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<th>ACRONYMS AND ABBREVIATIONS</th>
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<td><strong>AFASS</strong></td>
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Infant feeding counselling and support are key interventions for the prevention of mother-to-child transmission of HIV (PMTCT). All HIV-positive women need counselling that includes information about the risks and benefits of various infant feeding options, guidance in selecting the most suitable option for their situation and support to carry out their choice. Ideally, women are first counselled about infant feeding options during antenatal care, although it is possible that some will not learn their HIV status until they give birth or until their babies are a few months old.

These tools have been created to help health workers counsel HIV-positive mothers on infant feeding issues. The tools are intended to be used by health workers who have already been trained in both breastfeeding and HIV and infant feeding counselling and are working in the context of PMTCT programmes. These counsellors may be doctors, nurse-midwives, social workers, nutritionists, infant feeding counsellors, HIV/AIDS counsellors or lay counsellors. These tools are not to be used to counsel HIV-negative women or women of unknown HIV status.

The tools contain the following elements:

- this reference guide, which contains an overview of the tools and the counselling process, in addition to technical information on HIV and infant feeding for counsellors;
- 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;
- take-home flyers for mothers on how to practise the chosen feeding option safely;
- suggested orientation guide for health-care managers to train infant feeding counsellors on how to use these tools.

These tools are based on current United Nations (UN) policies and guidelines, which state that “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 and should then be discontinued as soon as it is feasible...Whatever a mother decides, she should be supported in her choice.” (WHO, 2001)

The tools are generic and should be adapted to different regions, countries and communities. See the next section, “Adapting the Tools to the Local Situation,” for more information on the adaptation process.
Counsellors using the tools should have received prior training in both breastfeeding and HIV and infant feeding counselling through courses such as the WHO/UNICEF Breastfeeding Counselling: A training course and the WHO/UNICEF/UNAIDS HIV and Infant Feeding: A training course, respectively. A list of these and other training resources can be found in Annex 1.

When these counselling tools are introduced for the first time, programme managers should organize a special workshop to orient counsellors in the counselling process and the content of the tools. Suggested content for the orientation is provided in a separate guide. Alternatively, the tools may be introduced as part of the WHO/UNICEF/UNAIDS training course on HIV and infant feeding.

NOTE:
The orientation to the tools cannot replace comprehensive training in HIV and infant feeding counselling. It is important for counsellors to receive this comprehensive training before being oriented to the tools, or simultaneously.

ADAPTING THE TOOLS TO THE LOCAL SITUATION

The counselling tools should be adapted to the country and, if possible, the community in which they are used. Local adaptations are necessary to identify local replacement feeding options and to provide context-specific information on the advantages, disadvantages and estimated costs of different feeding practices. One way to adapt the tools is to conduct local assessments using formative research. The following information is collected during such an assessment:

The national infant feeding policy

- Which feeding options are recommended in your country for infants of HIV-positive women up to 6 months old?
- What are the feeding recommendations for children 6-24 months old?

Other local PMTCT programmes

- How do they address infant feeding issues?
- How can your own counsellors link with these programmes or complement the work that these other programmes are doing?
Cultural acceptability of different feeding methods, including commercial infant formula; exclusive breastfeeding; wet-nursing; expressing and heat-treating breast milk; and home-modified animal milk

- How do most women in the community feed their infants?
- How do women feed their children if they are not breastfed?
- How are orphans or children of ill women fed?
- Are any of these methods likely to stigmatize HIV-positive women who use them?
- Has any local research been done on the acceptability of different methods? If yes, which ones are acceptable?
- Are there any cultural taboos against certain feeding methods?

Availability of commercial infant formula

- Is commercial infant formula being provided for HIV-positive women? If yes, who provides it?
- If not, where can it be purchased?
- What brands are available? How much do they cost? Is this affordable for women in this community?

Availability of animal milk

- What types of animal milk are consumed in the community (fresh, liquid ultra-high temperature [UHT], powdered or evaporated)?
- How does the availability of animal milk vary throughout the year?
- Where is it possible to purchase animal milk? How much does it cost?
- Is fresh animal milk diluted with water before sale? If yes, are there any vendors that do not do this?
- Where is it possible to purchase sugar? How much does it cost?
- Where is it possible to purchase or obtain a micronutrient supplement for infants? How much does it cost? Is this affordable for women in this community?
- What is the most suitable micronutrient supplement available (in the market or through programmes) and how should it be given? Has it been assessed by a local nutritionist to determine if it has all of the necessary vitamins and minerals in appropriate amounts (see page 44)?

Child health

- What are the main causes of infant illness and death?
- What proportion of children die before their first birthday from causes other than HIV?
INTRODUCTION

- What is the prevalence of malnutrition in infants and young children?
- At what age does growth faltering begin?

Local environment and hygiene
- What is the source and quality of local drinking water?
- What is the source and availability of cooking fuel?
- What is the sanitation situation in the community (for disposal of human and animal wastes)?
- What are the hygiene practices in the community (for preparation and storage of formula, milk and food)?
- What percentage of women have access to functioning refrigerators?

Existence of services for women and their families
- Are there any infant-feeding support groups for HIV-positive women and their families?
- Are there any breastfeeding support groups?
- Are there any support groups or counselling services for people living with HIV/AIDS (PLWHAs)?
- What family planning services are available?

For further guidance on how to obtain this information, see What are the Options? Using Formative Research to Adapt Global Recommendations on HIV and Infant Feeding to the Local Context. Geneva: WHO and UNICEF, 2004.

OBJECTIVES OF INFANT FEEDING COUNSELLING

Infant feeding counselling for HIV-positive women has three objectives:
- To provide women with information about the risks and benefits of various infant feeding options;
- To guide them to choose the one that is most likely to be suitable for their situation;
- To support them in implementing the method that they have chosen by helping them carry it out safely and effectively.

There are a variety of possible feeding options presented in these tools, as noted below.
INTRODUCTION

Counselling and support on HIV and infant feeding should take place at various contact points:

- after an HIV-positive test result, but before delivery, in order to choose an infant feeding option (one or more sessions);
- soon after birth (e.g., before discharge from hospital) to teach the mother how to implement her selected option;
- within the first week after delivery to help the mother successfully carry out her selected option or, if unable to practise this option, successfully switch to an alternative;
- during routine postnatal care and at every well-child or sick-child attendance (as is the practice for women who are not HIV-positive and their children);
- whenever the mother plans to change her feeding practice.

Additional sessions may be required during special high-risk time periods, such as when the mother has breast problems or before she goes back to work. However, it is recognized that not all women come for counselling when they are pregnant or at regular intervals after birth. Therefore, these tools may be used any time.

SNAPSHOT OF A COUNSELLING SESSION

Most of the time infant feeding counselling takes place in a clinic or hospital, but it may also take place in a woman’s home, especially for the follow-up sessions. Wherever the counselling takes place, the session should be conducted in a private setting where the woman feels comfortable.

Activities that take place during an infant feeding counselling session will differ depending on the purpose of that session:

- When assessing the woman’s situation and helping her choose an infant feeding option, the counsellor will use “listening and learning” skills as well as “building confidence and giving support” skills.
- When showing her how to safely feed her baby, the counsellor will demonstrate the steps and encourage her to perform the steps herself to ensure that she has clearly understood. The counsellor should use “building confidence and giving information” skills.
- When conveying information about how to implement a feeding method, the counsellor will also use the take-home flyers, which are in an easy-to-understand format. (NOTE: Copies of the flyers are included in Annex 2).
- When following up, a counsellor will monitor the infant’s growth, check how feeding is going and check for signs of illness. He or she should also check with the mother about how she is practising her chosen feeding method. The counsellor will arrange for further follow-up or referral, as needed.
INTRODUCTION

commercial infant formula: specially formulated powdered milk made specifically for infants and sold in shops/stores or provided by programmes to prevent HIV transmission to infants

home-modified animal milk: fresh or processed animal milk that is modified by adding water, sugar and micronutrient supplements

exclusive breastfeeding: giving only breast milk and prescribed medicine but no water, other liquids or food to the infants for the first months of life

wet-nursing: having another woman breastfeed a baby, in this case a tested HIV-negative woman

expressing and heat-treating breast milk: removing the milk from the breasts manually or with a pump, then heating it to kill HIV

breast-milk banks: places where donor milk is pasteurized and made available for infants

infant feeding options

There are a variety of possible feeding options presented in these tools, as described in the box on this page. The tools should be adapted, however, to include only those methods that are available and acceptable in the country.

The term replacement feeding refers to feeding an infant who is receiving no breast milk with a diet that provides all the nutrients the infant needs until the age at which he/she can be fully fed on family foods. During the first 6 months of life, replacement feeding should be with a suitable breast-milk substitute. After 6 months, the suitable breast-milk substitute should be complemented with other foods.

When replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS), avoidance of all breastfeeding by HIV-infected mothers is recommended. If this is not possible, exclusive breastfeeding is recommended during the first months of life and should be stopped as soon as replacement feeding is AFASS. Following is a definition of the different AFASS components:

- 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.

According to this concept the mother is under no social or cultural pressure not to use replacement feeding. She is supported by family and community in opting for replacement feeding, or she will be able to cope with pressure from...
family and friends to breastfeed. She can deal with possible stigma attached to being seen with replacement food.

**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.

According to this concept the mother can understand and follow the instructions for preparing infant formula, and with support from the family she can prepare enough replacement feeds correctly every day and night, despite disruptions to the preparation of family food or other work.

**AFFORDABLE:** The mother and family, with community or health-system support if necessary, can pay 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.

This concept also includes access to medical care, if necessary, for diarrhoea and the cost of such care.

**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.

According to this concept, there is little risk that formula will ever be unavailable or inaccessible. Also, another person is available to feed the child in the mother’s absence and can prepare and give replacement feeds.

**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.

According to this concept, the mother or caregiver:

- has access to a reliable supply of safe water (from a piped or protected well source);
- prepares replacement feeds that are nutritionally sound and free of pathogens;
- is able to wash hands and utensils thoroughly with soap and to regularly boil the utensils to sterilize them;
- can boil water for preparing each of the baby’s feeds;
- can store and prepare feeds in clean, covered containers and protect them from rodents, insects and other animals.
In many cases, women will not be able to meet all of these conditions. For this reason, there are several other feeding options for them to choose from. It is the job of the counsellor to help women choose the feeding method that is acceptable, feasible, affordable, sustainable and safe, given their individual situations.

If commercial infant formula is affordable because it is provided at subsidised or no cost to HIV-positive women, the other conditions should still be in place for the individual woman to choose this option. The government providing the formula must ensure that it can be supplied without interruption, and for as long as the child needs it.

COUNSELLING FLOW CHART

On page 9 is a flow chart of the recommended steps to follow for HIV and infant feeding counselling. Below are some simple instructions for how to use the flow chart:

1. **IF THIS IS THE MOTHER’S FIRST INFANT FEEDING COUNSELLING SESSION:**
   
   **And she is pregnant:**
   - Follow Steps 1-5.
   - If she needs time to decide which feeding option to choose, follow Steps 1-4 and ask her to return to discuss Step 5.
   - If she is early in her pregnancy, counsel her but also ask her to return again closer to her delivery date to review how to implement the feeding method.

   **If she already has a child:**
   - Follow Steps 1-4. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding.
   - Continue with Steps 5 and 6.

2. **IF THE MOTHER HAS ALREADY BEEN COUNSELLED AND HAS CHOSEN A FEEDING METHOD, BUT HAS NOT YET LEARNED HOW TO IMPLEMENT IT:**
   
   **And she is pregnant:**
   - Do Step 5 only.

   **And she already has a child:**
   - Begin with Step 5, and then continue with Step 6.

3. **IF THIS IS A FOLLOW-UP VISIT:**
   - Begin with Step 6.
   - Review how to implement the feeding method.
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Counselling flow chart

**STEP 1**
Explain the risks of mother-to-child transmission

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

**STEP 3**
Explore with the mother her home and family situation

**STEP 4**
Help the mother choose an appropriate feeding option

**STEP 5**
Demonstrate how to practise the chosen feeding option. Provide take-home flyer.

- How to practise exclusive breastfeeding
- How to practise other breast milk options
- How to practise replacement feeding

**STEP 6**
Provide follow-up counselling and support

- Monitor growth
- Check feeding practices and whether any change is envisaged
- Check for signs of illness

Discuss feeding for infants from 6 to 24 months

Monitor growth
Check feeding practices and whether any change is envisaged
Check for signs of illness
INTRODUCTION

To make a counselling session successful, the counsellor needs to establish a rapport with her client and engage her in an open and honest discussion. While just giving information may be easiest, counselling is not one-way communication. It is a dialogue in which the woman and counsellor are equal participants.

