eat a mix of good complementary foods.

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.

The gaps for iron and for energy may be the hardest to fill.

Animal-source foods are special foods for children. These foods should be eaten every day or as often as possible. If foods fortified with iron are available, these could be used to help fill the iron gap.

If an iron-rich food is not available, you as the health worker may need to recommend using a micronutrient supplement to ensure the child gets sufficient iron and other micronutrients.

To give more energy foods, families can give some extra foods between meals that are easy to prepare. These extra foods are in addition to the meals – they should not replace them. These extra foods are often called snacks. However, they should not be confused with foods such as sweets, crisps or other processed foods, which may include the term snack foods in their name.

Good snacks provide both energy and nutrients. Yoghurt and other milk products; bread or biscuits spread with butter; margarine, nut paste or honey, fruit, bean cakes, cooked potatoes, are all good snacks.

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.

## The frequency of feeding complementary foods

### Key Message 7

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

## Recommendations for the non-breastfed child

### Recommendations for feeding the non-breastfed child

The non-breastfed child should receive:

- extra water each day (2-3 cups in temperate climate and 4-6 cups in hot climate)
- essential fatty acids (animal-source foods, fish, avocado, vegetable oil, nut pastes)
- adequate iron (animal-source foods, fortified foods or supplements)
- milk (1-2 cups per day)
- extra meals (1-2 meals per day)

## Amount of complementary food to be offered

When a child starts to eat complementary foods, he needs time to get accustomed to the new taste and texture of the foods. A child needs to learn the skill of eating. Encourage families to start with 2-3 small spoonfuls of the food twice a day.

AMOUNTS OF FOODS TO OFFER			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal <sup>1</sup>
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	<sup>3</sup> / <sub>4</sub> to one 250 ml cup/bowl
If baby is not breastfed, give in addition: 1-2 cups of milk per day, and 1-2 extra meals per day.			

As the child gets older, the amount of food offered increases. Give as much as the child will eat with active encouragement.

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 that the mother increases the energy density of the meal (adding special foods) or increase the amount of food per meal. For example:

- For 6-8 months; increase gradually to <sup>2</sup>/<sub>3</sub> of cup
- For 9 to 11 months give <sup>3</sup>/<sub>4</sub> 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, recognizing the signs of hunger and satiety, these signs should guide the amount of food given at each meal and the need for snacks

### Key Message 8

A growing child needs increasing amounts of food.

<sup>1</sup> 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.

## Notes

[illegible]

## Session 32

# Building Confidence and Giving Support Exercises – Part 2

### Exercise 32.a Accepting what a mother THINKS

#### How to do the exercise:

Examples 1-2 are mistaken ideas which mothers might hold.

Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.

Beside each response write whether the response agrees, disagrees or accepts.

#### Example:

Mother of a healthy 19-month- old baby whose weight is on the median:

“I am worried that my child will become a fat adult so I will stop giving him milk”.

“You are worried about giving him milk?”

*Accepts*

“It is important that children have some milk in their diet until they are at least two years of age”.

*Disagrees*

“Yes, fat babies tend to turn into fat adults.”

*Agrees*

**Examples 1-2:**

1. Mother of a 7-month-old baby:  
 “My child is not eating any food that I offer so I will have to stop breastfeeding so often. Then he will be hungry and will eat the food.”  
 “Oh, no, you must not give him less breast milk. That is a bad idea.”  
 “I see...”  
 “Yes, sometimes babies do get full up on breast milk?”
  
2. Mother of a 12-month-old child:  
 “My baby has diarrhoea so I must stop giving him any solids.”  
 “Yes, often foods can make the diarrhoea worse.”  
 “You are worried about giving foods at the moment?”  
 “But solids help a baby to grow and gain weight again – you must not stop them now.”

**How to do the exercise:**

Examples 3-4 are some more mistaken ideas which mothers might hold.

Make up a response that accepts what the mother says, without disagreeing or agreeing.

**Examples 3-4:****Possible responses to accept what the mother thinks are:**

3. “My neighbour’s child eats more than my child and he is growing much bigger. I must not be giving my child enough food.”
  
4. “I am worried about giving my one-year-old child family food in case he chokes.”

**Exercise 32.b Accepting what a mother FEELS****How to do the exercise:**

After the Stories A, and B below, there are three responses.

Mark with a ✓ the response which shows acceptance of how the mother feels.

**Example:**

Edith's baby boy has not gained much weight over the past two months. As Edith tells you about it, she bursts into tears.

Mark with a ✓ the response which shows that you accept how Edith feels.

- a. Don't worry – I am sure he will gain weight soon.
- b. Shall we talk about what foods to give your baby?
- ✓ c. You're really upset about this aren't you?

**To answer:****Story A.**

Agnes is in tears. Her baby is refusing to eat vegetables and she is worried.

- a. Don't cry – many children do not eat vegetables.
- b. You are really worried about this, I know.
- c. It is important that your baby eats vegetables for the vitamins he needs.

**Story B.**

Susan is crying. Since starting complementary feeds her baby has developed a rash on his buttocks. The rash looks like a nappy rash.

- a. Don't cry - it is not serious.
- b. Lots of babies have this rash – we can soon make it better.
- c. You are really upset about this rash, aren't you?

### Exercise 32.c Praising what a mother and baby are doing right

#### How to do the exercise:

For Stories C and D below, make up a response which praises something the mother and baby are doing right.

#### Example:

(In your answer, you only need to give ONE answer):

A mother is giving her nine-month-old baby fizzy drinks. She is worried that he is not eating his meals well. He is growing well at the moment. She offers him three meals and one snack per day.

*"It is good that you are offering him three meals and one snack per day."*

*"Your child is growing well on the food you are giving him."*

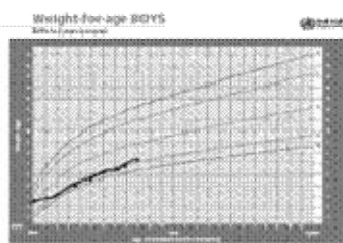
#### To answer:

#### Story C.

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

#### Story D.

A nine-month-old baby and his mother have come to see you. Here is the growth chart of the baby.





**Exercise 32.d Giving a little, relevant information****How to do the exercise:**

Below is a list of four mothers with babies of different ages.

Beside them are four pieces of information (a, b, c and d) that those mothers may need; but the information is not opposite the mother who needs it most.

Match the piece of information with the mother and baby in the same set for whom it is **MOST RELEVANT AT THAT TIME**

After the description of each mother there are four letters.

Put a circle round the letter which corresponds to the information which is most relevant for her.

**To answer:****Mothers 1-4****Information**

- |  |         |   |
|--|---------|---|
| 1. Mother with a seven-month old baby  | a b c d | a. Children need extra water at this age – about 4-5 cups in a hot climate.   |
| 2. Mother with a 15-month-old baby who is getting two meals per day.                             | a b c d | b. Children who start complementary feeding at six completed months of age grow well.                                   |
| 3. Mother with a 12-month-old baby who thinks that the baby is too old to breastfeed any longer. | a b c d | c. Growing children of this age need three to four meals per day plus one to two snacks if hungry, in addition to milk. |
| 4. Mother of a non-breastfed child who is 11 months old.   | a b c d | d. Breastfeeding to at least two years of age help a child to grow strong and healthy.                                  |

**Exercise 32.e Using simple language****How to do the exercise:**

Below are two pieces of information that you might want to give to mothers.

The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

**Example:****Information:**

Dark-green leaves and yellow-coloured fruit and vegetables are rich in vitamin A.

**Using simple language:**

*“Dark-green leaves and yellow-coloured vegetables help the child to have healthy eyes and fewer infections.”*

**To answer:****Information:**

1. Breastfeeding beyond six months of age is good as breast milk contains absorbable iron, calories and zinc.

**Using simple language:**

2. Non-breastfed children aged 14 months should receive protein, zinc and iron in appropriate quantities.

### Exercise 32.f Making one or two suggestions, not commands

#### How to do the exercise:

Below are some commands which you might want to give to a mother.  
Rewrite the commands as suggestions.

#### Example:

#### Command:

“You must start complementary foods when your baby is six completed months old.”

#### Suggestions:

(In your answer, you only need to give ONE answer):

*“Children who start complementary foods at six completed months grow well and are active and content.”*

*“Could you start some foods in addition to milk now that your baby is six completed months old?”*

#### To answer:

#### Command:

“You must use thick foods.”

#### Suggestions

“Your child should be eating a full bowl of food by one year of age.”

[illegible]

## Session 33

# Gathering Information on Complementary Feeding Practices

## Practice Scenarios

### Objectives

After completing this session participants will be able to gather information on complementary feeding practices by:

- demonstrating appropriate use of counselling skills
- observing a mother and child
- using the FOOD INTAKE JOB AID, 6-23 MONTHS

### Introduction

If you are going to counsel a mother on complementary feeding you need to find out what her child is eating. This is quite complicated because children eat different things at different times in a day.

In Session 13 you looked at the FEEDING HISTORY JOB AID, 0-6 MONTHS. You learnt how to take a feeding history.

Now we are going to look at assessing the intake of complementary feeds in more detail.

In Session 4 you learnt about assessing a breastfeed. We talked about how important it is to observe a mother and her baby, and the breastfeed itself. Observation is just as important when you are gathering information about complementary feeding, as it is when you assess a breastfeed.

### The FOOD INTAKE JOB AID, 6-23 MONTHS

A useful way to find out what a child eats is to ask the mother what the child ate yesterday. This information can be used to praise the good feeding practices that are there already and to identify any Key Messages to help improve practices.

The FOOD INTAKE JOB AID, 6-23 MONTHS helps you to do this.

The mother is asked to recall everything the child consumed the previous day. This includes all foods, snacks, drinks, breastfeeds and any vitamin or mineral supplements.