Some women may be reluctant to voice their opinions or ask questions, and they will need extra encouragement. The counsellor can help women to actively participate in sessions by following these counselling basics:

- Greet the woman in a kind and friendly way; use her name and her baby’s name.
- Ask her to tell you about herself in her own way.
- Explain that the session will be a dialogue.
- Assure her that what she says will be confidential.
- Take time to learn about difficult or sensitive issues.
- Explain that the counsellor’s role is to help a client make her own decisions, and not to make the decisions for her.
- Use skills for building confidence and giving support.
- Avoid being critical or judgemental of the woman’s situation.
- Ask the woman’s opinion about the information she is given.
- Ask the woman at the end of the session to summarize in her own words what was discussed. This will allow the counsellor to verify the woman’s comprehension of the information and confirm the decisions that the woman has made.

SUPPLIES NEEDED

Step 5 of the infant feeding counselling process involves teaching and demonstrating the feeding method chosen by the mother. The supplies noted below will help counsellors with these demonstrations.

NOTE:
The actual supplies needed in any given setting will depend on the feeding options to be discussed with mothers.
For exclusive breastfeeding demonstrations:
- baby doll to demonstrate proper positioning and attachment;
- model breast to explain milk expression.

For commercial formula demonstrations:
- a tin of formula and appropriate spoon, without a label or any reference to a specific brand;
- spoon or other utensil for mixing formula;
- small cup for feeding;
- container for measuring water;
- clean water for making formula;
- soap and clean water for washing containers and utensils;
- stove/cooker and fuel for boiling water.

For demonstrations of expressing and heat-treating breast milk:
- container with a wide neck and a cover for storing breast milk;
- cup for feeding;
- soap and clean water for washing containers and utensils;
- small stove and fuel;
- small pot or enamel cup for boiling breast milk;
- model breast.

For home-modified animal milk demonstrations:
- animal milk (whichever types are available locally);
- spoon for measuring milk and sugar;
- sugar and micronutrient supplement;
- cup for feeding;
- containers (60 ml, 90 ml, 120 ml and 150 ml);
- clean water for preparing formula;
- soap and clean water for washing containers and utensils;
- small stove/cooker and fuel;
- large stove/cooker and fuel.
The following sections contain technical information for counselling HIV-positive mothers about infant feeding. This information is organized according to the Steps shown on the counselling flow chart:

- **Help the mother to choose a feeding option (Steps 1-4)**  
  Should be used during the first infant feeding counselling session

- **Teach the mother how to practise the feeding option (Step 5)**  
  Should be used during the second infant feeding counselling session

- **Provide follow-up counselling and support**  
  Should be used during follow-up sessions from birth to 24 months

Topics marked with a numbered  at the top of the page are accompanied by a corresponding counselling card that can be used during individual counselling sessions with mothers. These cards use simple language and illustrations to ensure that important information is conveyed clearly.
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

COUNSELLING STEPS 1-4

Ideally the counsellor helps a woman choose a feeding method early in pregnancy, during an antenatal visit. If the woman has already given birth, the counsellor can help her to determine whether she would like to switch to another method or how to carry on with the one she has chosen in the safest possible way. If possible, the first counselling visit should cover all of the information in this section.

STEP 1: Explain the risk of mother-to-child transmission of HIV.
   Use skills for giving information. In particular, give relevant information and use simple language.

STEP 2: Explain the advantages and disadvantages of different options, starting with the mother’s initial preference.
   All options that are practised in the community should be discussed, starting with the mother’s initial preference. Use skills for giving information. In particular, give relevant information and use simple language. Use listening and learning skills to find out with the mother whether each option is acceptable.

STEP 3: Explore with the mother her home and family situation.
   Use listening and learning skills to find out with the mother whether each option is feasible, affordable, sustainable and safe.

STEP 4: Help the mother choose an appropriate option.
   Use building confidence and giving support skills. In particular, make suggestions, not commands.
BEGINNING THE COUNSELLING SESSION

Welcome the woman and explain what will happen during the counselling session:

- She will learn how she can pass HIV to her baby and what the risks are of this happening (Step 1).
- She will learn about the advantages and disadvantages of different feeding options and will identify the option that is most acceptable for her (Step 2).
- You will explore her home and family situation with her (Step 3).
- You will help her choose the feeding method that is most appropriate for her situation (Step 4).

EXPLAINING THE RISK OF MOTHER-TO-CHILD TRANSMISSION

DISCUSS WITH: All HIV-positive women who are being counselled for the first time

Women need to understand the risks of passing HIV to their babies during pregnancy, delivery and breastfeeding. Remember the following key points:

- A woman must be infected with HIV in order to pass the virus to her baby.
- Not all babies born to women with HIV become infected with HIV themselves.
- Babies can be infected during pregnancy, during delivery or through breastfeeding.
- In general, of babies born to 20 HIV-positive women who have not received any intervention to prevent transmission:
  - about 7 of them will get infected if no drugs are given and 13 will remain uninfected, even if breastfed;
  - of the 7 babies who will get infected, 4 will get infected through pregnancy and delivery and 1-3 through breastfeeding. If breastfeeding stops early, then fewer babies will be infected.
- Knowing whether a baby is infected with HIV is usually not possible until the baby is 15-18 months old. A special test called a polymerase chain reaction (PCR) test can be used to diagnose HIV infection before this age. However, this test is expensive and not yet widely available in most places.
- Remember that it is important to balance the risks of HIV transmission if breastfeeding with the risks of serious illness and death if not breastfeeding.
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

Several factors may increase the risk of passing HIV through breastfeeding:
- recent infection with HIV;
- advanced HIV infection or AIDS;
- breast conditions such as clinical or sub-clinical mastitis, abscesses and cracked or bleeding nipples;
- longer duration of breastfeeding;
- inappropriate breastfeeding practices such as mixed feeding (feeding both breast milk and other foods or liquids);
- mouth sores or thrush in the baby.

Several factors may reduce the risk that a woman will pass HIV to her baby:
- safe delivery practices;
- special drugs that are given to the HIV-positive mother during pregnancy, labour and delivery, and to the infant after birth (these are called antiretroviral drugs [ARVs]. When ARVs are given to prevent mother-to-child transmission of HIV, this is called ARV prophylaxis or ARV prevention. In this case, the drugs are given to reduce the baby’s chances of HIV infection. However, these drugs do not treat the woman’s own HIV infection. Some women have access to ARVs for long-term treatment of their own HIV infection. The effect of these drugs on HIV transmission through breastfeeding and the effects on the health of the infant are not yet known);
- safer breastfeeding practices (explained in more detail in the following sections).

OVERVIEW OF INFANT FEEDING OPTIONS

The infant feeding options that are commonly practised differ from community to community. In some communities, especially in urban areas, women may have many options to choose from. In other communities, appropriate options may be more limited. However, more than one option should be discussed with each woman, based on her individual situation.

Each one of the following feeding options has advantages and disadvantages. Some carry a higher risk of passing HIV to the baby. Others are more likely to make babies sick from diarrhoea and other serious diseases. Following are the options that are available in this community. (NOTE: This list needs to be adapted for each community. See the Introduction for details.)

- **COMMERCIAL INFANT FORMULA:** specially formulated powdered milk made specifically for infants and sold in shops/stores or provided to HIV-positive mothers to prevent HIV transmission to infants

- **HOME-MODIFIED ANIMAL MILK:** fresh or processed animal milk that is modified by adding water, sugar and micronutrient supplements
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

- **EXCLUSIVE BREASTFEEDING**: giving only breast milk and prescribed medicine but no water, other liquids or food to the infants for the first months of life
- **WET-NURSING**: having another woman breastfeed a baby, in this case a tested HIV-negative woman
- **EXPRESSING AND HEAT-TREATING BREAST MILK**: removing the milk from the breasts manually or with a pump, then heating it to kill HIV
- **BREAST-MILK BANKS**: places where donor milk is pasteurized and made available for infants

Ask the mother how she plans to feed her baby and then discuss the advantages and disadvantages of all the feeding options, starting with her preferred feeding method. Once all the feeding options have been discussed, assess the woman’s home and family situation and help her choose an option according to her specific circumstances. Finally, discuss with her how to overcome any obstacles that she may face using the questions listed for each feeding option.
Help the mother to choose a feeding option

Commercial infant formula is powdered milk made especially for babies. It carries no risk of HIV infection, but it does carry a risk of illness from diarrhoea and other serious diseases. The advantages and disadvantages of commercial infant formula are summarized below.

---

**ADVANTAGES AND DISADVANTAGES OF COMMERCIAL INFANT FORMULA**

**DISCUSS WITH:** All HIV-positive women who are being counselled for the first time

Commercial infant formula is powdered milk made especially for babies. It carries no risk of HIV infection, but it does carry a risk of illness from diarrhoea and other serious diseases. The advantages and disadvantages of commercial infant formula are summarized below.

### 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 the mother falls ill, others can feed the baby while she recovers.

#### Disadvantages

- Unlike breast milk, formula does not contain antibodies. These are substances that protect the baby from infections.
- Your formula-fed baby is more likely to get seriously sick from diarrhoea, chest infections and malnutrition, especially if the formula is not prepared correctly.
- You must stop breastfeeding completely, or the risk of transmitting HIV will continue.

#### Disadvantages

- You need 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 you are using commercial formula instead of breastfeeding.
- Formula takes time to prepare and must be made fresh for each feed (unless you have a refrigerator).
- Formula is expensive, and you must always have enough on hand. A baby needs forty (40) 500g tins for the first six months.
- The baby will need to drink from a cup. Babies can learn how to do this even when they are very young, but it may take time to learn.
- You may get pregnant again too soon.
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

If this is the woman’s chosen option – after having discussed all the options and assessed her situation (steps 2 and 3) – discuss with her ways of overcoming possible obstacles:

- How will she feed her baby in the hospital after delivery?
- How will she get a reliable supply of commercial formula?
- How will she get reliable supplies of water and fuel?
- How will she cope with feeding the baby at night?
- How will she cope with pressure to breastfeed from family, friends and others?
- How will she get medical care if her baby falls sick?
- What will she do if she runs out of formula?

See page 27 for further guidance on how to help the woman to choose a feeding option (Step 4).

ADVANTAGES AND DISADVANTAGES OF EXCLUSIVE BREASTFEEDING

DISCUSS WITH: All HIV-positive women who are being counselled for the first time

Exclusive breastfeeding means giving 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.

If an HIV-positive woman chooses to breastfeed, then exclusive breastfeeding is recommended for the first months of life. For further explanation about deciding when to stop breastfeeding, see page 56. The advantages and disadvantages of exclusive breastfeeding are summarized on the following page.
If this is the woman’s chosen option – after having discussed all the options and assessed her situation (Steps 2 and 3) – discuss with her ways of overcoming possible obstacles:

- What has been her past experience with breastfeeding?
- How will she manage to feed her baby only breast milk for the first months?
- What concerns do some mothers have about producing enough breast milk?
- How will she cope with pressure from friends and family to give her baby other liquids or foods?
- How will she feed the baby if she has to go to work or is separated from the baby for another reason? Mention that it is possible to express her breast milk when she is separated from her baby, and that you will explain this in more detail later if she chooses to breastfeed.
- How will she seek help if she has pain in the breast or any other difficulty?

See page 27 for further guidance on how to help the woman to choose a feeding option (Step 4).
Expressing milk means removing it from the breast, usually by hand. The milk must then be heated to the boiling point in order to kill the HIV before the milk is fed to the baby. The advantages and disadvantages of expressing and heat-treating breast milk are summarized below.

### Advantages and disadvantages of expressing and heat-treating breast milk

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV is killed by heating the milk.</td>
<td>The baby will need to drink from a cup. Babies can learn how to do this even when they are very young, but it may take time to learn.</td>
</tr>
<tr>
<td>Breast milk is the perfect food for babies, and most nutrients remain in breast milk after heating.</td>
<td>The breast milk needs to be stored in a cool place and used within an hour of heating because it could spoil.</td>
</tr>
<tr>
<td>Breast milk is always available, and you do not have to buy it.</td>
<td>You will need clean water and soap to wash the baby’s cup and the container used to store the breast milk.</td>
</tr>
<tr>
<td>Other responsible family members can help feed the baby.</td>
<td>You will need fuel to heat the breast milk.</td>
</tr>
<tr>
<td></td>
<td>People may wonder why you are expressing your milk, which could cause them to suspect that you have HIV.</td>
</tr>
<tr>
<td>Disadvantages</td>
<td></td>
</tr>
<tr>
<td>Although heated breast milk does not contain HIV, it may not be as effective as unheated breast milk in protecting the baby from other diseases. However, it is still better than formula.</td>
<td></td>
</tr>
<tr>
<td>Expressing and heating breast milk takes time and must be done frequently. It can be hard to do for a long time.</td>
<td></td>
</tr>
</tbody>
</table>

If this is the woman’s chosen option – after having discussed all the options and assessed her situation – discuss with her ways of overcoming possible obstacles:

- How will she find the time to express and heat-treat her breast milk several times each day and night?
- How will she get reliable supplies of water, soap and fuel?
- How will she store the breast milk?
- How will she cope with pressure to breastfeed?