### INSTRUCTIONS TO COMPLETE FOOD INTAKE JOB AID, 6-23 MONTHS

1. Greet the mother. Explain that you want to talk about the child's feeding.
2. Fill out the child's name, birth date, age in completed months or years and today's date.
3. Ask to see the growth chart and observe the pattern of the growth.
4. Start with: *"(Mother name), let us talk about what (child's name) ate yesterday."*
5. Continue with: *"As we go through yesterday, tell me all (name) ate or drank, meals, other foods, water or breastfeeds."*  
*"What was the first thing you gave (name) after he woke up yesterday?"*  
*"Did (child's name) eat or drink anything else at that time or breastfeed?"*
6. If the mother mentions a preparation, such as a porridge or stew, ask her for the ingredients in the porridge or stew.
7. Then continue with:  
*"What was the next food or drink or breastfeed (child's name) had yesterday?"*  
*"Did (child's name) eat/drink anything else at that time?"*
8. Remember to 'walk' through yesterday's events with the mother to help her remember all the food/drinks/breastfeeds that the child had.
9. Continue to remind the mother you are interested in what the child ate and drank yesterday (mothers may talk about what the child eats/drinks in general).
10. Clarify any points or ask for further information as needed.
11. Mark on the FOOD INTAKE JOB AID, 6-23 MONTHS the practices that are present. If appropriate, show the mother the pictures of thin and thick consistency (for porridge and mixed foods). Ask her which drawing is most like the food she gave the child. Was it thick, stayed in the spoon and held a shape on the plate, or thin, flowed off the spoon and did not hold its shape on the plate?
12. Praise practices you wish to encourage. Offer 2-3 Key Messages as needed and discuss how the mother might use this information.
13. If the child is ill on that day and not eating, give the Key Message 10 :  
*Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly.*
14. See the child another day and use the FOOD INTAKE JOB AID, 6-23 MONTHS when the child is eating again.

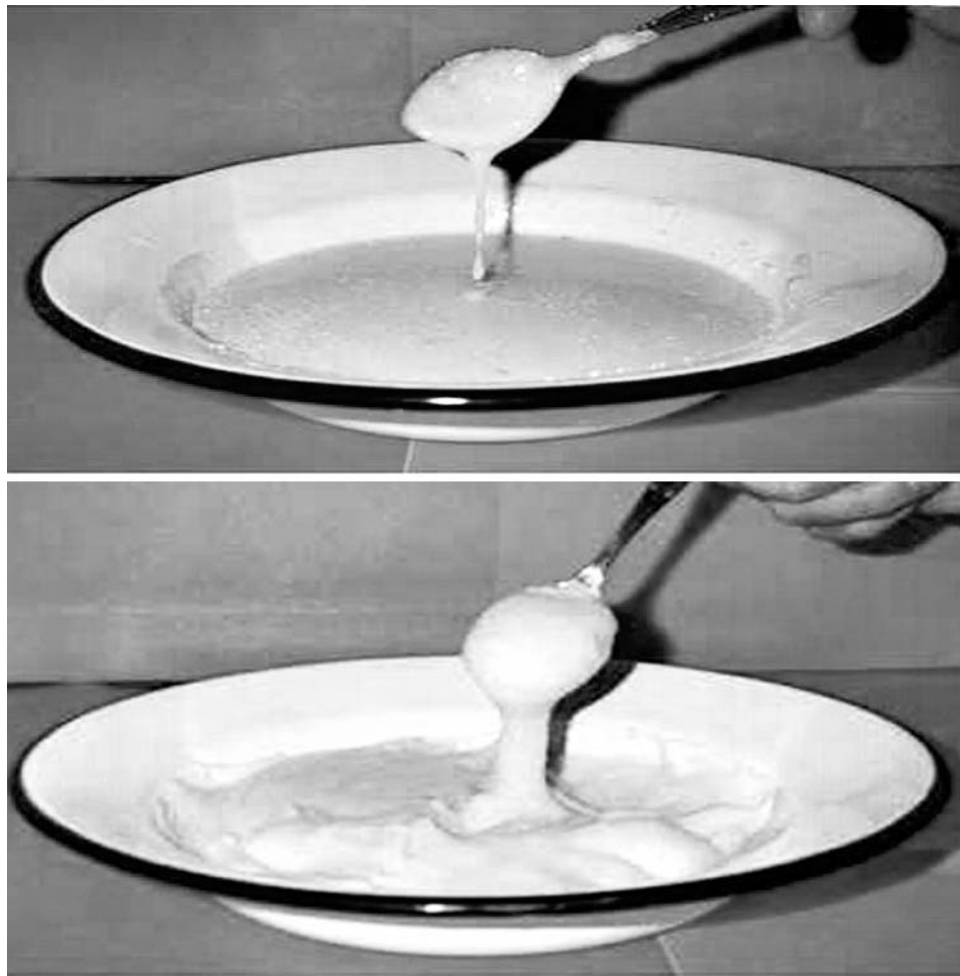
Enter ✓ in the Yes column if the practice is in place.

Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS for the message).

<b>FOOD INTAKE JOB AID, 6-23 MONTHS</b>		
<b>Child's name</b>		
<b>Date of birth</b>		<b>Age of child at visit</b>
<b>Feeding practice</b>	<b>Yes / number where relevant</b>	<b>Key Message given</b>
Growth curve rising?		
Child received breast milk?		
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)		
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?		
Child ate a dairy product yesterday?		
Child ate pulses, nuts or seeds yesterday?		
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?		
Child ate sufficient number of meals and snacks yesterday, for his/her age?		
Quantity of food eaten at main meal yesterday appropriate for child's age?		
Mother assisted the child at meals times?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

<b>FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS</b>		
<b>Feeding Practice</b>	<b>Ideal Feeding Practice</b>	<b>Key Messages to help counsel mothers</b>
Growth curve rising?		<i>Look at the shape of the growth curve of the child: is the child growing?</i>
Child received breast milk?	Yes	Breastfeeding for 2 years of age or longer helps a child to develop and grow strong and healthy
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	3 meals	Foods that are thick enough to stay in the spoon give more energy to the child
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	Animal-source foods should be eaten daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate a dairy product yesterday?	Try to give dairy products daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate pulses, nuts or seeds yesterday?	If meat is not eaten pulses or nuts should be eaten daily, with an iron enhancer such as a vitamin C rich food	Peas, beans, lentils, nuts and seeds are good for children
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	A dark-green or yellow vegetable or yellow fruit should be eaten daily	Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections
Child ate sufficient number of meals and snacks yesterday, for his/her age?	Child 6 – 8 months: 2 – 3 meals plus 1 – 2 snacks if child hungry Child 9 – 23 months: 3 – 4 meals plus 1 – 2 snacks if child hungry	A growing child needs 2 – 4 meals a day plus 1 – 2 snacks if hungry: give a variety of foods
Quantity of food eaten at main meal yesterday appropriate for child's age?	Child 6 – 8 months: gradually increased to approx. ½ cup at each meal Child 9 – 11 months: approx. ½ cup at each meal Child 12 – 23 months: approx. ¾ to 1 cup at each meal	A growing child needs increasing amounts of food
Mother assisted the child at meals times?	Yes, assists with learning to eat	A young child needs to learn to eat: encourage and give help... with lots of patience
Child took any vitamin or mineral supplements?	Vitamin and mineral supplements may be needed if child's needs are not met by food intake	<i>Explain how to use vitamin and mineral supplements if they are needed</i>
Child ill or recovering from an illness?	Continue to eat and drink during illness and recovery	Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly





Enter ✓ in the Yes column if the practice is in place.

Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL for the message)

FOOD INTAKE JOB AID, 6-23 MONTHS		
Child's name:		
Date of birth:		Age of child at visit: 11 months
Feeding practice	Yes / number where relevant	Key Message given
Growth curve rising?	<i>slowly</i>	
Child received breast milk?	✓	
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	2	Yes
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	✓	
Child ate a dairy product yesterday?	✓	
Child ate pulses, nuts or seeds yesterday?	✓	
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	✓	
Child ate sufficient number of meals and snacks yesterday, for his/her age?	✓	
Quantity of food eaten at main meal yesterday appropriate for child's age?	✓	
Mother assisted the child at meals times?	✓	
Child took any vitamin or mineral supplements?	-	
Child ill or recovering from an illness?	-	

## Practising gathering information on complementary feeding practices

You will use role-play to practise gathering information to assess complementary feeding practices.

You will work in small groups, taking turns to be a 'mother' or a 'health worker'. When you are the 'mother', play the part of the story on your card. The 'health worker' gathers information about your child's feeding. The other participants in the group observe.

When you are the 'mother':

- Give yourself and your child names and tell them to your 'health worker'.
- Answer the health worker's questions from your story. Do not give all the information at once.
- If the information to answer a question is not in your story, make up information to fit with the history.
- If your health worker uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the 'health worker':

- Greet the 'mother' and introduce yourself. Ask for her name and her baby's name, and use them.
- Ask one or two open questions to start the conversation and to find out in general how the child is.
- Explain that you would like to learn about how her child is eating. Ask the mother to tell you about the child's eating in the previous day. Prompt as needed. Fill out the FOOD INTAKE JOB AID, 6-23 MONTHS as you listen.
- Try to praise the things the mother is doing right. At the end of the counselling session try to think suggestions you would make and Key Messages to give to the mother.

When you are observing:

- Follow the pair practise with the FOOD INTAKE JOB AID, 6-23 MONTHS and observe if the 'health worker' gathers useful information.
- Notice which counselling skills the health worker uses and which she does not use.
- After the role-play, be prepared to praise what the health worker does right, and suggest what she could do better.

## This image shows a full page of white paper with horizontal dotted lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Session 34

# Feeding Techniques

### Objectives

After completing this session participants will be able to:

- describe feeding practices and their effect on the child's intake
- explain to families specific techniques to encourage a young child to eat
- list the Key Message from this session

### Feeding care practices and their effect on intake

A child needs food, health and care to grow and develop. Even when food and health care are limited, good care giving can help make best use of these limited resources.

Care refers to the behaviours and practices of the caregivers and family that provide the food, health care, stimulation and emotional support necessary for the child's healthy growth and development.

An important time to use good care practices is at mealtimes – when helping young children to eat.

### RESPONSIVE FEEDING PRACTICES

Assist children to eat, being sensitive to their cues or signals.  
Feed slowly and patiently, encourage but do not force.  
Talk to children during feeding with eye-to-eye contact.

### Assist children to eat, being sensitive to their cues or signals

A child needs to learn how to eat, to try new food tastes and textures. A child needs to learn to chew, move food around the mouth and to swallow food. The child needs to learn how to get food effectively into the mouth, how to use a spoon and how to drink from a cup.

Therefore, it is very important also to talk to caregivers and offer suggestions about *how* to encourage the child to learn to eat the foods offered. This can help families to have happier meal times.

Families tend to feed their young children in one of three different ways:

- One way is **high control** of the feeding by the caregiver who decides when and how much the child eats. This may include force-feeding.
- Another feeding style is that the **children are left to feed themselves**. The caregiver believes that the child will eat if hungry. The caregiver may also believe when the child stops eating that he has had enough to eat.
- The third style is feeding **in response to the child's cues** or signals using encouragement and praise.

**Feed slowly and patiently, encourage but do not force.**

### RESPONSIVE FEEDING TECHNIQUES

- Respond positively to the child with smiles, eye contact and encouraging words
- Feed the child slowly and patiently with good humour
- Try different food combinations, tastes and textures to encourage eating
- Wait when the child stops eating and then offer again
- Give finger foods that the child can feed him/herself
- Minimize distractions if the child loses interest easily
- Stay with the child through the meal and be attentive.

### Talk to children during feeding with eye to eye contact

Feeding times are periods of learning and love. Children may eat better if feeding times are happy. Feed when the child is alert and happy. If the child is sleepy or over-hungry and upset, he may not eat well. Regular mealtimes and the focus on eating without distractions, may also help a child learn to eat.

### Key Message 9

A young child needs to learn to eat: encourage and give help  
...with lots of patience.

## Session 35

### Practical Session 4

#### Gathering Information on Complementary Feeding Practices

**Objectives**

After completing this session participants will be able to:

- demonstrate how to gather information about complementary feeding using counselling skills and the FOOD INTAKE JOB AID, 6-23 MONTHS
- provide information about complementary feeding and continuing breastfeeding to a mother of a 6-23 month old child

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session.

During the practical session, you work in small groups of 3-4 and take turns to talk to a mother while the others in your group observe.

**When you talk with a mother:**

Introduce yourself to the mother and ask permission to talk with her. Introduce your group and explain you are interested in learning about feeding young children in general.

Try to find a chair or stool to sit on, so you are at the same level as the caregiver.

Practise as many of the counselling skills as possible as you gather information from the mother using the FOOD INTAKE JOB AID, 6-23 MONTHS. Listen to what the mother is saying and try not to ask a question if you have been told the information already.

Use the information you have gathered and then try to praise two things that are going well and offer the mother two or three pieces of relevant information that are useful at the time.

If the mother has any question about feeding her child, encourage her to discuss it with their health worker or health facility.

**When you are the observer:**

Mark a ✓ on the COUNSELLING SKILLS CHECKLIST for every skill that you observe the 'counsellor' practising. Remember to observe what the 'counsellor' is doing rather than thinking about what you would say if you were talking to the mother. The observer does not ask the mother any questions.

Remember to use your counselling skills when giving feedback to the participant who was doing the counselling.

Notice other feeding practices in the area such as:

- if children are eating any food or drinks
- whether children are given a bottle or soother/pacifier while waiting
- general interaction between mothers and children any posters or other information on feeding in the area.



## Session 36

# Checking Understanding and Arranging Follow-up

### Objectives

After completing this session participants will be able to:

- demonstrate how to ensure that a mother understands information provided by using checking questions
- arrange referral or follow-up of a child

### Checking understanding

Often you need to check the caregiver understands a practice or action they plan to carry out. Ask open questions to find out if further explanation is needed. Avoid asking closed questions, because they suggest the answer and can be answered with a simple 'yes' or 'no'. They do not tell you if the caregiver really understands.

Checking understanding also helps to summarize what you have talked about.

### Arrange follow-up or referral

All children should receive regular visits to check their general health and feeding. If a child has a difficulty that you are unable to help with, you may need to refer him for more specialized care.

Follow-up is especially important if there has been any difficulty with feeding. Ask the caregiver to visit the health facility in 5 days for follow-up.

This follow-up includes checking what foods are used and how they are given, checking the child's weight, general development and care.

The follow-up visits also give an opportunity to praise and reinforce practices thus building the caregiver's confidence, to offer relevant information and to discuss suggestions as needed.

It is especially important for children with special difficulties, for example children whose mothers are living with HIV to receive regular follow-up from health workers. These children are at special risk. In addition it is important to follow-up how the mother is coping with her own health and difficulties.

[illegible]

## Session 37

# Feeding During Illness and Low-Birth-Weight Babies

### Objectives

After completing this session participants will be able to:

- explain why children need to continue to eat during illness
- describe appropriate feeding during illness and recovery
- describe feeding of low-birth-weight babies
- estimate the volume of milk to offer to a low-birth-weight baby
- list the Key Message from this session

### Why children need to continue to eat during illness

During infections, the child needs more energy and nutrients to fight the infection. If they do not get extra food, their fat and muscle tissue is used as fuel. This is why they lose weight, look thin and stop growing.

The goal in feeding a child during and after illness is to have him return to the growth he had before illness.

### Key Message 10

Encourage the child to drink and to eat during illness and provide extra food after illness to help them recover quickly.

### Appropriate feeding during illness and recovery

Sick children often need *extra* drinks and food during illness – for example if they have fever or diarrhoea. A sick child may prefer breastfeeding to eating other foods. Do not withhold food from a sick child.

### FEEDING THE CHILD WHO IS ILL

- Encourage the child to drink and to eat – with lots of patience
- Feed small amounts frequently
- Give foods that the child likes
- Give a variety of nutrient-rich foods
- Continue to breastfeed – often ill children breastfeed more frequently

### Feeding during recovery

A child's appetite may be poor during illness. Even with encouragement to eat, the child may not eat well. The child's appetite usually increases after the illness so it is important to continue to give extra attention to feeding after the illness. This is a good time for families to give extra food so that lost weight is quickly regained. This allows 'catch-up' growth.

Young children need extra food until they have regained all their lost weight and are growing at a healthy rate.

### FEEDING DURING RECOVERY

- Give **extra** breastfeeds
- Feed an **extra** meal
- Give an **extra** amount
- Use **extra** rich foods
- Feed with **extra** patience.

### Low-birth-weight babies

The term *low-birth-weight* (LBW) means a birth weight of less than 2,500 grams (up to and including 2,499g), regardless of gestational age. This includes babies who are born *premature* (that is, who are born before 37 weeks of gestational age), and babies who are *small for gestational age*. Babies may be small for both these reasons

In many countries 15-20% of all babies are low-birth-weight.

Low-birth-weight babies are at particular risk of infection, and they need breast milk more than larger babies. Yet they are given artificial feeds more often than larger babies.

Many LBW babies can breastfeed without difficulty. Babies born at term, who are small-for-dates, usually suckle effectively. They are often very hungry and need to breastfeed more often than larger babies, so that their growth can catch up.

Babies who are born preterm may have difficulty suckling effectively at first. But they can be fed on breast milk by tube or cup, and helped to establish full breastfeeding later. Breastfeeding is easier for these babies than bottle feeding.

Mothers of LBW babies need skilled help to express their milk and to cup-feed.

It is important to start expressing on the first day, within six hours of delivery if possible. This helps to start breast milk to flow, in the same way that suckling from soon after delivery helps breast milk to 'come in'.

If a mother can express just a few millilitres of colostrum it is valuable for her baby.

Babies of about 32 weeks gestational age or more are able to start suckling on the breast.

Babies between about 30-32 weeks gestational age can take feeds from a small cup, or from a spoon.

Babies below 30 weeks usually need to receive their feeds by a tube in hospital.

Let the mother put her baby to her breast as soon as he is well enough. He may only root for the nipple and lick it at first, or he may suckle a little. Continue giving expressed breast milk by cup to make sure the baby gets all that he needs.

When a LBW baby starts to suckle effectively, he may pause during feeds quite often and for quite long periods. For example, he may take 4-5 sucks and then pause for up to 4 or 5 minutes.

It is important not to take him off the breast too quickly. Leave him on the breast so that he can suckle again when he is ready.

He can continue for up to an hour if necessary. Offer a cup-feed after the breastfeed.

Make sure that the baby suckles in a good position. Good attachment may make effective suckling possible at an earlier stage.

The best positions for a mother to hold her LBW baby at the breast are:

- . across her body, holding him with the arm on the opposite side to the breast
- . the underarm position.

Low-birth-weight babies need to be followed up regularly to make sure that they are getting all the breast milk that they need.

Low-birth-weight babies of mothers who are HIV-positive and who have chosen replacement feeding are at higher risk of complications and should also be followed regularly to make sure they are growing. Encourage mothers to feed the replacement milk to their babies by cup.

**AMOUNT OF MILK FOR LOW-BIRTH-WEIGHT BABIES WHO CANNOT BREASTFEED****What milk to give**

Choice 1: Expressed breast milk (EBM) (if possible from the baby's mother)

Choice 2: Formula made up according to the instructions

**Babies who weigh less than 2.5 kg (Low-birth-weight)**

Start with 60 ml/kg body weight

Increase the total volume by 20 ml per kg per day, until the baby is taking a total of 200 ml per kg per day

Divide the total into 8-12 feeds, to feed every 2-3 hours

Continue until the baby weighs 1800 g or more, and is fully breastfeeding

Check the baby's 24-hour intake

The size of individual feeds may vary

## Session 38

# Food Demonstration

### Objectives

After completing this session participants will be able to:

- prepare a plate of food suitable for an infant or young child
- explain why they have chosen these foods
- conduct a food demonstration with a caregiver

To teach a new skill or behaviour, you could:

- tell the mother how to do it - this is good
- ask the mother to watch while you talk and prepare the food – this is better
- help the mother to actually prepare the food themselves – this is the BEST method

AMOUNTS OF FOODS TO OFFER			
Age	Texture	Frequency	Amount of food an average child will usually eat at each meal <sup>1</sup>
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	<sup>3</sup> / <sub>4</sub> 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.			