See page 27 for further guidance on how to help the woman to choose a feeding option (Step 4).
A wet-nurse is a woman who breastfeeds a baby for another woman. This is acceptable in some communities, but not in others. Wet-nursing is a good option if the wet-nurse is confirmed to be HIV-negative and if she is available to feed the baby upon demand. However, it can be difficult to ensure that a wet-nurse protects herself from HIV infection the entire time that she is breastfeeding. The advantages and disadvantages of wet-nursing are summarized below.

### Advantages and disadvantages of wet-nursing

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet-nursing carries no risk of HIV infection from breast milk for the baby, as long as the wet-nurse is not infected with the virus.</td>
<td>The wet-nurse must be tested for HIV and confirmed to be HIV-negative.</td>
</tr>
<tr>
<td>Breast milk is the perfect food for babies and can protect them from diseases.</td>
<td>The wet-nurse must be able to protect herself from HIV infection the entire time she is breastfeeding. This means not having sex, using condoms every time she has sex or having sex with only one partner who has also tested HIV-negative and remains faithful to her.</td>
</tr>
<tr>
<td>Breast milk is free.</td>
<td>The wet-nurse must be available to breastfeed the baby frequently throughout the day and night or able to express milk if she and the baby are separated.</td>
</tr>
<tr>
<td></td>
<td>People may ask why you are not breastfeeding. This could cause them to suspect that you have HIV.</td>
</tr>
<tr>
<td></td>
<td>You may get pregnant again too soon.</td>
</tr>
</tbody>
</table>
If this is the woman’s chosen option – after having discussed all the options and assessed her situation – discuss with her ways of overcoming possible obstacles:

- Who will be the baby’s wet-nurse?
- How will she ensure that this person is HIV-negative and that she will protect herself from HIV while she is breastfeeding?
- How will she ensure that this person will feed her baby as often as needed, day and night?

See page 27 for further guidance on how to help the woman to choose a feeding option (Step 4).
## Advantages and Disadvantages of Home-Modified Animal Milk

**DISCUSS WITH: All HIV-positive women who are being counselled for the first time**

### 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 you have 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. The baby also needs to have a micronutrient supplement.
- The baby is more likely to get sick from diarrhoea, chest infections and malnutrition if he/she is fed home-modified animal milk, especially if it is not prepared correctly.
- The mother must stop breastfeeding completely, or the risk of transmitting HIV will continue.

### Advantages
- Home-modified animal milk takes time to prepare and must be made fresh each time you feed your baby, unless you have a refrigerator.
- Your baby will need about 15 litres of milk per month for the first 6 months. You will also need to buy sugar and a micronutrient supplement.
- Your baby will need to drink from a cup. Babies can learn how to do this even when they are very young, but it may take time to learn.
- You will need clean water (boiled vigorously for 1-2 seconds) to prepare the formula and soap to wash the baby’s cup.
- People may ask why you are using home-prepared formula instead of breastfeeding, and this may cause them to suspect that you are HIV-positive.
- You may get pregnant again too soon.
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

If this is the woman’s chosen option – after having discussed all the options and assessed her situation – discuss with her ways of overcoming possible obstacles:

- How will she feed her baby in the hospital after delivery?
- How will she get a reliable supply of animal milk?
- How will she get a reliable supply of sugar and micronutrient syrup or powder?
- How will she get supplies of water, fuel to boil the water and soap to wash the utensils?
- How will she cope with feeding the baby at night?
- How will she cope with pressure from family, friends and others to breastfeed?
- How will she get medical care if her baby falls sick?

See page 27 for further guidance on how to help the woman to choose a feeding option (Step 4).
While counselling a woman, it is important to learn about her home and family situation in order to help her determine the most suitable feeding method for her situation.

Assess the woman’s current situation by asking these questions:

- How long have you known that you are HIV-positive?
- Who do you live with now? Do any of these people know that you are HIV-positive? Does anyone else know that you are HIV-positive?
- Will you have any support to help you to feed your baby? (If yes: who will help you?)
- Do you have any other children? (If yes: How did you feed your other children from birth to 6 months old?)

The table on the following page should be used with all HIV-positive mothers who are being counselled for the first time or who are thinking of changing their feeding option. Ask the woman all of the questions in the left-hand column and keep a mental note of the woman’s responses to each question. Her combined replies to these questions can help the woman to choose the most suitable method for her situation, after she has learned the advantages and disadvantages of each method.

NOTE:
The table is not designed as a scoring tool or to make the mother’s choice for her.
**Table for assessing the mother’s situation**

<table>
<thead>
<tr>
<th>Most suitable feeding method</th>
<th>Breastfeeding/wet nursing</th>
<th>Unclear</th>
<th>Replacement feeding or expressed and heat-treated breast milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where do you get your drinking water?</td>
<td>River, stream, pond or well</td>
<td>Public standpipe</td>
<td>Piped water at home or can buy clean water</td>
</tr>
<tr>
<td>What kind of latrine/toilet do you have?</td>
<td>None or pit latrine</td>
<td>Ventilation-improved pit latrine</td>
<td>Waterborne latrine or flush toilet</td>
</tr>
<tr>
<td>How much money could you afford for formula each month?*</td>
<td>Less than ___* available for formula each month.</td>
<td>___* available for formula most months.</td>
<td>___* available for formula every month</td>
</tr>
<tr>
<td>Do you have money for transportation to get formula when you run out?</td>
<td>No</td>
<td>Yes, usually</td>
<td>Always (unless expressing and heat-treating breast milk)</td>
</tr>
<tr>
<td>Do you have a refrigerator with reliable power?</td>
<td>No, or irregular power supply</td>
<td>Yes, but not at home</td>
<td>Yes</td>
</tr>
<tr>
<td>Can you prepare each feed with boiled water and clean utensils?</td>
<td>No</td>
<td>Yes, but with effort</td>
<td>Yes</td>
</tr>
<tr>
<td>How would you arrange night feeds?</td>
<td>Preparation of milk feeds at night difficult</td>
<td>Preparation of milk feeds at night possible but with effort</td>
<td>Preparation of milk feeds at night possible</td>
</tr>
<tr>
<td>Does your family know that you are HIV-positive?</td>
<td>No</td>
<td>Some family members know</td>
<td>Yes</td>
</tr>
<tr>
<td>Is your family supportive of milk feeding and are they willing to help?</td>
<td>Family not supportive and not willing to help, or don’t know – can’t discuss</td>
<td>Family supportive but not willing to help</td>
<td>Family supportive and willing to help</td>
</tr>
</tbody>
</table>

Adapted from Rollins, N.C. and Bland, R., Africa Centre for Health and Population Studies, South Africa.

* You will need to know the monthly cost of formula in your community.
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

HELPING THE MOTHER TO CHOOSE A FEEDING OPTION (STEP 4)

DISCUSS WITH: All HIV-positive women who are being counselled for the first time or who are thinking of changing their feeding option

When replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS), avoidance of all breastfeeding by HIV-infected mothers is recommended. If this is not possible, exclusive breastfeeding is recommended during the first months of life and should be stopped as soon as replacement feeding is AFASS. The decision must belong to the mother, however. Follow these steps to help the woman decide on a feeding option:

- Ask the woman which option she prefers, considering the previous discussion (Steps 2 and 3).
- Remember the woman’s answers to the assessment of her situation (see page 26). If most of the woman’s responses fall into the first column, then breastfeeding or wet-nursing may be the best option. If most of her responses fall into the last column, then replacement feeding or expressing and heat-treating breast milk may be the most appropriate option. If her responses fall into different columns, or if most of them are in the second column, the most appropriate option is not as clear, and more discussion will be needed.
- Continue discussing with her ways to overcome any obstacles to her preferred option.
- Once an option has been decided on by the woman, discuss HIV disclosure and family support issues.
- Encourage the woman to go home and discuss her decision with her family or a supportive friend. Make an appointment for her to come back and learn how to implement her chosen feeding method.
FAMILY SUPPORT FOR INFANT FEEDING
DISCUSS WITH: All HIV-positive women who are being counselled for the first time

Family support is very important for HIV-positive women, especially if they choose to implement a feeding option that is not common in their community.

If a woman chooses to breastfeed:
- Her family will need to understand why she is not giving her baby water or any other foods or liquids.
- She will need her family’s support if she chooses to stop breastfeeding early or if she chooses to express and heat-treat her breast milk.

If a woman chooses not to breastfeed:
- Her family will need to understand why she is not breastfeeding.
- She may need help preparing commercial formula or home-modified animal milk.

Say to her:
- From what you have told me, you will need the support of __________ (name person) in order to feed your baby.
- This person may need to know about your HIV status in order to support your feeding choice. Have you told him/her that you are HIV-positive?
  - If NO, discuss options for disclosing her HIV status (see below).
  - If YES, encourage her to discuss her chosen feeding option with this person.
- Once you have thought about your decision and discussed it with your family, come back to see me. If you are still comfortable with the feeding method that you have chosen today, I will show you how to do it in detail. If you have changed your mind, we can find another option that you are more comfortable with. If possible, bring the person who will be supporting you in your feeding choice.

If the woman is early in pregnancy:
- Ask her to come back at her next antenatal visit in order to learn how to practise her chosen feeding method.

If the woman is late in pregnancy or has already given birth:
- Explain to her immediately how to practise her chosen feeding method (see page 31).
HELP THE MOTHER TO CHOOSE A FEEDING OPTION

DISCLOSING HIV-POSITIVE STATUS
DISCUSS WITH: Women who have not disclosed their HIV status to their families

If a woman has not told her family that she is HIV-positive, she will have a hard time getting the support she needs to feed her baby. This is especially true if she will not be breastfeeding. Infant feeding counsellors can help women make decisions about disclosing their HIV status (telling other people that they have HIV).

**Say to her:**

- From what you have told me, you will need the support of ___________ (fill in) to implement the feeding option that you have chosen. How do you feel about telling this person that you are HIV-positive? How do you think she/he will react to the news?

**Tips for disclosing your HIV status:**

- Make sure that you feel ready to disclose your status.
- Pick a private place to tell the person, at a time when he/she is relaxed and not distracted by other things.
- Ask the woman: When and where do you think that you could tell this person about your HIV status?
- Sometimes the easiest way to tell a person is to be direct. For example: *I have something to tell you. I have HIV.*
- While some women get bad reactions when they tell people about their HIV status, many others get positive reactions. Even if someone reacts badly at first, they may be supportive once the initial shock wears off.
- Try to stay calm, even if the other person gets angry or emotional.
- If the person does react badly, it is better to wait for him/her to calm down. Once he/she is calm, ask him/her to explain *why* he/she is feeling this way. If you do not feel that the person will listen to you, you can bring him/her back to see me, and I can speak to you together.
- Many people are afraid of HIV and AIDS because they do not have information about the disease. The more you know yourself, the easier it will be to explain the virus to your family. For example, your family needs to know that HIV cannot be transmitted through “casual contact,” such as touching, hugging, sharing eating utensils or sharing clothing. I can tell you where to get more information about HIV and AIDS. **Give referrals for information and brochures if possible.**
- Ask the woman: How do you think that you will tell this person about your status? What words would you use exactly?
- Conduct a role-play with her so that she can practise disclosing her status.
TEACH THE MOTHER HOW TO PRACTISE THE CHOSEN FEEDING OPTION

COUNSELLING STEP 5

A woman should learn how to implement her chosen feeding method before her baby is born. This should take place during the last trimester of pregnancy, or as soon as possible after she has given birth.

If possible, the woman’s partner or a family member should accompany her when she learns how to implement the feeding method. If she has chosen wet-nursing, the wet-nurse should come with her.

The counsellor should have all of the necessary supplies on hand for teaching and demonstrations (depending on the feeding options that are feasible in the country). See pages 10–11 for a review of counselling basics and list of supplies needed. The counsellor should also have the appropriate take home flyer for the method that the woman has chosen. (NOTE: Copies of the flyers are contained in Annex 2.)

If the woman has chosen commercial formula or home-modified animal milk, she should bring a transparent container that she will use to measure liquids, as well as a teaspoon or spoon.

CONFIRMING THE WOMAN’S DECISION

DISCUSS WITH: HIV-positive women who have made a decision about how to feed their babies

At the start of the second session, the mother should have confirmed the decision she made during the first session. She may have changed her mind after she has had time to think about it and discuss it with her family. Ideally, the woman should bring her partner or a supportive family member with her to this session so that they can learn together how to feed the baby.

Welcome the woman and her partner/family member and explain what will happen during this session.

- The woman will confirm her decision about how to feed her baby.
- The woman and her partner/family member will learn exactly how to feed her baby using this method.
- They will learn how to deal with pressure from others and get family and community support.
- They will make an action plan for feeding the baby.
TEACH THE MOTHER HOW TO PRACTISE THE CHOSEN FEEDING OPTION

Say to the woman:

- Let’s review what happened in the last session. From what I remember, you chose ____________ (fill in feeding method).
- How do you feel about this choice after having had some time to think about it?
- Who did you discuss your choice with? How did they feel about it?

If the woman is still happy with her feeding choice:

- Explain to her in detail how to feed her baby.
- Use the cards and take home flyers in this section for the specific method that she has chosen.

If the woman has changed her mind, ask her the following questions:

- What made you change your mind?
- Which one of the other feeding options that we discussed the last time would you be more comfortable with? (If she cannot remember, show her the Advantages/Disadvantages cards again.)

Once the mother has chosen another feeding option, explain it to her in detail using the cards in this section.

OVERVIEW OF EXCLUSIVE BREASTFEEDING

DISCUSS WITH: HIV-positive women who have chosen to breastfeed or use a wet-nurse

- Exclusive breastfeeding means giving 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.
- Exclusive breastfeeding is recommended for HIV-positive mothers who breastfeed. Breast milk gives babies younger than 6 months all of the nutrition and water that they need. They do not need any other liquid or food.
- Mixing other liquids or foods with breast milk may increase the risk of passing HIV to the baby.
- While breastfeeding, the woman should not give her baby water, cooking oil, herbal teas, juice, porridge or any other liquids or foods.
- It is all right to give the baby medicine that has been prescribed by a doctor or nurse.
Tips to say to the mother for getting started with breastfeeding:

- Give your baby skin-to-skin contact by putting him/her to the breast immediately after giving birth.
- Make sure that the baby is attached and positioned well – I can help you, or you can seek help from another trained health worker.
- The colostrum, or first milk, is very good for your baby. It is like a vaccination and protects your baby from many diseases.
- Early and frequent feeding will help your body to produce enough milk, and it will also keep your breasts from getting engorged (swollen). Feed your baby frequently day and night, whenever he/she wants to suckle and for as long as he/she wants. Feeding every 2-3 hours is normal.
- Let the baby finish one breast first and come off by him/herself to ensure that he/she gets the first milk, which provides the baby with water, and the final milk, which is more nutritious and satisfying. Then offer the other breast.
- You will know that your baby is getting enough to drink if he/she urinates at least 6 times per day. The urine should be light in colour and not strong smelling.
- If you must miss a feed, you can express your milk and store it in a cool place until the baby needs it.
- You must eat at least 3 nutritious meals a day and drink something whenever you are thirsty.
- Check for sores in your baby’s mouth often, and get them treated as soon as possible.
- Remember: Safer breastfeeding means exclusive breastfeeding (giving no other foods or drink, not even water), frequent day and night feeding and seeking help if there is a problem. This will be helpful for your baby’s survival, and for your breast health.
Correct attachment, along with unrestricted breastfeeding, can prevent cracked nipples and mastitis and ensure that mothers or wet-nurses have ample milk production. Good positioning helps a baby to attach well. This will make it easier to breastfeed exclusively. Make arrangements for providing breastfeeding counselling to the woman as soon as possible after delivery and before discharge from the hospital. In addition, you can give the following instructions to women on how to properly position and attach their babies to the breast. You can show them how to do this with their own babies or with a doll. Here are some key points to discuss with the mother:

- Sit comfortably or lie down and make sure that your back is supported.
- Hold the baby close to you, facing the breast, with his/her neck and body straight and supported. He/she should face the breast with his/her nose opposite the nipple.
- Support the breast by holding your fingers against your chest wall below your breast.
- Your first finger should support the breast, with your thumb above. Do not hold your fingers too near the nipple.
- Help the baby to attach to the breast. Touch his/her lips to your nipple. When the baby’s mouth is opening wide, move him/her quickly onto the breast, aiming his/her lower lip below the nipple.

**Correct attachment and positioning**

- You will know that your baby is well attached if:
  - more areola (dark area) is visible above the baby’s mouth than below it;
  - his/her mouth is wide open;
  - his/her lower lip is turned outward;
  - his/her chin is touching the breast.
- You will notice effective suckling if:
  - the baby takes slow, deep sucks, sometimes pausing;
  - you may also hear the baby swallowing.
- You should feel no pain. If breastfeeding is painful it means that the attachment is not correct.
- Do not let your baby suck pacifiers between feedings. These can make the baby tired and prevent him/her from suckling well. They can also make the baby sick if they are not clean.
Come back within 7-10 days after your baby is born so that we can make sure that your breastfeeding goes well. You can also come back sooner if you are having any difficulties with breastfeeding.

**PREVENTING AND TREATING CRACKED NIPPLES**

**DISCUSS WITH: HIV-positive women who have chosen to breastfeed and wet-nurses**

Cracked nipples (or nipple fissures) may increase the risk of HIV transmission through breastfeeding. For this reason, it is important for all breastfeeding women to know how to prevent and treat them. Here are some key points to discuss with the mother:

**Prevention of cracked nipples (nipple fissures)**

- Cracked nipples are often caused if the baby is not well attached to the breast for feeding.
- Women or wet-nurses can prevent cracked nipples by attaching their babies correctly. I can help you, and you can get additional help from __________ (fill in the name of a nurse or another health worker trained on how to attach the baby to the breast) to make sure the baby is properly attached.
- Do not wash your breasts more than once a day and do not use soap.

**Treatment of cracked nipples**

- If you have cracked nipples, put some breast milk on them, and let them air-dry. Do this whenever you express breast milk to relieve discomfort and until the nipples are healed.
- Do not use any other types of creams or ointments unless a trained health worker has diagnosed thrush or candidiasis on the nipples and given you medicine for this.
- Feed the baby with the healthy breast only. Express milk from the breast with the cracked nipple; if possible, discard this milk. However, you may heat-treat this milk if the milk from the healthy breast is not enough to cover the baby’s needs. Do not give the baby any other type of food, liquid or water.
- If both nipples are affected you’ll need to stop breastfeeding (while expressing breast milk frequently) until the nipples are healed. I can help you choose an alternative feeding method for this period.
- Once the nipple is healed, you can feed directly from that breast again.
Mastitis is an inflammation of the breast. It may increase the risk of HIV transmission through breastfeeding. For this reason it is important for all breastfeeding women to learn how to prevent this condition. Here are some key points to discuss with the mother:

- In cases of mastitis, the affected breast is swollen, painful, red or hard (engorged). Fever and body ache may also be present. One or both breasts may be affected.
- The amount of HIV in the breast milk of an HIV-positive woman may be higher with mastitis. More virus in breast milk may mean a greater chance of HIV transmission.

**Prevention of mastitis**
- Good breastfeeding technique with good attachment and frequent removal of breast milk can help prevent mastitis.
- Advise the breastfeeding HIV-positive mother to return immediately to the health centre for help if she has symptoms of mastitis.

**Treatment of mastitis**
If, after examination, you confirm the diagnosis of mastitis, give the mother treatment or refer her as appropriate. Explain the following points:
- Seek medical care immediately. The doctor or nurse may give you antibiotics and medicine (paracetamol or ibuprofen) for fever and pain. You will need antibiotics for 10 to 14 days. Be sure to take all of the medicine, even if you begin to feel better before it is finished.
- Avoid breastfeeding from the affected breast while mastitis persists.
- Express and discard the milk frequently from the affected breast(s) to prevent the mastitis from becoming worse, to help the breast(s) recover and to maintain milk production.
- If only one breast is affected, continue to breastfeed from the healthy breast. If the milk from the healthy breast is not enough to cover the baby’s needs, you may express and heat-treat milk from the affected breast and give it to the baby.
- If both breasts are affected, you’ll need to stop breastfeeding (while expressing breast milk frequently) until the mastitis is healed. I can help you choose an alternative feeding method for this period.
- Apply warm compresses to the affected breast.
TEACH THE MOTHER HOW TO PRACTISE THE CHosen FEEDING OPTION

- Try to get complete rest (in bed if possible) and drink more fluid while you recover.
- After the mastitis has healed, try to breastfeed frequently and leave the baby on each breast until he/she comes off him/herself.
- Check to make sure that the baby is attached properly to avoid continued discomfort and problems.

If the mastitis does not get treated, an abscess may form. A woman may have an abscess if one area of the breast is more swollen than the rest, with a soft shiny surface at the centre. If this happens, refer her to a health professional who can lance the abscess to release the pus. This will help relieve the pain and speed healing.

HOW MUCH TO FEED A BABY FROM BIRTH TO 6 MONTHS
DISCUSS WITH: HIV-positive women who have chosen commercial formula or home-modified animal milk

As babies grow older, their nutritional needs increase. Women need to understand how much a baby who is drinking either commercial infant formula or home-modified animal milk needs each month. On average babies need 150 ml/kg body weight per day. It may be hard for some women to understand the concept of millilitres (ml), so it is best to show them containers for the different amounts of formula needed each month.

What to say to the mother:

- As babies grow older, they need more formula or animal milk each month. This table shows you how much a baby needs for each feed, and how many times a day he/she should be fed. These amounts can be used as a starting point and then adjusted for the individual baby. It is normal that the amount of milk a baby takes at each feed varies. If a baby takes a very small feed, offer extra at the next feed, or give the next feed earlier.
TEACH THE MOTHER HOW TO PRACTISE THE CHOSEN FEEDING OPTION

Demonstrate the amount of milk needed for each feed, according to the baby’s age.

For babies from birth to 1 month old:
- 60 ml is equivalent to __________ (Show container).

For babies 1-2 months old:
- 90 ml is equivalent to __________ (Show container).

For babies 2-4 months old:
- 120 ml is equivalent to __________ (Show container).

For babies 4-6 months old:
- 150 ml is equivalent to __________ (Show container).

The containers used for measuring the milk and feeding the baby should be cleaned with soap and clean water before each use and, if possible, with boiling water. If using feeding bottles (which are not recommended), these should be boiled, completely covered in water. The water should boil with the surface actively rolling for at least 10 minutes.

As the babies get older, counsellors need to update women on how much formula is needed. Review the quantity of formula with the mother during each follow-up visit.
Women can keep their children healthy by preparing milk and food in a hygienic way. If they do not practise good hygiene, their children can easily get sick from diarrhoea and other diseases. Here are some key points to discuss with the mother:

**Keep clean:**
- Wash your hands with soap* and water before preparing formula or food or before feeding your child and also after going to the toilet.
- Wash your child’s cup or bowl thoroughly with soap and water or boil it.
- Keep food preparation surfaces clean using water and soap or detergent to clean them every day.

**Use safe water and wash raw materials:**
- Boil water vigorously for 1-2 seconds.**
- Wash fruits and vegetables, especially if eaten raw.

**Separate raw and cooked foods:**
- Avoid contact between raw and cooked foods.
- Use separate utensils and storage containers for raw foods.

**Cook thoroughly:**
- Especially meat, poultry, eggs and seafood.
- Reheat cooked food thoroughly. Bring soups and stews to boiling point.

**Keep formula and food at safe temperatures:**
- Give unfinished formula to an older child, drink it yourself or add it to cooked food. Do not keep it until the next feed.
- Do not leave cooked food at room temperature for more than 2 hours.
- Refrigerate prepared formula and all cooked and perishable foods promptly (preferably below 5˚C).

---

* Washing hands, especially with soap or a rubbing agent such as ash, helps remove germs and contributes to prevention of disease transmission.

**Bringing water to a rolling boil is the most effective way to kill disease-causing germs, even at high altitudes. Let the hot water cool down on its own without adding ice. If the water is clear and has been boiled, no other treatment is needed.
Using cups for feeding babies is better than using bottles if they are receiving formula or animal milk, for several reasons:

- Bottles are harder to clean, so they can be easily contaminated with germs that can make your baby sick.
- Ear infections are more common with bottle-feeding.
- Bottles may be propped for a baby to feed itself or given to a young sibling to feed the baby, so babies get less adult attention and social contact when bottle-fed.
- Cup-feeding ensures social contact during feeding and adult attention if the baby is having any difficulties. This can help to stimulate and comfort him/her.