<sup>1</sup> 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.

<b>EXERCISE 38.A PREPARING A YOUNG CHILD'S MEAL</b>		
Group:		
Task	Achieved	Comments
Mixture of foods:		
Staple		
Animal-source food		
Bean / pulse <i>plus</i> vitamin C fruit or vegetable		
Dark-green vegetable or yellow-coloured fruit or vegetable		
Consistency		
Amount		
Prepared in a clean and safe manner		

**Key Messages:**

1.

2.



Watching a demonstration is useful. However, it is easier to remember a new skill if a mother actually prepares the food herself.

How you assist a mother to learn is important. Your counselling can also be used when helping a mother to learn a new skill.

You can use your skills to:

- . use open questions to find out if the mother understands
- . avoid judging words and sounding critical, and praise the mother
- . explain things in a simple and suitable way to help her understand.

Whenever possible, let the mother prepare the food herself, with your support, until she is confident and competent. Watching a health worker prepare foods is not enough, particularly if there is a difficulty with the child's weight gain or feeding. Supportive teaching can help to build her confidence as well as making it easier for her to learn.

## Planning Guide for a Group Demonstration of the Preparation of Young Children's Food

### Gather the Equipment and Materials

- Cooked food for the preparation
- Plates and utensils for the preparation
- Utensils for mothers and infants to taste the preparation
- Table on which to prepare the food
- Facilities for washing hands

### Review Objectives of the Demonstration:

1. Teach mothers how to prepare a simple and nutritious food for young children using local ingredients (to learn through doing).
2. Demonstrate to mothers the appropriate consistency (thick) for these foods.
3. Demonstrate the taste and acceptability of the food preparations for mothers and young children.

### Decide the Key Messages

- Select 1-3 Key Messages to say to mothers (see Key Messages, inside back cover)
- Follow each message with a checking question (a question that you cannot answer with a simple 'yes' or 'no').

For example:

1. Foods that are thick enough to stay in the spoon give more energy to the child.  
*Checking question:* What should the consistency of foods be for a small child? (*Answer:* thick, so the food stays in the spoon).
2. Animal-source foods are especially good for children, to help them grow strong and lively.  
*Checking question:* What animal-source food could you give your child in the next two days?  
(*Answer:* meats, fish, egg, milk, cheese - these are special foods for the child).
3. A young child needs to learn to eat: encourage and give help ... with lots of patience.  
*Checking question:* How should you feed a child learning to eat?  
(*Answer:* with patience and encouragement).

## Give the Participatory Demonstration

- Thank the mothers for coming.
- Present the recipe that will be prepared.
- Hold up each of the ingredients. Mention any ingredients that can be easily substituted, for example oil for butter, powdered milk or tinned milk (unsweetened) for fresh milk, or cooking water or boiled water if no milk is available.
- Invite at least two mothers to prepare the food. If possible, have enough ingredients to have 2 or 3 pairs of mothers to participate in the preparation, each pair working with their own plate of ingredients and utensils.
- Talk the mothers through each step of the preparation, for example:
  - Wash hands
  - Mashing a potato or \_\_\_\_\_
  - Adding the correct quantity of fish or egg, etc.
  - Adding correct quantity of milk or water.
- Point out the consistency of the preparation as the mothers are making it, and demonstrate with a spoon when they are finished.
- Reinforce the use of local inexpensive and nutritious ingredients, especially using foods from the family pot.
- Ask the mothers if they would have difficulty in obtaining any of the ingredients (suggest alternatives). Ask the mothers if they could prepare the food in their household.

## Offer Food Preparations to Taste

- Invite the mothers who prepared the food to taste it in front of the rest and give their opinion (use clean spoons).
- Invite all the mothers to taste the preparation and to give it to their small children (who are at least six months old). Use a clean spoon for each child.
- Use this time to stress the Key Messages you decided to use when planning the demonstration.

## Ask Checking Questions

- What are the foods used in this recipe? Wait for responses.
- Then the health worker reads out the list of the foods again.
- Ask the mothers when they think they can prepare this food for their young child (e.g. tomorrow).
- You may repeat the Key Messages and checking questions again.

## Conclude Demonstration

- Thank the mothers for coming and participating.
- Ask the mothers to share their new knowledge of preparing this food with a neighbour who has small children.
- Invite mothers to visit the health facility for nutrition counselling and growth checks.

**Recipes for Food Demonstration - fill in the food and the amount needed****Recipe 1**

Family food for a 10-month-old child's main course  
(about ½ cupful – a cup/bowl that holds 250 ml)

Staple: \_\_\_\_\_

Meat or fish or beans: \_\_\_\_\_

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption:

\_\_\_\_\_

Dark-green or yellow vegetable: \_\_\_\_\_

Milk or hot boiled water or soup water if milk is not available: 1 Tablespoon (large spoon)

Wash hands and use clean surface, utensils and plates.  
Take the cooked foods and mash them together.  
Add the oil or margarine and mix well.

Check the consistency of the mashed food with a spoon – it should stay easily on the spoon without dripping off.  
Add the milk or water to the mashed foods and mix well. Only add a small amount of milk or water to make the right consistency.

**Recipe 2**

Family food for a 15-month-old child's main course (a full cup)

Staple: \_\_\_\_\_

Meat or fish or beans: \_\_\_\_\_

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption:

\_\_\_\_\_

Dark-green or yellow vegetable: \_\_\_\_\_

Oil or margarine: 1 teaspoon (small spoon)

Wash hands and use clean surface, plates and utensils.  
Take the cooked foods cut them into small pieces or slightly mash them together (depending on the child's age).  
Add the oil or margarine and mix well.

## Session 39

# Follow-up After Training

### Objectives

After completing this session participants will be able to:

- describe the contents and arrangement of the table of competencies they are expected to acquire
- describe the components of the follow-up session
- list the tasks they should complete for the follow-up session

You will receive a follow-up session between one and three months after this course. This follow-up is not an exam or a test. It is designed to help you to continue to learn the competencies expected of participants, and to help you with any difficulties you may have come across in infant feeding when you return to your facilities.

The trainer who comes to conduct this follow-up session might be one of the trainers who has facilitated on this course or another trainer who you may not have met. However, it will be someone who is experienced in infant feeding counselling and who is a trainer on this course.

### Competencies

On page 221 of your Manual you will see a table of competencies. To become competent in something you need to have the relevant knowledge and also the relevant skills. The table has three columns – a column for the competency, a column for the knowledge required and a column for the skills required. Most people find that they obtain the 'knowledge' part of the competency more quickly than the 'skills' part.

You will see that the competencies at the top of the table are essential for managing many situations. For example, the counselling skills that you have learnt in this course will be used in most situations. As you go further down the table you will see situations where you have to correctly apply a number of the competencies that are higher up in the table.

You may feel that you already have acquired much of the knowledge listed in the table from attending this course. However, you may feel that you need much more practice to develop the skills listed - for example the skill to cup-feed a low-birth-weight baby or the skill to use counselling skills to gather information on complementary feeding using the FOOD INTAKE JOB AID, 6-23 MONTHS.

When you go back to your facility you will have the opportunity to practise many of these skills. The more you practise the more skilled you will become.

## The follow-up session

The follow-up session will take one full day. The trainer who is coming to assess you will make arrangements with your facility for this follow-up to occur.

The morning will be practical sessions and the afternoon will be used to go over written exercises and to discuss any difficulties you have had. This is the time to discuss any difficult cases you may have seen.

If there are a few of you at one facility the afternoon discussion can take place together, but the written exercises will be individual.

The competencies that you will be assessed on in the morning are all in the table you have in your Manual. You may be taken to the post-natal ward and asked to teach a mother with a newborn baby to position and attach her baby. Or you may be asked to counsel a mother with HIV on infant feeding options. Or you may be asked to plot and interpret a child's growth chart.

## Preparation for the follow-up session

There are some things you need to prepare for the follow-up session.

1. Complete the exercises on page 231 of your Manual. These are all exercises on breastfeeding difficulties so that you can practise applying the knowledge and counselling skills that you have learnt. Complete your answers in pencil in your Manual, as you have been doing during this course. During your follow-up session the trainer will go over these exercises individually with you.
2. Complete the log of skills on page 227 of your Manuals. This log has three columns. There is one column for skills, one column for the date and one column for any comments. When you practise a skill at your facility you should list the skill and write the date next to it and any comments. Remember the list of skills which you are expected to learn are on pages 221-226 of your Manual.

So, for example. On the 1st July 2005 you practise the skill of assessing a breastfeed using the BREASTFEED OBSERVATION JOB AID. You would write the date in the first column and the skill in the second column.

Perhaps you found that the mother was not holding her breast in the recommended way, but was using the scissor grip. You might have suggested to her that she tries to hold her breast in a different way. Note this down in the third column.

Make particular notes of any difficult cases you have had to deal with so that you can discuss these with your trainer when she comes for follow-up.

3. Finally on page 229 of your Manuals there is a place where you can note down any difficulties you have experienced in trying to implement what you have learnt during the course. For example, you may have had difficulty counselling mothers about complementary feeding practices because the clinic in which you work is too crowded and there are too few staff. You may have had difficulties trying to help mothers who have had a caesarean section to give the first breastfeed because their babies are kept in the nursery after delivery. These difficulties can be discussed with your trainer at the follow-up session.

During the afternoon of the follow-up session the trainer will look at your log of skills with you and see which skills you have been able to practise.