If the woman has already given birth, show her how to cup-feed. If she has not yet given birth, explain the process and check for understanding. Here are some key points to discuss with the mother:

- Clean the cup with soap and water before filling it with milk or formula.
- Make sure that your baby is awake. Hold him/her sitting upright or semi-upright on your lap. Put a cloth underneath his/her chin to catch any dribble.
- Hold the cup to the baby’s lips and tilt it just enough so that the milk touches the 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.
- Keep the cup tilted so that he/she can sip the milk. Do not pour the milk or push on the baby’s lower lip. Let the baby take the milk at his/her own speed.
- A low-birth-weight baby starts to take the milk into his mouth with his/her tongue. A full-term or older baby sucks the milk, spilling some of it.
- You will know the baby has had enough when he/she closes his/her mouth and does not take any more.
- If the baby does not drink very much, offer him/her more at the next feeding or feed him/her earlier than usual.
- Look into your baby’s eyes and talk to him/her to show your love.
TEACH THE MOTHER HOW TO PRACTISE THE CHOSEN FEEDING OPTION

**COMMERCIAL FORMULA: IMPORTANT FACTS**
**DISCUSS WITH: HIV-positive women who have chosen commercial formula**

Babies can become sick or malnourished if commercial infant formula is not prepared and fed correctly. Here are some key points to discuss with the mother:

- Women should use formula made especially for infants. A baby needs a total of forty (40) 500 g tins, forty-four (44) 450 g tins of milk or fifty-one (51) 400 g tins for the first 6 months. Here is how many tins are needed per month:

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of 500 g tins needed per month</th>
<th>Number of 450 g tins needed per month</th>
<th>Number of 400 g tins needed per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>First month</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Second month</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Third month</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Fourth month</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Fifth month</td>
<td>8</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Sixth month</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

- The instructions for mixing the formula need to be followed exactly. Adding too much water or too little water can be dangerous for a baby’s health. Review the instructions on the tin together with the woman. If she cannot read, ask her who can help her to read them at home.

- If the woman cannot afford to buy more formula when it runs out, she should not add more water to make it last longer. She should feed her child animal milk with added water, sugar and micronutrient supplement until she can get more formula.

- Her baby will not need anything else besides formula until he/she is 6 months old. The woman should neither breastfeed nor give her baby any food, water or other types of liquids.

- Women who formula-feed lose the child-spacing benefits of breastfeeding. For this reason, they need information about other family-planning methods. Women who choose to replacement feed should be referred to a family-planning counsellor/service.
HOW TO PREPARE COMMERCIAL FORMULA
DISCUSS WITH: HIV-positive women who have chosen commercial formula

Each brand of infant formula is prepared differently. This section provides general instructions for preparing formula. If possible, the woman should bring containers that she usually uses to measure water for cooking so that you can demonstrate for her. You should mark the woman’s own container to show her how much water is needed. Ask her to mix up a feed while you watch and guide her, so she knows what to do when she goes home. Powdered infant formula is not a sterile product so make sure that the mother understands and follows these instructions carefully:

**General instructions for the mother (to be adapted to the locally available brand):**

- It is better to prepare the formula only a little while before giving it to the baby. It should be used as soon as it has cooled, always within one hour after preparation.

- Read the instructions on the formula or have someone read them for you. Make sure that you understand everything clearly. If the formula is not prepared the right way, then your baby could become sick or malnourished.

- Wash your hands with soap and clean water.

- Clean all of the utensils, containers and cups with soap and clean water.

- Tins of formula often come with their own scoop for measuring the powder. Measure the exact amount of powder and water that you will need for one feed.

- Bring enough water to a rolling boil briefly (until the surface of the water is moving vigorously for 1-2 seconds) and then add the hot water to the powdered formula. (NOTE: The water should be added when it is still hot, and not after it has cooled down to reduce the risk of bacterial contamination. If the powder clumps try using water that is less hot.)

- Only make enough formula for one feed at a time, since formula that is not stored at a constantly low temperature may spoil and sicken your baby.

- Do not keep milk in a thermos flask, because it will become contaminated quickly.

- If you have boiled water left over, you may keep it hot in a thermos flask. If it has been stored for more than a day it should be re-boiled before use.
Home-modified animal milk can be made from many different types of animal milk. Animal milk must be modified to make it fit for babies less than 6 months of age. The woman or other caregiver must add water to the milk and then boil it, so that the baby can easily digest it. Then she needs to add sugar. The baby also needs to take a micronutrient supplement every day that is specially made for infants. A list of the micronutrients that the supplement should contain is on the next page.

**Here are some key things to discuss with the mother:**

- Home-modified animal milk can be made from the following types of milk:
  - fresh cow’s milk
  - fresh goat’s milk
  - fresh sheep’s milk
  - fresh buffalo’s milk
  - full-cream milk (pasteurized)
  - ultra high temperature (UHT) milk
  - full-cream milk (powdered)
  - evaporated (unsweetened) milk

- The woman should never use sweetened condensed, skimmed or partially skimmed milk.

- Home-modified animal milk has fewer micronutrients than commercial formula. This is why the baby needs to take a micronutrient supplement every day that is specially formulated for non-breastfeeding children.

- Women who formula-feed lose the child-spacing benefits of breastfeeding. For this reason, they need information about other family planning methods. Women who choose to replacement feed should be referred to a family planning counsellor/service.
### Micronutrients for home-modified animal milk

The following is the composition of a micronutrient supplement needed daily to fortify a diet of 100 kcal of the infant milk mix (100 ml of milk + 10 g sugar + 50 ml water):

**Minerals:**
- manganese: 7.5 μg
- iron: 1.5 mg
- copper: 100 μg
- zinc: 205 μg
- iodine: 5.6 μg

**Vitamins:**
- Vitamin A: 300 IU
- Vitamin D: 50 IU
- Vitamin E: 1 IU
- Vitamin C: 10 mg
- Vitamin B1: 50 μg
- Vitamin B2: 80 μg
- Niacin: 300 μg
- Vitamin B6: 5 μg
- Folic acid: 5 μg
- Pantothenic acid: 400 μg
- Vitamin B12: 0.2 μg
- Vitamin K: 5 μg
- Biotin: 2 μg

If supplements containing these micronutrients are not available, then home-modified animal milk is not recommended.
Mothers should have a good understanding of how to prepare animal milk, given that it can be quite complicated. Demonstrate how to prepare the formula, using locally available milk and containers. Ask the woman to bring in the containers that she will use, so that you can mark them.

Demonstrate the milk preparation, giving precise and clear instructions. Transform the amounts of sugar (and milk powder if applicable) into measurements that the mother can understand (example: different-sized spoons). Remember to explain to her whether the spoonfuls should be flat, rounded or full. Remember to check her understanding of the instructions. Below are simple instructions for the mother.

Here is how to prepare different types of liquid milk:

- Make enough formula for one feed at a time. You may make formula for more than one feed if you can store it in a refrigerator and in a sterilised container with a tight lid.
- Wash your hands with soap and clean water.
- Clean all of the utensils, containers and cups with soap and clean water.
- Measure the amount of water, milk and sugar that you will need. (Mark the mother’s containers to show the amount of liquid required for both milk and water).

**Fresh animal’s milk:**

- Put the water and milk together in a small pot and bring them to a boil. As soon as they reach the boiling point, remove the pot from the heat and stand it in a larger pot of cool water to let it cool.

**Powdered full-cream milk:**

- Gather all of the water that you will need for the whole day if possible. Bring the water to a rolling boil briefly (until the surface of the water is moving vigorously for a second or two). You may keep it hot in a thermos flask.
- Mix the exact amount of powdered milk and water needed for one feed.
- Measure the exact amount of sugar needed for one feed and mix it with the liquid.
Mothers should also give their babies a micronutrient supplement every day (see the previous section, “Home-modified Animal Milk: Important Facts,” on page 43). Explain to the mother how to use it properly, following the directions on the package.

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>Amount of milk</th>
<th>Amount of water</th>
<th>Amount of sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>40 ml</td>
<td>20 ml</td>
<td>4 g</td>
</tr>
<tr>
<td>2 months</td>
<td>60 ml</td>
<td>30 ml</td>
<td>6 g</td>
</tr>
<tr>
<td>3 to 4 months</td>
<td>80 ml</td>
<td>40 ml</td>
<td>8 g</td>
</tr>
<tr>
<td>5 to 6 months</td>
<td>100 ml</td>
<td>50 ml</td>
<td>10 g</td>
</tr>
</tbody>
</table>

**Powdered full-cream milk**

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>Amount of milk</th>
<th>Amount of water</th>
<th>Amount of sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>5 g</td>
<td>60 ml</td>
<td>4 g</td>
</tr>
<tr>
<td>2 months</td>
<td>7.5 g</td>
<td>90 ml</td>
<td>6 g</td>
</tr>
<tr>
<td>3 to 4 months</td>
<td>10 g</td>
<td>120 ml</td>
<td>8 g</td>
</tr>
<tr>
<td>5 to 6 months</td>
<td>12.5 g</td>
<td>150 ml</td>
<td>10 g</td>
</tr>
</tbody>
</table>

* The dilution may vary according to the brand. Check the label for the appropriate dilution to prepare full-cream milk.
Teach the mother how to express breast milk

Discuss with: HIV-positive women who have chosen to express and heat-treat their milk; breastfeeding women who are transitioning to replacement feeding; women with mastitis and mothers of low-birth-weight babies.

Teach a mother how to express milk from her breasts:

- Get a container with a wide neck and a cover.
- Wash your hands and the milk container with soap and clean water.
- Sit or stand in a comfortable position in a quiet, private place. Drink something warm and try to relax as much as possible. You may ask someone to massage your back to help your milk to flow.
- Apply a warm compress to your breasts. Lightly massage them and gently pull or roll your nipples.
- Put your thumb on the breast above the nipple and areola (coloured area) and your first finger below the nipple and areola. Support your breast with your other fingers.
- Gently press your thumb and first finger together. Press and release, press and release, in order to start the milk flowing. This should not hurt. If it does, then you are not doing it right.
- Press the same way on the sides of the areola in order to empty all parts of the breast.
- Do not squeeze the nipple itself or rub your fingers along the skin. Your fingers should roll over the breast.
- Express one breast for 3-5 minutes until the flow slows then change to the other breast. Then do both breasts again.
- Change hands when the one hand gets tired. You can use either hand for either breast.
- Store the breast milk in a clean, covered container.
- You can store untreated breast milk for up to 8 hours at room temperature or up to 24 hours in a refrigerator.

The milk will need to be heat-treated if the mother has stopped feeding breast milk directly from the breast or is transitioning to replacement feeding (see page 56). If the mother is breastfeeding as her primary feeding method and only expresses her milk occasionally, then it does not need to be heated (example: if she is separated from her baby for a short time).

Women who express their milk may reduce the child-spacing benefits of breastfeeding. For this reason, they need information about other family-planning methods. Women who choose to express their milk should be referred to a family-planning counsellor/service.
HOW TO HEAT-TREAT AND STORE BREAST MILK

Discuss with: HIV-positive women who have chosen to express and heat-treat their milk; breastfeeding women who are transitioning to replacement feeding; women with mastitis and mothers of low-birth-weight babies.

Heat-treating and storing breast milk properly is important so that the breast milk does not get contaminated. Demonstrate how to do this, using if possible the woman’s own containers. In a hospital setting, health workers can heat-treat the breast milk indirectly using the Holder pasteurization method (where the breast milk is heated to 62.5 degrees Celsius for 30 minutes). This may help to preserve some of the protective properties of breast milk and most of its nutrients.

At home, however, it is easier and safer for women to heat-treat the milk directly. Following are some simple instructions for the mother.

Before heat-treating milk, gather the following things:
- clean containers with wide necks and covers, enough to store the milk;
- a small pot to heat the milk, such as an enamel cup;
- a large container of cool water;
- fuel to heat the water;
- soap and clean water to wash the equipment.

Follow these steps to heat-treat and store milk:
- Wash all of the pots, cups and containers with soap and water.
- Heat your milk to the boiling point and then place the 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.

Here are some things to remember:
- Only boil enough expressed milk for one feed. Store it in a clean, covered container in a cool place and use it within 1 hour.
- You can store untreated breast milk for up to 8 hours at room temperature or up to 24 hours in a refrigerator.
WET-NURSING
(BREASTFEEDING BY ANOTHER WOMAN)
DISCUSS WITH: HIV-positive women who have chosen wet nursing

A wet-nurse is a woman who breastfeeds a baby for another woman. In communities where this is accepted, an HIV-positive woman may choose to have an HIV-negative woman nurse her baby. If possible, the woman should bring the wet-nurse in with her to the counselling session to discuss HIV testing and infant-feeding counselling. Here are some key points to discuss with the mother:

- To protect your 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 3 months after the last time she had unprotected sex or any 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 also tested negative for HIV and remains faithful to her; and
  - not sharing any razors, needles or other piercing objects.

- You will need to discuss HIV prevention with your wet-nurse regularly if she is sexually active. If she does anything to put herself at risk for HIV, you may want to consider getting a new wet-nurse.

- The wet-nurse should be available to feed your baby upon demand, both day and night. If not available always, she should express and store breast milk as needed.

- The wet-nurse should receive counselling on how to prevent cracked nipples, mastitis and engorgement.

- If the baby is already infected with HIV, there is a small chance that he/she 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.

- Women who use wet-nurses lose the child-spacing benefits of breastfeeding. For this reason, they need information about other family planning methods. Women who choose to use wet-nurses should be referred to a family planning counsellor/service.
HIV-positive women who choose to breastfeed may be pressured to give their babies other foods, making it hard for them to breastfeed exclusively. Women who choose not to breastfeed may be pressured to do so. Below are some tips for women on how to deal with pressure from others.

- If the way that you have chosen to feed your baby is different from what is “normal” in your community, then people may pressure you to feed your baby differently. For example, they may pressure you to breastfeed, if you have chosen to give your baby formula. If you have not told these people that you are HIV-positive, then it can be hard for you to defend your feeding choice.

- If you have chosen exclusive breastfeeding, and people are pressuring you to give your baby other foods or liquids, then tell them that breast milk is the perfect food and drink for babies and that babies do not need anything else until they are 6 months old. This is true for ALL babies, not just babies of HIV-positive women, so the community will not think that you are HIV-positive if you are exclusively breastfeeding.

- If you have chosen any other option and people are pressuring you to breastfeed, here are some suggestions:
  - If they know about your HIV status, explain to them that the option you have chosen decreases the risk of passing HIV to your baby.
  - If they do not know about your HIV status, tell them that you were having difficulties with breastfeeding and your doctor advised you to feed your baby using ________(fill in the chosen feeding method).
  - If people demand to know what problems you had with your milk, you can say any of these things:
    - I am on special medication that can go through the milk and affect the baby.
    - It is between me and my doctor. Why don’t you ask my doctor?
  - It will be better for you to choose one simple reason that you can remember and use every time.

- Turn to your family for support if you are having difficulty dealing with the pressure from community members. You may also want to join an infant feeding support group (for HIV-positive women), a support group for HIV-positive people in general, or a support group for breastfeeding women (see the next section, “Getting Community Support,” for details).
GETTING COMMUNITY SUPPORT
DISCUSS WITH: All HIV-positive women

All HIV-positive women can benefit from HIV/AIDS support groups. Women who do not have the support of family or friends have a special need for these groups, however. If support groups are available in the community, below are some key messages for women.

- Being HIV-positive is difficult for many reasons. You may feel hopeless, scared, angry, stressed or confused about your situation. This is especially true if you are being pressured to explain why you have chosen a different feeding method from the norm, or you are being pressured to use another feeding method than the one you have chosen. Talking with other people in a supportive environment can help you to deal with these feelings.

- An HIV/AIDS support group is a good place to talk about your feelings, share your experiences and get support from other HIV-positive people. These groups can also help you to “live positively” with the virus.

- If you have chosen to breastfeed exclusively, you might find it helpful to join a breastfeeding support group. These groups are normally for all women who want to exclusively breastfeed, not just HIV-positive women. Women in these groups share experiences, support each other and help each other deal with breastfeeding difficulties.

- Your community may also have an infant feeding support group for HIV-positive women and their partners. These groups allow you to share experiences with other HIV-positive couples who are trying to reduce the risk of passing HIV to their babies. These can help you to learn from the experience of others in order to successfully carry out the feeding option that you have chosen.

Be aware of various support groups in the community so that you can provide appropriate referrals.
COUNSELLING STEP 6

It is important for the woman to come back on a regular basis so that the counsellor can monitor her progress with infant feeding and help her to address any difficulties. It is best if she can come back every month when she brings her baby for his/her regular checkups, following the schedule below:

First follow-up visit

- Within the first 10 days after delivery to help the mother successfully carry out her selected option.

Other follow-up visits

- During routine postnatal care and at every well-child and sick-child attendance (as is the practice for women who are not HIV-positive and their children) or whenever the mother plans to change her feeding practice.

Encourage the woman to return at any time if she has difficulties or is thinking about changing her feeding method. It is important for her to consult you before she makes the change.

GROWTH MONITORING

DISCUSS WITH: HIV-positive women returning for follow-up visits

All babies should have their weight monitored monthly in the first year of life and at least every 3 months in the second and third years of life in order to ensure that they are growing well and receiving adequate nutrition. This is especially important for babies who are not breastfed, because they are at greater risk of diarrhoea and malnutrition. Here are some key points to discuss with mothers:

- One sign that a baby is healthy is that he/she gains weight well during the first years of life. If a baby is not gaining weight, there could be many reasons:
  - the baby could be sick or have a poor appetite;
PROVIDE FOLLOW-UP COUNSELLING AND SUPPORT

- the baby could have mouth sores, making it painful to eat;
- the baby may not be getting enough breast milk, formula, or complementary foods;
- the baby’s formula milk is not being prepared or mixed properly;
- the woman could be sick and unable to care for the child.

- If the baby is not gaining weight between monthly visits to the health clinic:
  - check to see whether the baby is sick (see the section on feeding the sick child on page 69);
  - check to see whether the woman is having difficulties with breastfeeding or replacement feeding;
  - check to see whether the woman is sick (refer for care);
  - check to see whether the woman is feeling depressed (see the section on dealing with depression on page 62).

PROGRESS CHECK ON INFANT FEEDING
DISCUSS WITH: HIV-positive women returning for follow-up visits

Each time the woman comes in for a follow-up visit, the counsellor should check on how she is doing with her chosen feeding method.

Do the following:
- Check how the mother is feeding the baby (see the questions below).
- Check the child’s growth and health.
- Check how the mother is coping with her own health and any difficulties.

Discuss the following things with the mother according to the feeding option that she has chosen:

If she is breastfeeding:
- Check if she breastfeeds exclusively and gives no other milks or water to the baby.
- Check if she breastfeeds as often as the baby wants and for as long as the baby wants.
- Observe a breastfeed and check the mother’s breasts.
- If the baby is approaching 6 months, discuss the possibility of stopping early.
If she is replacement feeding*, check that she:
- is using a suitable type of replacement milk.
- is able to get new supplies of milk before she runs out.
- is measuring the milk and other ingredients correctly.
- is giving an appropriate volume and number of feeds. If not, recommend that she adjust the amount according to the baby’s age.
- is preparing the milk cleanly and safely.
- is cup-feeding.
- is not breastfeeding.

If she is expressing and heat-treating breast milk, ask the following:
- How easy has it been to express your milk? How often have you been doing it? How much have you been able to express each day?
- How have you been heating it?
- How often have you been feeding the baby?
- How have you been storing the breast milk?
- How have you been coping with pressure from family, friends and others to breastfeed?
- What difficulties have you had?

If she has a wet-nurse, ask the following:
- How has the baby responded to the wet-nurse?
- Has the wet-nurse been able to feed the baby on demand? What about at night?
- What has the wet-nurse been doing to protect herself from HIV? How do you know?
- What difficulties has the wet-nurse had?

In addition to discussing the feeding method that the mother has been using, the counsellor should also cover the following issues:

Growth spurts
- Babies experience periods of rapid growth during the first months of life. Often these occur at around 2 weeks, 6 weeks and 3 months. During these times they are extra hungry and may cry more often than normal. If this happens, the woman should not be alarmed. The way to deal with it is to feed and comfort her baby more often than normal.

* This applies to commercial infant formula and home-modified animal milk.
Returning to work

- Women often return to work when their babies are still young. The counsellor should discuss how the woman plans to feed her baby when the time comes for her to return to work. She will need extra support from family or friends, especially if she is exclusively breastfeeding.

Preparing for the transition from breastfeeding to replacement feeding

- Stopping breastfeeding will reduce the risk of HIV infection for the baby, but requires preparation. If the woman is still breastfeeding when the baby is approaching 6 months of age or older, introduce the idea of stopping.

Preparing for complementary feeding

- When the baby reaches 6 months of age, complementary foods are required. (See the section on complementary feeding for more information.)

DECIDING WHEN TO STOP BREASTFEEDING

DISCUSS WITH: All HIV-positive breastfeeding women

HIV-positive women who breastfeed their babies are encouraged to breastfeed exclusively and to stop as soon as their individual situation allows it. The decision about exactly when to stop should take into account the affordability of breast-milk substitutes, the woman’s available time to prepare them, the pressure she may experience to continue breastfeeding, her own health, and the child’s health and development.

Reassess briefly the mother’s situation at each follow-up visit to determine whether replacement feeding could become acceptable, feasible, affordable, sustainable and safe in the near future. This will help you define the right time for discussing with the mother when and how to stop breastfeeding. It is important that she plans in advance.

When the time is right, discuss the following:

- HIV-positive women may want to stop breastfeeding earlier than they normally would in order to prevent transmission of HIV through breastfeeding.
- The longer you breastfeed, the longer your baby is exposed to HIV.
- You may wish to consider stopping earlier if your health declines and you develop AIDS. This is because the risk of HIV transmission to your baby will be higher.
When your baby is under 6 months of age, he/she will need 4-8 500 g-tins of commercial formula per month or 9-18 litres of animal milk per month until he/she is 6 months old. The amount of milk needed increases as the baby gets older. This will cost about _______ per month (insert local costs.)

Once your baby is over 6 months of age, he/she can drink regular animal milk. This still may require some preparation though, depending on the type of milk.

Another option is to express and heat-treat your breast milk once your baby is a few months old and you feel you can handle it.

To stop breastfeeding, your baby should be in good health. If he/she is under 6 months of age, he/she should learn how to cup-feed. If he/she is 6 months old or older, he/she should already be eating other foods.

Once you stop breastfeeding, you will lose your natural protection against pregnancy. Therefore, you will need another family-planning method.

Ask the mother:

- How long do women in this community breastfeed their babies? What are some reasons that women might stop breastfeeding early?
- How do you feel about stopping breastfeeding early? When do you think that you might be able to do it?
Some women who decide to stop breastfeeding early may prefer to stop rapidly in order to lessen the risk of passing HIV to their babies. Others may wish to stop more gradually, however. The best duration for this transition is not known, but it is recommended that the transition should last between 2-3 days and 2-3 weeks.

Rapidly stopping breastfeeding can be traumatic for the woman and can cause several problems for the baby, such as dehydration (not having enough liquid), refusal to eat, the loss of sucking comfort, weight loss and malnutrition. Common problems for the woman include breast engorgement, mastitis, depression, increased risk of pregnancy and stigmatization. Support from the woman’s family members may make the transition easier. The following guidelines can help women to make the transition easier.

**Ways to prevent these problems:**

- While you are breastfeeding, teach your baby to drink expressed, unheated breast milk from a cup. This milk may be heat-treated to destroy the HIV.
- Once the baby is drinking comfortably, replace one breastfeeding with one cup-feeding using expressed breast milk.
- Every few days, increase the frequency of cup-feeding and reduce the frequency of breastfeeding. Ask an adult family member to help cup-feed the baby.
- Stop putting your baby to the breast completely as soon as you and your baby are accustomed to frequent cup-feeding. From this point on, it is best to heat-treat your breast milk.
- If your baby is only receiving milk, check that your baby is passing enough urine – at least 6 wet diapers in every 24-hour period. This means that he/she is getting enough milk.
- Gradually replace the expressed breast milk with formula or home-modified animal milk.
- If your baby needs to suck, give him/her a clean finger instead of the breast.
- To avoid breast engorgement, express a little milk and discard it. Wear a firm bra to prevent breast discomfort.
- If your breasts become engorged, put warm compresses on your breasts or take a warm shower, and express enough milk to reduce discomfort. After expressing milk use cold compresses to reduce the inflammation.
Do not begin breastfeeding again once you have stopped. If you do, the risk of passing HIV to your baby will continue.

Begin using the family planning method of your choice, if you have not already done so, as soon as you start reducing breastfeeds.

When the woman comes back for a follow-up visit, discuss these things:

- What has she been feeding her baby instead of breast milk, and how she has been preparing it?
- What has she been doing to help her baby sleep?
- How has she been comforting her baby when he/she cries?
- How has she dealt with depression?
- How has she coped or how is she coping with any breast conditions (engorgement, mastitis)?
HELPING BABIES TO SLEEP AT NIGHT
DISCUSS WITH: HIV-positive women who are preparing to stop breastfeeding or women who are having trouble getting their babies to sleep at night

Most young babies are breastfed day and night. Women who want to stop breastfeeding early may worry about how they will feed and comfort their babies during the night. Women may also wish to find ways to prevent night-time crying, which could disturb other family members. If the woman is worried about these problems, these tips can help her baby sleep through the night.