## Competencies participants will be expected to master during training and follow-up

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

Competency	Knowledge	Skills
8. Help a mother to cup-feed her baby	<ul style="list-style-type: none"> <li>List the advantages of cup-feeding</li> <li>Estimate the volume of milk to give a baby according to weight</li> <li>Describe how to prepare a cup hygienically for feeding a baby</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate to a mother how to prepare a cup hygienically for feeding</li> <li>Practise with a mother how to cup-feed her baby safely</li> <li>Explain to a mother the volume of milk to offer her baby and the minimum number of feeds in 24 hours</li> </ul>
9. Plot and interpret a growth chart	<ul style="list-style-type: none"> <li>Explain the meaning of the standard curves</li> <li>Describe where to find the age and the weight of a child on a growth chart</li> </ul>	<ul style="list-style-type: none"> <li>Plot the weights of a child on a growth chart</li> <li>Interpret a child's individual growth curve</li> </ul>
10. Take a feeding history for an infant 0-6 months	<ul style="list-style-type: none"> <li>Describe the contents and arrangement of the Feeding History Job Aid, 0-6 Months</li> </ul>	<ul style="list-style-type: none"> <li>Take a feeding history using the job aid and appropriate counselling skills according to the age of the child</li> </ul>
11. Teach a mother the 10 Key Messages for complementary feeding	<ul style="list-style-type: none"> <li>List and explain the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6)</li> <li>Explain when to use the food consistency pictures, and what each picture shows</li> <li>List and explain the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7-8)</li> <li>List and explain the Key Message about how to feed an infant or young child (Key Message 9)</li> <li>List and explain the Key Message about how to feed an infant or young child during illness (Key Message 10)</li> </ul>	<ul style="list-style-type: none"> <li>Explain to a mother the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6)</li> <li>Use the food consistency pictures appropriately during counselling</li> <li>Explain to a mother the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7-8)</li> <li>Explain to a mother the Key Message about how to feed an infant or young child (Key Message 9)</li> <li>Explain to a mother the Key Message about how to feed an infant or young child during illness (Key Message 10)</li> </ul>
12. Counsel a pregnant woman about breastfeeding	<ul style="list-style-type: none"> <li>List the Ten Steps to Successful Breastfeeding</li> <li>Describe how the International Code of Marketing of Breast-milk Substitutes helps to protect breastfeeding</li> <li>Discuss why exclusive breastfeeding is important for the first six months</li> <li>List the special properties of colostrum and reasons why it is important</li> </ul>	<ul style="list-style-type: none"> <li>Use counselling skills appropriately with a pregnant woman to discuss the advantages of exclusive breastfeeding</li> <li>Explain to a pregnant woman how to initiate and establish breastfeeding after delivery, and the optimal breastfeeding pattern</li> <li>Apply competencies 1, 2 and 6</li> </ul>
13. Help a mother to initiate breastfeeding	<ul style="list-style-type: none"> <li>Discuss the importance of early contact after delivery and of the baby receiving colostrum</li> <li>Describe how health care practices affect initiation of exclusive breastfeeding</li> </ul>	<ul style="list-style-type: none"> <li>Help a mother to initiate skin-to-skin contact immediately after delivery and to introduce her baby to the breast</li> <li>Apply competencies 1, 2, 4 and 5</li> </ul>



Competency	Knowledge	Skills
14. Support exclusive breast feeding for the first six months of life	<ul style="list-style-type: none"> <li>. Describe why exclusive breastfeeding is important</li> <li>. Describe the support that a mother needs to sustain exclusive breastfeeding</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1 to 10 appropriately</li> </ul>
15. Help a mother to sustain breastfeeding up to 2 years of age or beyond	<ul style="list-style-type: none"> <li>. Describe the importance of breast milk in the 2nd year of life</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1, 2, 9 and 10, including explaining the value of breastfeeding up to 2 years and beyond</li> </ul>
16. Help a mother with 'not enough milk'	<ul style="list-style-type: none"> <li>. Describe the common reasons why a baby may have a low breast milk intake</li> <li>. Describe the common reasons for apparent insufficiency of milk</li> <li>. List the reliable signs that a baby is not getting enough milk</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1, 3, 9 and 10 to decide the cause</li> <li>. Apply competencies 2, 4, 5, 6, 7 and 8 to overcome the difficulty, including explaining the cause of the difficulty to the mother</li> </ul>
17. Help a mother with a baby who cries frequently	<ul style="list-style-type: none"> <li>. List the causes of frequent crying</li> <li>. Describe the management of a crying baby</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1, 3, 9 and 10 to decide the cause</li> <li>. Apply competencies 2, 4, 5 and 6 to overcome the difficulty, including explaining the cause of the difficulty to the mother</li> <li>. Demonstrate to a mother the positions to hold and carry a colicky baby</li> </ul>
18. Help a mother whose baby is refusing to breastfeed	<ul style="list-style-type: none"> <li>. List the causes of breast refusal</li> <li>. Describe the management of breast refusal</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1, 3, 9 and 10 to decide the cause</li> <li>. Apply competencies 2, 4 and 5 to overcome the difficulty, including explaining the cause of the difficulty to the mother</li> <li>. Help a mother to use skin-to-skin contact to help her baby accept the breast again</li> <li>. Apply competencies 7 and 8 to maintain breast milk production and to feed the baby meanwhile</li> </ul>
19. Help a mother who has flat or inverted nipples	<ul style="list-style-type: none"> <li>. Explain the difference between flat and inverted nipples and about protractility</li> <li>. Explain how to manage flat and inverted nipples</li> </ul>	<ul style="list-style-type: none"> <li>. Recognize flat and inverted nipples</li> <li>. Apply competencies 2, 4, 5, 7 and 8 to overcome the difficulty</li> <li>. Show a mother how to use the syringe method for the treatment of inverted nipples</li> </ul>
20. Help a mother with engorged breasts	<ul style="list-style-type: none"> <li>. Explain the differences between full and engorged breasts</li> <li>. Explain the reasons why breasts may become engorged</li> <li>. Explain how to manage breast engorgement</li> </ul>	<ul style="list-style-type: none"> <li>. Recognize the difference between full and engorged breasts</li> <li>. Apply competencies 2, 4, 5, 6 and 7 to manage the difficulty</li> </ul>

Competency	Knowledge	Skills
21. Help a mother with sore or cracked nipples	<ul style="list-style-type: none"> <li>List the causes of sore or cracked nipples</li> <li>Describe the relevant anatomy and physiology of the breast</li> <li>Explain how to treat candida infection of the breast</li> </ul>	<ul style="list-style-type: none"> <li>Recognize sore and cracked nipples</li> <li>Recognize candida infection of the breast</li> <li>Apply competencies 2, 3, 4, 5, 7 and 8 to manage these conditions</li> </ul>
22. Help a mother with mastitis	<ul style="list-style-type: none"> <li>Describe the difference between engorgement and mastitis</li> <li>List the causes of a blocked milk duct</li> <li>Explain how to treat a blocked milk duct</li> <li>List the causes of mastitis</li> <li>Explain how to manage mastitis, including indications for antibiotic treatment and referral</li> <li>List the antibiotics to use for infective mastitis</li> <li>Explain the difference between treating mastitis in an HIV-negative and HIV-positive mother</li> </ul>	<ul style="list-style-type: none"> <li>Recognize mastitis and refer if necessary</li> <li>Recognize a blocked milk duct</li> <li>Manage blocked duct appropriately</li> <li>Manage mastitis appropriately using competencies 1, 2, 3, 4, 5, 6, 7, 8 and rest, analgesics and antibiotics if indicated. Refer to the appropriate level of care</li> <li>Refer mastitis in an HIV-positive mother to the appropriate level of care</li> </ul>
23. Help a mother to breastfeed a low-birth-weight baby or sick baby	<ul style="list-style-type: none"> <li>Explain why breast milk is important for a low-birth-weight baby or sick baby</li> <li>Describe the different ways to feed breast milk to a low-birth-weight baby</li> <li>Estimate the volume of milk to offer a low-birth-weight baby per feed and per 24 hours</li> </ul>	<ul style="list-style-type: none"> <li>Help a mother to feed her LBW baby appropriately</li> <li>Apply competencies, especially 7, 8 and 9, to manage these infants appropriately</li> <li>Explain to a mother the importance of breastfeeding during illness and recovery</li> </ul>
24. Counsel an HIV-positive woman antenatally about feeding choices	<ul style="list-style-type: none"> <li>Explain the risk of mother-to-child transmission of HIV</li> <li>Outline approaches that can prevent MTCT through safer infant feeding practices</li> <li>State infant feeding recommendations for women who are HIV+ve and for women who are HIV-ve or do not know their status</li> <li>List advantages and disadvantages of these feeding options</li> </ul>	<ul style="list-style-type: none"> <li>Apply competencies 1 and 2 to counsel an HIV-positive woman</li> <li>Use the Flow Chart and the Counselling Cards to help an HIV-positive woman to come to her own decision about how to feed her baby</li> </ul>
25. Support an HIV-positive mother in her feeding choice	<ul style="list-style-type: none"> <li>List the different types of replacement milks available locally and how much they cost</li> <li>Explain how to prepare the milks</li> <li>Describe hygienic preparation of feeds and utensils</li> <li>Explain the volumes of milk to offer a baby according to weight</li> <li>Explain exclusive breastfeeding and stopping early</li> <li>Explain how to heat-treat and store breast milk</li> </ul>	<ul style="list-style-type: none"> <li>Help a mother to prepare the type of replacement milk she has chosen</li> <li>Apply competency 8</li> <li>Show a mother how to prepare replacement feeds hygienically</li> <li>Practise with a mother how to prepare replacement feeds hygienically</li> <li>Show a mother how to measure milk and other ingredients to prepare feeds</li> </ul>