- Teaching your baby to sleep through the night may make it easier for you to stop breastfeeding completely.
- Getting more sleep may also help you to stay rested and healthy.
- You can start teaching your baby to sleep through the night by following these steps:
  - breastfeed your baby late at night, before going to bed;
  - reduce the number of night feedings gradually so that by the time you want to stop breastfeeding, your baby is not waking often to feed;
  - avoid breastfeeding your baby to sleep; instead, lay the baby down and pat his/her back gently and rhythmically to help him/her fall asleep.
  - help your baby to learn the difference between day and night:
    - follow the same bathing, cuddling and feeding ritual every night, and
    - don't over-stimulate your baby with loud noise or play before bedtime.
- If your baby cries at night, see if he/she is cold or uncomfortable or has a wet diaper and rock him/her back to sleep. Babies cry for many reasons, not only because of hunger, so carefully check these things before feeding your baby during the night.
- If you must feed the baby at night, give him/her expressed breast milk.
- If possible, avoid sleeping with the baby when you are teaching him/her to sleep through the night. Sleeping together may make it more difficult to teach him/her not to want to breastfeed upon waking up.
COMFORTING A NON-BREASTFED BABY

DISCUSS WITH: HIV-positive women who have chosen replacement feeding, breastfeeding women who are preparing to stop, or women who have a baby who cries a lot.

Mothers who are not breastfeeding may have a difficult time comforting their babies when they cry, especially in public places or at home at night. Below are some suggestions for how to comfort a baby who is not breastfed:

- Hold the baby close and rock him/her gently.
- Gently rub his/her stomach or back.
- Give the baby something to eat (for children who have started eating complementary foods).
- Allow the baby to suck on your forearm or finger if they are clean.

It can be traumatic for a baby to stop breastfeeding, especially if it is done earlier and/or more rapidly than normal. This is because babies miss the warmth, skin-to-skin contact and affection that they get from breastfeeding. Below are some tips to help parents comfort their babies during this difficult time:

- Hold and cuddle your baby as often as possible. He/she needs attention, even if he/she is not breastfeeding.
- Cradle your baby during feedings and gaze into his/her eyes.
- Be patient with your baby during feedings, since babies eat slowly and need time to swallow. Talk lovingly and caress your baby during pauses.
- Snuggle with the baby for a few minutes after each feed, in order to be close to him/her and show love.
- Give skin-to-skin contact after feeding or whenever your baby seems fussy. It is possible to give skin-to-skin contact with other parts of your body, such as the stomach or back (for example, lie on your stomach with your baby on your back).
- Sleep with your baby after he/she has been weaned. Keep your breasts covered, however, so that the baby does not try to feed from them.
DEALING WITH DEPRESSION
DISCUSS WITH: HIV-positive women who are suffering from depression

Women may feel depressed when they stop breastfeeding or learn that they are HIV-positive. Both of these feelings are normal. A woman who is severely depressed may need to be referred to a psychologist, an HIV/AIDS support group or other type of mental health counsellor. Following are tips for dealing with depression that is not severe. It can be helpful to discuss these with the woman before she stops breastfeeding so that she is prepared and knows that this is normal.

- Talk to a friend, a family member or a counsellor about your feelings. That person may have gone through the same experience when she weaned her baby. Joining a support group in the community can also be helpful for people living with HIV/AIDS or a support group for breastfeeding women.
- Let your partner or spouse know how you feel so that he can support you.
- Massage your baby so that you can still feel close to him/her, even though you are not breastfeeding.
- Take time for yourself to do something that you enjoy.
- Make sure that you are getting enough sleep and are eating a nutritious diet.
 Massage is another way for women to bond with their babies during the weaning period. Massage stimulates babies and can also help depressed women to feel better. Baby massage is also helpful for babies who are not breastfeeding. Below are some instructions for doing massage. *(Demonstrate for the woman with her baby or with a doll).* Massage your baby when he is not hungry, fussy or sleepy.

**To massage your baby’s chest:**
- Massage your baby when he is not hungry, fussy or sleepy.
- With your hands together at the centre of the chest, gently push out to both sides, following the baby’s rib cage as if you were flattening a piece of cloth.
- Without lifting your hands, bring them gently around in a heart-shaped motion to the centre.

**To massage your baby’s armpits and arms:**
- Lift the arm and stroke the baby’s armpits a few times. Do both armpits.
- Hold your hands around the baby’s arm at the shoulder, as if you were holding a stick. Gently move your hands in opposite directions, back and forth, from the baby’s shoulder to hand, gently squeezing as you do. Stroke the other arm.

**To massage your baby’s stomach:**
- Using the outside of each hand, make gentle paddling strokes on the baby’s tummy, one hand following the other, as if you were scooping sand towards yourself.
- Use your fingertips to walk across the baby’s tummy.

**To massage your baby’s legs:**
- Hold the baby’s leg as if you were holding a stick. Move your hands up the leg together, gently turning in opposite directions and squeezing slightly.

**To massage your baby’s back:**
- Turn the baby onto his or her stomach. Start with your hands together at the top of the baby’s back, at right angles to the spine. Move your hands back and forth in opposite directions, going down the back to the buttocks, then up to the shoulders.
Once they reach 6 months of age, babies need other foods and liquids in addition to breast milk, formula or animal milk. These are called **complementary foods**. Following are some key messages to discuss with women once their babies reach 6 months of age:

- Your baby needs other foods and liquids in addition to milk once he/she reaches 6 months of age.

- **Staple foods** give your baby energy. These foods include **cereals** (rice, wheat, maize, millet and quinoa), **roots** (cassava, yam and potato), and **starchy fruits** (plantain and breadfruit).

- But staple foods do not contain enough nutrients by themselves. You also need to give other foods. Your child should eat a variety of the following foods, along with the staple:
  - **animal-source foods**: liver, red meat, chicken, fish and eggs
  - **milk products**: milk, cheese, yogurt and curds
  - **green leafy and orange-coloured vegetables**: Spinach, broccoli, chard, carrots, pumpkins and sweet potatoes
  - **pulses**: chickpeas, lentils, cowpeas, black-eyed peas, kidney beans and lima beans
  - **oils and fats**: oils (preferably soy or rapeseed oil), margarine, butter or lard
  - **ground nut paste, other nut pastes**: soaked or germinated seeds, such as pumpkin, sunflower, melon and sesame seeds

- **Animal-source foods** are especially important because they contain essential nutrients for the growth and development of all infants. Give daily or as often as possible:
  - foods rich in **iron** such as liver (any type), red meat and fish;
  - foods rich in **zinc**, such as liver (any type), red meat, fish, chicken, eggs and milk products
  - foods rich in **calcium**, such as milk or milk products and small fish with bones.

- Babies who are **not** breastfed and do **not** consume the minimum amount of animal milks or animal-source foods daily will need to consume large quantities of calcium, zinc and iron to meet their nutritional needs. Increased consumption may be achieved by eating fortified foods (if locally available) or by taking daily supplements (if a national policy exists and these are locally available).

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* This refers to babies who are 6 complete months (180) days old.
At each meal, feed your baby different foods from the groups mentioned above together with the staple food.

Increase the variety (kinds) of foods that your child eats as he/she gets older. Starting at 8 months, your baby also needs “finger foods” or snacks in between meals. For example:

- mashed ripe banana, paw-paw (papaya), avocado, mango and other fruits;
- yogurt, milk and puddings made with milk;
- biscuits or crackers;
- bread or chapati with butter, margarine, groundnut paste (peanut butter) or honey;
- beancakes;
- cooked potatoes.

Your baby still needs milk to grow well. If you have been using formula or home-modified animal’s milk, you can switch to regular (undiluted) animal milk.

At this age, babies usually need water (in addition to the recommended amounts of milk). To find out if your baby is still thirsty, offer him/her some boiled water during and after meals.

Do not feed your child sodas (fizzy drinks) or sweets/candies. Do not give your child tea or coffee. Limit the amount of fruit juice offered to no more than one cup per day, because this can decrease his/her appetite and may cause diarrhoea.

Complementary foods need to be introduced gradually, and the quantities need to increase as the baby gets older. Women also need to understand why porridge should not be watered down. Following are some key messages for women:

**HOW TO INTRODUCE COMPLEMENTARY FOODS**

**DISCUSS WITH: HIV-positive women with babies approaching or older than 6 months of age**

*This refers to babies who are 6 complete months (180) days old.*
Start by giving your baby one or two tablespoons of new food twice per day. Give more food if the baby shows interest. Gradually increase the variety, texture, frequency and quantity of foods, as noted in the table below:

<table>
<thead>
<tr>
<th>Age</th>
<th>Texture</th>
<th>Frequency</th>
<th>Amount at each meal¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation of complementary foods</td>
<td>soft porridge, well mashed foods</td>
<td>2 times per day</td>
<td>2-3 tablespoons</td>
</tr>
<tr>
<td>7-8 months</td>
<td>mashed foods</td>
<td>3 times per day</td>
<td>2/3 cup</td>
</tr>
<tr>
<td>9-11 months</td>
<td>finely chopped or mashed foods and foods that baby can pick up</td>
<td>3 meals plus 1 snack between meals</td>
<td>3/4 cup²</td>
</tr>
<tr>
<td>12-24 months</td>
<td>family foods, chopped or mashed if necessary</td>
<td>3 meals plus 2 snacks between meals</td>
<td>1 full cup²</td>
</tr>
</tbody>
</table>

NOTES:

These amounts are in addition to milk feeds. If baby is not breastfed, give in addition 1-2 extra meals per day.

¹ This chart should be adapted to the local context, using local utensils to show the amount.

² One cup = 250 ml

- If your baby refuses some types of foods, try giving different types of foods in different combinations.
- Feed the baby from his/her own plate or bowl so that the baby gets his/her full share and you can see how much is eaten.
- Patiently help your baby eat. It takes babies time to learn how to eat solid food. Talk to your baby lovingly, look into his/her eyes and actively encourage him/her to eat. Once your child gets older, help the child to feed him/herself.
- If your baby loses interest while eating, try to remove distractions.
- Practise good hygiene to keep your baby from getting sick:
  - wash your hands with soap and water before preparing your baby’s food and before feeding; also wash your baby’s hands before feeding;
  - cover cooked food and eat it within 2 hours if there is no refrigerator;
  - use clean utensils to prepare and serve food and use clean bowls and cups to feed your baby.
- Avoid foods in a form that can cause choking, such as whole groundnuts.
BREAST-MILK SUBSTITUTES FROM 6 TO 24 MONTHS
DISCUSS WITH: HIV-positive women with babies approaching or older than 6 months of age*

Babies still need to drink milk (commercial formula or unmodified animal milk) after they begin to eat other foods. Women who have been breastfeeding and want to stop need to learn how to prepare commercial formula or animal milk safely. Below are some key messages for women:

- Even though your baby is old enough for solid foods, milk in some form is still important for his/her health and growth.
- The table below shows how much milk (commercial formula, or animal milk) your baby will need to drink approximately each day (show the woman the right size of container):

| Minimum** recommended amount of milk per day (ml per day) for children 6 to 24 months of age |
|--------------------------------------------------|--------------------------------------------------|
| Animal milk                                      | Commercial formula                               |
| If other animal-source foods are regularly consumed | 200-400 ml                                       | 300-500 ml                                      |
| If other animal-source foods are not consumed    | 300-500 ml                                       | 400-550 ml                                      |

**The minimum recommended amounts are presented as ranges because of differences in the nutrient content (calcium, zinc, iron) of other foods in the diet such as eggs, red meat, poultry or fish, and provision of mineral supplements. This table assumes that animal milk is given with an iron-containing supplement whereas infant formula is given without a supplement. These recommendations should be refined during the local adaptation.

- If you have been breastfeeding, you should consider stopping breastfeeding completely so that your baby is no longer exposed to HIV. Once you are ready to do this (see pages 56-63), wean your baby over a period of 2-3 days to 2-3 weeks. You can also express and heat-treat your breast milk, which will protect your baby from HIV.
- If you have been using commercial formula or home-modified animal milk, you can switch to regular (undiluted) animal milk when your baby is 6 months old. Here is how to prepare it:
  - **fresh animal milk**: boil the milk to kill any bacteria and make it more digestible;
  - **powdered or evaporated milk**: add clean boiled water according to the directions on the tin in order to make full strength milk;
  - **processed/pasteurized or UHT milk**: no preparation needed; if it has been open more than an hour, it will need to be boiled before giving it to your baby.

* This refers to babies who are 6 complete months (180 days) old.
If you are expressing and heat-treating your breast milk, you can continue to do this for as long as you can manage it.

Do not use condensed milk as the main source of milk.

**COMPLEMENTARY FEEDING FOLLOW-UP**

**DISCUSS WITH: HIV-positive women with babies approaching or older than 6 months of age**

When a mother brings her 6-24 month old baby back for a follow-up visit, ask her the following questions to see how well she is doing with complementary feeding:

- How well has your child been feeding? What problems have you had?
- Who feeds the child and how?
- What types of foods have you been giving him/her? *(Check that the baby is receiving a well-balanced diet)*
- How often have you been feeding your child food and snacks? *(Check that the baby is fed often enough.)*
- How large are the servings? Does the child receive his/her own serving? *(Check that the quantity of food increases as the child gets older.)*
- Does the child eat most or all of his/her food?
- What utensils do you use to feed the child?
- Tell me about how you prepare the food and clean the dishes.
- How is the food stored after it is prepared?
- What kind of milk or formula have you been feeding your child?
- How much milk or formula has your child been drinking each day? *(Check that the baby is drinking enough milk.)*
- What questions do you have?