Competency	Knowledge	Skills
	<ul style="list-style-type: none"> <li>. Describe the criteria for selection of a wet-nurse</li> </ul>	<ul style="list-style-type: none"> <li>. Practise with a mother how to measure milk and other ingredients to prepare feeds</li> <li>. Explain to a mother the volume of milk to offer her baby and the number of feeds per 24 hours</li> <li>. Apply competencies 1, 2, 3, 4, 5, and 6 to support a mother to breastfeed exclusively and optimally</li> <li>. Show a mother how to heat-treat breast milk and apply competencies 7 and 8</li> <li>. Apply competencies 1, 2, 3, 4, 5 and 6 to support the wet-nurse</li> <li>. Use the Counselling Cards and Flyers appropriately</li> </ul>
26. Follow-up the infant of an HIV-positive mother 0-6 months who is receiving replacement milk	<ul style="list-style-type: none"> <li>. Describe hygienic preparation of feeds</li> <li>. Explain the volumes of milk to give to a baby according to weight</li> <li>. Explain when to arrange follow-up or when to refer</li> <li>. Explain about feeding during illness and recovery</li> </ul>	<ul style="list-style-type: none"> <li>. Show a mother how to prepare replacement feeds hygienically</li> <li>. Practise with a mother how to prepare replacement feeds hygienically</li> <li>. Apply competency 8</li> <li>. Recognize when a child needs follow-up and when a child needs to be referred</li> <li>. Explain to a mother how to feed her baby during illness or recovery</li> <li>. Use the Counselling Cards and Flyers appropriately</li> </ul>
27. Help an HIV-positive mother to cease breastfeeding early and make a safe transition to replacement feeds	<ul style="list-style-type: none"> <li>. Describe the difficulties a mother may encounter when she tries to stop breastfeeding over a short period of time</li> <li>. Explain how to manage engorgement and mastitis in a mother who stops breastfeeding over a short period of time</li> <li>. Show the ways to comfort a baby who is no longer breastfeeding</li> <li>. List what replacement feeds are available and how to prepare them</li> <li>. Explain when to arrange follow-up or when to refer</li> </ul>	<ul style="list-style-type: none"> <li>. Explain to a mother how she should prepare to stop breastfeeding early</li> <li>. Practise with a mother how to prepare replacement feeds hygienically</li> <li>. Apply competencies 7 and 8</li> <li>. Manage breast engorgement and mastitis in an HIV-infected woman who is stopping breastfeeding (competencies 20 and 22)</li> <li>. Explain to a mother ways to comfort a baby who is no longer breastfeeding</li> </ul>
28. Help mothers whose babies are over six months of age to give complementary feeds	<ul style="list-style-type: none"> <li>. List the gaps which occur after six months when a child can no longer get enough nutrients from breast milk alone</li> <li>. List the foods that can fill the gaps</li> <li>. Describe how to prepare feeds hygienically</li> </ul>	<ul style="list-style-type: none"> <li>. Apply competencies 1, 2, 9 and 10</li> <li>. Use the FOOD INTAKE JOB AID, 6-23 MONTHS to learn how a mother is feeding her infant or young child</li> <li>. Identify the gaps in the diet using the FOOD INTAKE JOB AID, 6-23 MONTHS and the FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS</li> </ul>

Competency	Knowledge	Skills
	<ul style="list-style-type: none"> <li>List recommendations for feeding a non-breastfed child, including quantity, quality, consistency, frequency and method of feeding at different ages</li> </ul>	<ul style="list-style-type: none"> <li>Explain to a mother what foods to feed her child to fill the gaps, applying competency 11</li> <li>Demonstrate preparation of a meal for an infant or young child at different ages (8, 10, 15 months)</li> <li>Practise with a mother how to prepare meals for her infant or young child</li> <li>Show a mother how to prepare feeds hygienically</li> <li>Explain to a mother how to feed a non-breastfed child</li> </ul>
29. Help a mother with a breastfed child over six months of age who is not growing well	<ul style="list-style-type: none"> <li>Explain feeding during illness and recovery</li> <li>Describe how to prepare feeds hygienically</li> </ul>	<ul style="list-style-type: none"> <li>Apply competency 15 to help a mother to sustain breastfeeding up to 2 years of age or beyond</li> <li>Apply competencies 1, 2, 9, 10 and 11</li> <li>Explain to a mother how to feed during illness and recovery</li> <li>Demonstrate to a mother how to prepare feeds hygienically</li> <li>Recognize when a child needs follow-up and when a child needs referral</li> </ul>
30. Help a mother with a non-breastfed child over six months of age who is not growing well	<ul style="list-style-type: none"> <li>Explain about the special attention to give to children who are not receiving breast milk</li> <li>List the recommendations for feeding a non-breastfed child, including quantity, quality, consistency, frequency and method of feeding</li> <li>Explain feeding during illness and recovery</li> <li>Describe how to prepare feeds hygienically</li> </ul>	<ul style="list-style-type: none"> <li>Apply competencies 1, 2, 9, 10 and 11</li> <li>Explain to a mother how to feed a non-breastfed child</li> <li>Explain to a mother how to feed during illness and recovery</li> <li>Demonstrate to a mother how to prepare feeds hygienically</li> <li>Recognize when a child needs follow-up and when a child needs referral</li> </ul>

LOG OF SKILLS PRACTISED		
Date	Skill practised	Comments

LOG OF SKILLS PRACTISED		
Date	Skill practised	Comments

DIFFICULTIES EXPERIENCED		
Date	Difficulty experienced	Comments

DIFFICULTIES EXPERIENCED		
Date	Difficulty experienced	Comments



## EXERCISES TO BE COMPLETED

There are 12 exercises to be completed in your Manual before the follow-up session. The trainer will go through these exercises with you at the follow-up session and discuss any difficulties you had answering them.

### How to do the exercise:

Read the stories and write your answers to the questions in pencil in the spaces. These exercises are based on Sessions 14 and 20 in your Manuals. The exercises also use the counselling skills from Sessions 5 and 10. Refer to these Sessions to help you with these exercises.

### Example:

**Mrs A** says that both her breasts are swollen and painful. She put her baby to her breast for the first time on the third day, when her milk 'came in'. This is the sixth day. Her baby is suckling, but now it is rather painful, so she does not let him suck for very long. Her milk is not dripping out as fast as it did before.

*What is the diagnosis?*

Engorged breasts.

*What may have caused the condition?*

Delay starting to breastfeed.

*How can you help Mrs A?*

Help her to express her milk, and help her to position her baby at her breast, so that he can attach better.

**To answer:**

**Mrs B** says that her right breast has been painful since yesterday, and she can feel a lump in it, which is tender. She has no fever and feels well. She has started to wear an old bra which is tight, because she wants to prevent her breasts from sagging. Her baby now sometimes sleeps for 6-7 hours at night without feeding. You watch him suckling. Mrs B holds him close, and his chin is touching her breast. His mouth is wide open and he takes slow, deep sucks.

*What could you say to empathize with Mrs B's worries about her figure?*

*What is the diagnosis?*

*What may be the cause?*

*What three suggestions would you give Mrs B?*

**Mrs C** has had a painful swelling in her left breast for three days. It is extremely tender, and the skin of a large part of the breast looks red. Mrs C has a fever and feels too ill to go to work today. Her baby sleeps with her and breastfeeds at night. By day, she expresses milk to leave for him. She has no difficulty in expressing her milk. But she is very busy, and it is difficult for her to find time to express milk, or to breastfeed her baby during the day.

*What could you say to empathize with Mrs C?*

*What is the diagnosis?*

*Why do you think that Mrs C has this condition?*

*How would you treat Mrs C?*

**Mrs D** complains of nipple pain when her 6-week-old baby is suckling. You examine her breasts while her baby is asleep, and can see no fissures. When he wakes, you watch him feeding. His body is twisted away from his mother's. His chin is away from the breast, and his mouth is not wide open. He takes rapid, shallow sucks. As he releases the breast, you notice that the nipple looks squashed.

*What is the cause of Mrs D's nipple pain?*

*What could you say to build Mrs D's confidence?*

*What practical help could you give her?*

**Mrs E's** baby was born yesterday. She tried to feed him soon after delivery, but he did not suckle very well. She says that her nipples are inverted, and she cannot breastfeed. You examine her breasts, and notice that her nipples look flat. You ask Mrs E to use her fingers and to stretch her nipple and areola out a short way. You can see that the nipple and areola are protractile.

*What could you say to accept Mrs E's idea about her nipples?*

*How could you build her confidence?*

*What practical help could you give Mrs E?*

**Mrs F's** baby is 3 months old. She says that her nipples are sore. They have been sore on and off since an attack of mastitis several weeks ago. The mastitis cleared up after a course of antibiotics. This new pain feels like needles going deep into her breast whenever her baby suckles. You watch her baby breastfeeding. His mouth is wide open, his lower lip is turned out, and his chin is close to the breast. He takes some slow deep sucks and you see him swallow.

*What might be the cause of Mrs F's sore nipples?*

*What treatment would you give to her and her baby?*

*How would you build Mrs F's confidence?*

**Mrs G** is 16 years old. Her baby was born 2 days ago, and is very healthy. She has tried to breastfeed him twice, but her breasts are still soft, so she thinks that she has no milk, and will not be able to breastfeed. Her young husband has offered to buy her a bottle and some formula.

*What could you say to accept what Mrs G says about her breast milk?*

*Why does Mrs G think that she will not be able to breastfeed?*

*What relevant information would you give her, to build her confidence?*

*What practical help could you give Mrs G?*

**Mrs H** says that her breast milk seems to be decreasing. Her baby is 4 months old, and has gained weight well from when he was born. Last month she started giving him cereal three times a day. She says that he is breastfeeding less often, and for a shorter time than before she started cereal feeds. Mrs H is at home all day, and her baby sleeps with her at night.

*Why do you think that Mrs H's breast milk seems to be decreasing?*

*What are Mrs H and her baby doing right?*

*What could you suggest to Mrs H, so that she continues to breastfeed?*



**Mrs I's** baby is 7 weeks old. She says that her breast milk is not good. Her baby does not seem satisfied after breastfeeds. He cries and wants to feed again very soon, sometimes in half an hour, or an hour. He cries and wants to breastfeed often at night too, and Mrs I is exhausted. He passes urine about 6 times a day. When he breastfeeds, you notice that his lower lip is turned in, and there is more areola visible below his bottom lip than above his top lip.

The baby weighed 3.7 kilos at birth. He now weighs 4.8 kilos.

*Is Mrs I's baby getting as much breast milk as he needs?*

*What may be the reason for his behaviour?*

*What could you praise, to build Mrs I's confidence?*

*What practical help would you offer to Mrs I?*

**Mrs J** says that she is exhausted, and will have to bottle feed her 2-month-old baby. He does not settle after breastfeeds, and wants to feed very often - she cannot count how many times in a day. She thinks that she does not have enough breast milk, and that her milk does not suit her baby. While she is talking to you her baby wants a feed. He suckles in a good position. After about two minutes, he pauses, and Mrs J quickly takes him off her breast.

The baby's growth chart shows that he gained 250 g last month.

*What could you say to show that you accept Mrs J's ideas about her milk?*

*Is Mrs J's baby getting enough breast milk?*

*What is the reason for this?*

*What can you suggest to help Mrs J?*

**Mrs K** says that her 3-month-old baby is refusing to breastfeed. He was born in hospital and roomed-in from the beginning. He breastfed without any difficulty. Mrs K returned to work when her baby was 2 months old. Her baby has 2-3 bottle feeds while she is at work. For the last week, he has refused to breastfeed when she comes home in the evening. She thinks that her milk is not good, because she works hard and feels hot all day.

*What could you say to accept Mrs K's ideas about her milk?*

*What might be the cause of her baby's refusal to breastfeed?*

*What praise and relevant information could you give to build Mrs K's confidence?*

*What could you suggest that she does to breastfeed again, if she decides to try?*

**Mrs L** has a baby who is one month old. The baby was born in hospital, and was given three bottle feeds before he started to breastfeed. When Mrs L went home, her baby wanted to breastfeed often, and he seemed unsatisfied. Mrs L thought that she did not have enough milk. She continued to give bottle feeds, in addition to breastfeeding, and hoped that her breast milk supply would increase. Now her baby is refusing to breastfeed. When Mrs L tries to breastfeed, he cries and turns away. Mrs L wants very much to breastfeed, and she feels rejected by her baby.

*What could you say to empathize with Mrs L?*

*Why is Mrs L's baby refusing to breastfeed?*

*What relevant information might be helpful to MrsL?*

*What four things would you offer to help Mrs L to do, so that she and her baby can enjoy breastfeeding again?*

## Notes

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### KEY MESSAGES FOR COMPLEMENTARY FEEDING

1. Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.
2. Starting other foods in addition to breast milk at 6 months helps a child to grow well.
3. Foods that are thick enough to stay in the spoon give more energy to the child.
4. Animal-source foods are specially good for children, to help them grow strong and lively.
5. Peas, beans, lentils, and nuts and seeds, are good for children.
6. Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections.
7. A growing child needs 2-4 meals a day plus 1-2 snacks if hungry: give a variety of foods
8. A growing child needs increasing amounts of food
9. A young child needs to learn to eat: encourage and give help...with lots of patience.
10. Encourage the child to drink and to eat during illness and provide extra food after illness to help them recover quickly.

## Glossary of Terms

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

**Active encouragement:** Assistance given to encourage a child to eat. This includes praising, talking to the child, helping the child put food on the spoon, feeding the child, making up games.

**Afterpains:** Contraction of the uterus during breastfeeding in the first few days after childbirth, due to oxytocin released.

**AIDS:** Acquired immune deficiency syndrome, which means that the HIV-positive person has progressed to active disease.

**Allergy:** Symptoms when fed even a small amount of a particular food (so it is not dose-related).

**Alveoli:** Small sacs of milk secreting cells in the breast.

**Amenorrhoea:** Absence of menstruation.

**Anaemia:** Lack of red cells or lack of haemoglobin in the blood.

**Antenatal preparation:** Preparing a mother for the delivery of her baby.

**Antibodies:** Proteins in the blood and in breast milk which fight infection.

**Anti-infective factors:** Factors which prevent or which fight infection. These include antibodies.

**Appropriate touch:** Touching somebody in a socially acceptable way.

**Areola:** Dark skin surrounding the nipple.

**Artificial feeding:** Feeding an infant on a breast-milk substitute.

**Artificial feeds:** Any kind of milk or other liquid given instead of breastfeeding.

**Artificially fed:** Receiving artificial feeds only, and no breast milk.

**Asthma:** Wheezing illness.

**Attachment:** The way a baby takes the breast into his mouth; a baby may be well attached or poorly attached to the breast.

**Baby-friendly Hospital Initiative (BFHI):** An approach to transforming maternity practices as recommended in the joint WHO/UNICEF statement on Protecting, promoting and supporting breastfeeding: the special role of maternity services (1989).

**Baby-led feeding:** See demand feeding.

**Bedding-in:** A baby sleeping in bed with his mother, instead of in a separate cot.

**Bilirubin:** Yellow breakdown products of haemoglobin which cause jaundice.

**Blocked duct:** A milk duct in the breast becoming blocked with thickened milk, so that the milk in that part of the breast does not flow out.

**Bonding:** Mother and baby developing a close loving relationship.

**Bottle-feeding:** Feeding an infant from a bottle, whatever is in the bottle, including expressed breast milk, water, formula, etc.

**Breast pumps:** Devices for expressing milk.

**Breast refusal:** A baby not wanting to suckle from his mother's breast.

**Breastfeeding history:** All the relevant information about what has happened to a mother and baby, and how their present breastfeeding situation developed.

**Breastfeeding support:** A group of mothers who help each other to breastfeed.

**Breast-milk substitute:** Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not it is suitable for that purpose.

**Calories:** Kilocalories or Calories measure the energy available in food.

**Candida:** Yeast which can infect the nipple, and the baby's mouth and bottom. Also known as 'thrush'.

**Casein:** Protein in milk which forms curds.

**Cessation of breastfeeding:** Completely stopping breastfeeding, including suckling.

**Chapati:** A flat bread made by mixing whole wheat flour with water and then shaping pieces of the dough into flat circles and baking on a griddle (hot metal sheet). Traditionally eaten in India and Pakistan.

**Cleft lip or palate:** Abnormal division of the lip or palate.

**Closed questions:** Questions which can be answered with 'yes' or 'no'.

**Colic:** Regular crying, sometimes with signs suggesting abdominal pain, at a certain time of day; the baby is difficult to comfort but otherwise well.

**Cold compress:** Cloths soaked in cold water to put on the breast.

**Colostrum:** The special breast milk that women produce in the first few days after delivery; it is yellowish or clear in colour.

**Confidence:** Believing in yourself and your ability to do things.

**Contaminated:** Containing harmful bacteria or other harmful substances.

**Commercial infant formula:** A breast-milk substitute formulated industrially in accordance with applicable *Codex Alimentarius* standards to satisfy the nutritional requirements of infants during the first months of life up to the introduction of complementary foods.

**Complementary feeding:** The child receives both breast milk or a breast-milk substitute and solid (or semi-solid) food.



**Complementary food:** Any food, whether manufactured or locally prepared, used as a complement to breast milk or to a breast-milk substitute.

**Counselling:** A way of working with people so that you understand their feelings and help them to develop confidence and decide what to do.

**Cup-feeding:** Feeding from an open cup without a lid, whatever is in the cup.

**Deficiency:** Shortage of a nutrient that the body needs.

**Dehydration:** Lack of water in the body.

**Demand feeding:** Feeding a baby whenever he shows that he is ready, both day and night. This is also called 'unrestricted' or 'baby-led' feeding.

**Distraction (during feeding):** A baby's attention easily taken from the breast by something else, such as a noise.

**Ducts, milk ducts:** Small tubes which take milk to the nipple.

**Dummy:** Artificial nipple made of plastic for a baby to suck. Also known as a pacifier/soother.

**Early contact:** A mother holding her baby during the first hour or two after delivery.

**Eczema:** Skin condition, often associated with allergy.

**Effective suckling:** Suckling in a way which removes the milk efficiently from the breast.

**Empathize:** Show that you understand how a person feels from her point of view.

**Engorgement:** Swollen with breast milk, blood and tissue fluid. Engorged breasts are often painful and oedematous and the milk does not flow well.

**Essential fatty acids:** Fats which are essential for a baby's growing eyes and brain, which are not present in cow's milk or most brands of formula.

**Exclusive breastfeeding:** An infant receives only breast milk and no other liquids or solids, not even water, with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

**Expressed breast milk (EBM):** Milk that has been removed from the breasts manually or by using a pump.

**Express:** To squeeze or press out.

**Family foods:** Foods that are part of the family meals.

**Fermented foods:** Foods that are soured. For example, yoghurt is fermented milk. These substances can be beneficial and kill pathogens that may contaminate food.

**Fissure:** Break in the skin, sometimes called a 'crack'.

**Flat nipple:** A nipple which sticks out less than average.

**Foremilk:** The watery breast milk that is produced early in a feed.

**Formula:** Artificial milks for babies made out of a variety of products, including sugar, animal milks, soybean, and vegetable oils. They are usually in powder form, to mix with water.

**Fortified foods:** These are foods that have certain nutrients added to improve their nutritional quality.

**Full breasts:** Breasts which are full of milk, and hot, heavy and hard, but from which the milk flows.

**Gastric suction:** Sucking out a baby's stomach immediately after delivery.

**Germinated seeds/flour:** Seeds that have been soaked and allowed to sprout. The sprouted seeds can be dried and milled to make germinated flour. If a little of this flour is added to warm thick porridge it makes the porridge soft and easy to eat.

**Gestational age:** The number of weeks the baby has completed in the uterus.

**Ghee:** Butter that has been heated so that the fat melts and the water evaporates. It looks clear. It can be made from cow or buffalo milk and is widely used in India. In the Middle East it is called *samna*.

**Growth factors:** Substances in breast milk which promote growth and development of the intestine, and which probably help the intestine to recover after an attack of diarrhoea.

**Growth spurt:** Sudden increased hunger for a few days.

**Gruel:** Another name for thin porridge. Examples are *atole* in Central America, *uji* in Africa.

**Gulp:** Loud swallowing sounds, due to swallowing a lot of fluid.

**'High needs' babies:** Babies who seem to need to be carried and comforted more than other babies.

**Hindmilk:** The fat-rich breast milk that is produced later in a feed.

**HIV:** Human immunodeficiency virus, which causes AIDS (acquired immune deficiency syndrome).

**HIV-infected:** Refers to a person infected with HIV, but who may not know that he/she is infected.

**HIV-negative:** Refers to people who have taken a test with a negative result and who know their result.

**HIV-positive:** Refers to persons who have taken an HIV test, whose results have been confirmed and who know and/or their parents know that they tested positive.

**HIV-status unknown:** Refers to people who have not taken an HIV test or who do not know the result of their test.

**HIV testing and counselling:** Testing for HIV status, preceded and followed by counselling. Testing should be voluntary and confidential, with fully informed consent. The expression means the same as the terms: *counselling and voluntary testing*, *voluntary counselling and testing*, and *voluntary and confidential counselling and testing*. Counselling is a process, not a one-off event: for the HIV-positive client it should include life planning, and, if the client is pregnant or has recently given birth, it should include infant-feeding considerations.

**Home-modified animal milk:** A breast-milk substitute prepared at home from fresh or processed animal milk, suitably diluted with water and with the addition of sugar and micronutrients.

**Hormones:** Chemical messengers in the body.

**Infant:** A child not more than 12 months of age.

**Infant feeding counselling:** Counselling on breastfeeding, on complementary feeding, and, for HIV-positive women, on HIV and infant feeding.

**Immune system:** Those parts of the body and blood, including lymph glands and white blood cells, which fight infection.

**Immunity:** A defence system that the body has to fight diseases.

**Ineffective suckling;** Suckling in a way which removes milk from the breast inefficiently or not at all.

**Infective mastitis:** Mastitis due to bacterial infection.

**Inhibit:** To reduce or stop something.

**Inspection:** Examining by looking.

**Intolerance (of food):** Inability to tolerate a particular food.

**Inverted nipple:** A nipple which goes in instead of sticking out, or which goes in when the mother tries to stretch it out.

**Jaggery:** Brown sugar made from the sap of the palm flower. It is widely used in the Indian subcontinent.

**Jaundice:** Yellow colour of eyes and skin.

**Judging words:** Words which suggest that something is right or wrong, good or bad.

**Lactation:** The process of producing breast milk.

**Lactation Amenorrhoea Method (LAM):** Using the period of amenorrhoea after childbirth as a family planning method.

**Lactose:** The special sugar present in all milks.

**Lipase:** Enzyme to digest fat.

**Low-birth-weight (LBW):** Weighing less than 2.5 kg at birth.

**Mastitis:** Inflammation of the breast (see also infective and non-infective mastitis).

**Matooke:** Green banana.

**Mature milk:** The breast milk that is produced a few days after birth.

**Micronutrients:** Essential nutrients required by the body in small quantities (like vitamins and some minerals).

**Milk ejection:** Milk flowing from the breast due to the oxytocin reflex, which is stimulated in response to the sight, touch or sound of the baby..

**Milk stasis:** Milk staying in the breast and not flowing out.

**Mistaken idea:** An idea that is incorrect.

**Median duration of breastfeeding:** The age in months when 50% of children are no longer breastfed.

**Micronutrient supplements:** Preparations of vitamins and minerals.

**Milk expression:** Removing milk from the breasts manually or by using a pump.

**Mixed feeding:** Feeding both breast milk and other foods or liquids.

**Montgomery's glands:** Small glands in the areola which secrete an oily liquid.

**Natural (passive) immunity:** Is the protection a baby inherits from his/her mother.

**`Nipple confusion':** A term sometimes used to describe the way babies who have fed from a bottle may find it difficult to suckle effectively from a breast.

**Nipple sucking:** When a baby takes only the nipple into his mouth, so that he cannot suckle effectively.

**Non-infective mastitis:** Mastitis due to milk leaking out of the alveoli and back into the breast tissues, with no bacterial infection.

**Non-verbal communication:** Showing your attitude through your posture and expression.

**Nutrients:** Substances the body needs that come from the diet. These are carbohydrates, proteins, fats, minerals and vitamins.

**Nutritional needs:** The amounts of nutrients needed by the body for normal function, growth and health.

**Mother-to-child transmission:** Transmission of HIV to a child from an HIV-infected woman during pregnancy, delivery or breastfeeding.

**Mother-support group:** A community-based group of women providing support for optimal breastfeeding and complementary feeding.

**Oedema:** Swelling due to fluid in the tissue.

**Offal/organs:** Liver, heart, kidneys, brain, intestines, blood.

**Open questions:** Questions which can only be answered by giving information, and not with just a 'yes' or a 'no'.

**Oxytocin:** The hormone which makes the milk flow from the breast.

**Pacifier:** Artificial nipple made of plastic for a baby to suck, a dummy.

**Palpation:** Examining by feeling with your hand.

**Partially breastfed:** Breastfed and given some artificial feeds.

**Pasteurized:** Food (usually milk) made safe by heating it to destroy disease-producing pathogens.

**Pathogen:** Any organism that causes disease.

**Persistent diarrhoea:** Diarrhoea which starts like an acute attack, but which continues for more than 14 days.

**Pesticides:** Substances (usually sprays) used by farmers to prevent pests from attacking crops.

**Phytates:** Substances present in cereals, especially in the outer layer (bran), and in peas, beans and nuts. Phytates combine with iron, zinc and calcium in food to form substances that the body cannot absorb. Eating foods containing vitamin C helps protect iron from the adverse effect of phytates.

**Pneumonia:** Infection of the lungs.

**Poorly protractile:** Used to describe a nipple which is difficult to stretch out to form a 'teat'.

**Porridge:** Is made by cooking cereal flour with water until it is smooth and soft. Grated cassava or other root, or grated starchy fruit can also be used to make porridge.

**Positioning:** How a mother holds her baby at her breast; the term usually refers to the position of the baby's whole body.

**Postnatal check:** Routine visit to a health facility after a baby is born.

**Predominantly breastfed:** Breastfed as the main source of nourishment, but also given small amounts of non-nutritious drinks such as tea, water and water-based drinks.

**Prelacteal feeds:** Artificial feeds given before breastfeeding is established.

**Premature, preterm:** Born before 37 weeks gestation.

**Prolactin:** The hormone which makes the breasts produce milk.

**Protein:** Nutrient necessary for growth and repair of the body tissues.

**Protractile:** Used to describe a nipple which is easy to stretch out.

**Psychological:** Mental and emotional.

**Pulses:** Peas, lentils, beans and groundnuts.

**Puree:** Food that has been made smooth by passing through a sieve or mashing with a fork, pestle or other utensil.

**Quinoa:** A cereal grown at high altitude in the Andes in South America.

**Reflect back:** Repeat back what a person says to you, in a slightly different way.

**Reflex:** An automatic response through the body's nervous system.

**Rejection of baby:** The mother not wanting to care for her baby.

**Relactation:** Re-establishing breastfeeding after a mother has stopped, whether in the recent or distant past.

**Replacement feeding:** The process of feeding a child who is not receiving any breast milk with a diet that provides all the nutrients the child needs until the child is fully fed on family foods. During the first six months this should be with a suitable breast-milk substitute. After six months it should be with a suitable breast-milk substitute, as well as complementary foods made from appropriately prepared and nutrient-enriched family foods.

**Responsive feeding:** Feeding infants directly and assisting older children when they feed themselves, being sensitive to their hunger and satiety cues.

**Restricted breastfeeds:** When the frequency or length of breastfeeds is limited in any way.

**Retained placenta:** A small piece of the placenta remaining in the uterus after delivery.

**Rooming-in:** A baby staying in the same room as his mother.

**Rooting:** A baby searching for the breast with his mouth.

**Rooting reflex:** A baby opening his mouth and turning to find the nipple.

**Rubber teat:** The part of a feeding bottle from which a baby sucks.

**Scissor hold:** Holding the breast between the index and middle fingers while the baby is feeding.

**Secrete:** Produce a fluid in the body.

**Self-weaning:** A baby more than one year old deciding by himself to stop breastfeeding.

**Sensory impulses:** Messages in nerves which are responsible for feeling.

**Silver nitrate drops:** Drops put into a baby's eyes to prevent infection with gonococcus or chlamydia.

**Skin-to-skin contact:** A mother holding her naked baby against her own skin.

**Sore nipples:** Pain in the nipple and areola when the baby feeds.

**‘Spillover’:** A term used to designate the feeding behaviour of new mothers who either know that they are HIV-negative or are unaware of their HIV status – they do not breastfeed, or they breastfeed for a short time only, or they mix-feed, because of unfounded fears about HIV or of misinformation or of the ready availability of breast-milk substitutes.

**Sucking:** Using negative pressure to take something into the mouth.

**Sucking reflex:** The baby automatically sucks something that touches his palate.

**Suckling:** The action by which a baby removes milk from the breast.

**Supplements:** Drinks or artificial feeds given in addition to breast milk

**Support:** Help.

**Sustaining:** Continuing to breastfeed up to 2 years or beyond; helping breastfeeding mothers to continue to breastfeed.

**Swallowing reflex:** The baby automatically swallows when his mouth fills with fluid.

**Sympathize:** Show that you are sorry for a person, from your point of view.

**Tarwi:** A bean grown in the Andes in South America.

**Teat:** Stretched out breast tissue from which a baby suckles.

**Thrush:** Infection caused by the yeast *Candida*; in the baby's mouth, thrush forms white spots

**Tortilla:** A flat breads made by mixing maize flour and water and then making the dough into a thin round shape. It is cooked on a hot metal griddle. Traditionally eaten in Central America. Wheat flour can also be used.

**Toxin:** A poisonous substance.

**Unrestricted feeding:** See demand feeding.

**Warm compress:** Cloths soaked in warm water to put on the breast.

**Whey:** Liquid part of milk which remains after removal of casein curds.

**Young child:** A person from the age of more than 12 months up to the age of 3 years (36 months).





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