*This refers to babies who are 6 complete months (180) days old.*
It is important to continue feeding children when they are sick and to provide extra nutrition after they have recovered from illness. If a woman's child is sick, follow these steps:

1. **ASSESS HOW THE CHILD IS BEING FED.**
   
   **Ask all women:**
   - During this illness, has the child's feeding changed? If yes, how?

   **If the woman is breastfeeding, ask:**
   - Is she having any trouble breastfeeding?
   - How many times per day is she breastfeeding? Does she also breastfeed at night?
   - Is the child being given any other food or fluids? If yes:
     - What food or fluids?
     - How many times per day?
     - What utensils does she use to feed the child? Does she wash them with soap and water before use?
     - How is the child's appetite?
     - Does the child have any sores in the mouth or oral thrush?

   **If the woman is not breastfeeding, ask:**
   - What is she feeding her child instead of breast milk?
   - Has she had any problems getting a steady supply of the formula or animal milk? If yes, how has she managed?
   - How is she preparing the breast-milk substitute?
   - What utensils is she using to feed the child?
   - How is she making sure that the water and utensils are clean?
     - How often is she feeding the child?
     - Is she having any trouble feeding the child?
     - How is the child's appetite?
     - Does the child have any sores in the mouth or oral thrush?
If the child has begun eating complementary foods, ask:
- What food is she giving her child? How often?
- Is the child having any difficulty in eating or is there a change in appetite?
- Does the child have any sores in the mouth or oral thrush?

If the child is very low weight for his/her age:
- How large are the child’s servings?
- Does the child receive his own serving?
- Who feeds the child and how?
- How often does he/she eat?

2. PROVIDE GUIDANCE TO THE MOTHER FOR FEEDING HER CHILD DURING ILLNESS.

Emphasize that women should encourage their children to drink and eat while they are sick. This may require more time and patience than usual, but it is very important in order to prevent malnutrition.

If the child is less than 6 months old and has not yet started eating complementary foods:
- If the child is breastfeeding, breastfeed as often as he/she wants, day and night, at least 8 times in 24 hours. Do not give any other food or liquids.
- If the child is drinking commercial formula or home-modified animal milk, give it as often as the child wants, day and night. Do not give any other food or liquids.

If the child has started eating complementary foods:
- If still breastfeeding the child, breastfeed as often as he/she wants.
- For children 6-12 months old: give the child small amounts of soft food at least 3 times per day if receiving some type of milk, and 5 times per day if not receiving milk at all.
- For children 12-24 months old: give the child adequate amounts of food 5 times per day.
- Gently coax the child to eat, even if he/she is not hungry. Feeding your child when he/she is fully awake will help. Make sure that he/she is comfortable (e.g., clear his/her nose if it is stuffed up).
- Give extra fluids if the child has diarrhoea or fever.
The table below shows some specific suggestions for a child who has any of the following illnesses or conditions:

<table>
<thead>
<tr>
<th>Illness/condition</th>
<th>Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s mouth or throat is sore</td>
<td>- Give soft or smooth foods&lt;br&gt;- Avoid acidic foods (like citrus fruits), very sweet foods and spicy foods&lt;br&gt;- Have child drink through a straw</td>
</tr>
<tr>
<td>Child has a stuffy nose</td>
<td>- Clear the nose before feeding&lt;br&gt;- Feed slowly, giving the child time to breathe</td>
</tr>
<tr>
<td>Child has a fever</td>
<td>- Give extra fluids or breastfeeds&lt;br&gt;- Give frequent small portions</td>
</tr>
<tr>
<td>Child has a chest infection or cough</td>
<td>- Sit child upright and slowly give small amounts of food and fluids</td>
</tr>
<tr>
<td>Child has diarrhoea</td>
<td>- If breastfeeding, give more frequent, longer breastfeeds, day and night&lt;br&gt;- If replacement feeding:&lt;br&gt;  - replace the formula/milk with fermented milk products, such as yoghurt; or&lt;br&gt;  - replace half the milk with extra rich semisolid food&lt;br&gt;- Give bananas, mashed fruits, soft rice and porridge&lt;br&gt;- Give small meals more often&lt;br&gt;- If the child is getting dehydrated, use oral rehydration solution</td>
</tr>
<tr>
<td>Child is vomiting</td>
<td>- Give very frequent fluids or breastfeeds in small amounts&lt;br&gt;- Give small amounts of food as frequently as possible</td>
</tr>
<tr>
<td>Child is sleepy</td>
<td>- Watch for times when the child is alert and then feed</td>
</tr>
</tbody>
</table>
3. PROVIDE GUIDANCE TO THE MOTHER FOR FEEDING HER CHILD DURING RECOVERY.

Emphasize that children need to eat more than normal while they are recovering from illness. Here is how a mother or caretaker can do this:

- Feed the child more frequently than normal.
- Give her child more breast milk, formula feeds and/or other food than normal.

If the baby has started eating complementary foods:

- Feed more frequently and give an extra meal or snack between meals.
- Give extra food at each meal if the child’s appetite is good.
- Give fruits and foods that are extra rich in energy and/or nutrients, such as animal products, margarine or oil.
- Be extra patient in encouraging the baby to eat.

NOTE:
These guidelines also apply to children who are known or suspected to be HIV-infected. Some HIV-infected children are likely to become severely malnourished as the infection gets worse. These children need to be referred for treatment of their severe malnutrition and underlying infections, and they may require hospitalization.
ANNEX 1

TRAINING AND INFORMATION RESOURCES

As mentioned earlier, it is essential that counsellors who will use these cards have already been trained in breastfeeding counselling and HIV and infant feeding counselling. The resources listed below can be obtained from the World Health Organization at the following address:

World Health Organization
Department of Child and Adolescent Health and Development
Avenue Appia 20
CH-1211 Geneva 27, Switzerland
Tel: (41)22-791-2111  Fax: (41)22-791-4853
E-mail: cah@who.int

The resources can also be obtained from WHO and UNICEF country and regional offices. If you have access to the internet, they can be downloaded from the following website: http://www.who.int/child-adolescent-health/publications/pubnutrition.htm#Training.

- **Breastfeeding Counselling: A Training Course (WHO/UNICEF)**
  This is a 40-hour course for counsellors who care for women and young children.

- **HIV and Infant Feeding Counselling: A Training Course (WHO/UNAIDS/UNICEF)**
  This is a 3-day training course for counsellors in primary care and maternal and child health care settings. It builds on skills taught in the WHO/UNICEF Breastfeeding Counselling: A training course (see above). Therefore, it should be used with health workers who have already been trained as breastfeeding counsellors, or it should be conducted together with the breastfeeding counselling course.

- **Complementary Feeding Counselling: A Training Course (WHO)**
  This is a 3-day course.

- **HIV and Infant Feeding (UNICEF/UNAIDS/WHOUNFPA)**
  This is a series of documents that includes:
  - guidelines for decision makers;
  - a guide for health care managers and supervisors;
  - *HIV transmission through breastfeeding: a review of available evidence.*
Complementary Feeding: Family Foods for Breastfed Children

This is a comprehensive handbook focusing on the period when a child continues to receive breast milk or formula, but also needs increasing amounts of additional foods.

What are the Options? Using Formative Research to Adapt Global Recommendations on HIV and Infant Feeding to the Local Context.

This document provides programme managers, researchers and policymakers with basic guidance on how to conduct local assessments to establish the range of replacement feeding options that may be acceptable, feasible, affordable, sustainable and safe (AFASS) in different contexts.

Other useful resources for training and breastfeeding support

Centre for International Child Health (CICH)

CICH offers an annual Breastfeeding: Practice and Policy Course in London, England. This is a master’s level course that teaches senior health professionals how to take an active role in improving breastfeeding practices, implementing international initiatives on infant feeding and training others. The course is 4 weeks long and is held in collaboration with UNICEF (Nutrition Section) and WHO (Department of Child and Adolescent Health). CICH also offers a 2-week provincial level training for trainers, co-ordinators and resource personnel in other countries. For more information, contact:

Centre for International Child Health
Institute of Child Health
30 Guilford Street
London, WC1N 1EH, United Kingdom
Tel: +44 (0) 20 7905 2122
Fax: +44 (0) 20 7404 2062
www.cich.ich.ucl.ac.uk
Email: bfeed@ich.ucl.ac.uk

Regional AIDS Training Network (RATN)

Training courses in PMTCT and other HIV/AIDS-related subjects offered throughout the East and southern Africa.

RATN
P.O. Box 16035
Nairobi, Kenya
Tel. (254) 2-716009 or 724634
Fax: (254) 2-726626
Website: www.ratn.org
E-mail: ratn@ratn.org
**Woman-to-Woman Support Handbook (La Leche League International)**

An overview of breastfeeding support groups and how to establish them, using principles that can also be used to create infant-feeding support groups for HIV-positive women.

La Leche League International
Website: www.lalecheleague.org
Email: llli@llli.org

**The LINKAGES Project**

LINKAGES is a USAID-funded program of The Academy for Educational Development that provides technical assistance, information and training on breastfeeding, complementary feeding, HIV and infant feeding, maternal dietary practices and the lactational amenorrhea method. Numerous documents and training materials on these subjects can be ordered from LINKAGES or downloaded from the project website:

LINKAGES

c/o The Academy for Educational Development
1825 Connecticut Avenue NW
Washington, DC 20009 USA
www.linkagesproject.org

The LINKAGES Africa Regional PMTCT and Infant Feeding Program, based in Zambia, collaborates with national, regional and international partners to promote and facilitate PMTCT programs and build their capacity to integrate optimal infant feeding and PMTCT into existing maternal and child health and community services. For more information, please contact:

LINKAGES Africa Regional PMTCT and Infant Feeding Program
P.O. Box 32242
Lusaka, Zambia
Tel. (260)1-234-311/12
Email: region@link.org.zm
ANNEX 2

TAKE HOME FLYERS
HOW TO BREASTFEED SAFELY

- Practise exclusive breastfeeding. Do not give your baby any other liquids or foods besides breast milk, not even water, except for medicine prescribed by a doctor or nurse.

- Ensure that your baby is always well positioned and attached to the breast to prevent cracked nipples and soreness.

- Hold the baby close to you, facing the breast, with his/her neck and body straight and supported.

- You will know that your baby is well attached if more areola is visible above the baby's mouth, his/her mouth is wide open and his/her chin is touching the breast.

- Feed the baby frequently day and night, as often and for as long as the baby wants, at least 8 times in 24 hours.

- Let your baby finish one breast and come off on its own before offering the other breast. This will ensure that your baby gets all the water and food to satisfy him/her.

- Check for sores in your baby’s mouth everyday and get them treated as soon as possible.

- Come back to see me right away if your baby is not feeding well or if you have any difficulties with breastfeeding, or sore nipples or red or painful breast.

- Even if you do not have any difficulties come back to see me on ______.
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 seconds.

- 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. Stir well.

- Only make enough formula for one feed at a time. 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 _____.
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 _____.

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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). Add____ spoonfuls 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_____.

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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 by filling the spoon until it is level/rounded/heaped (circle one). Put _____ spoonfuls in the marked cup or class.

- Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one). Put _____ spoonfuls in the marked cup or class.

- 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 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_____.

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 by filling the spoon until it is level/rounded/heaped (circle one). Put _____ spoonfuls in the marked cup or class.

Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one). Put _____ spoonfuls in the marked cup or class.

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 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_____.

© World Health Organization, 2005
EXPRESSING BREAST MILK

- Wash your hands and the milk container.

- Lightly massage breasts and gently pull or roll your nipples.

- If possible, ask someone to massage your back to help your milk flow.

- Put your thumb on the breast near the edge of the areola, away from your nipple, and your first finger in a similar position on the other side. Support your breast with your other fingers.

- Gently press your thumb and first finger towards your chest and then press and release several times in order to start the milk flowing. This should not hurt.

- Press the same way on all edges of the areola in order to empty all parts of the breast. Do not squeeze near or on the nipple itself or rub your fingers along the skin. Your fingers should roll over the breast.

- Express one breast for 3-5 minutes until the flow slows, and then change to the other breast. Then do both breasts again. Change hands if your hand gets tired. This will take about 20 minutes.

- Express as often as the baby would feed. The baby needs about ____ml per feed, _____ feeds every 24 hours.

- Your milk can safely be stored in a covered container for up to 8 hours at room temperature or up to 24 hours in a refrigerator.

- Come back to see me on ____.
HEATING BREAST MILK

- Wash your hands.

- Gather a small pot, a large container of cool water, a clean container for the milk, a cup for feeding the baby, fuel, soap and clean water.

- Put enough breast milk for one feed in the small pot and heat it to the boiling point. Place the 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 milk in a clean, covered container in a cool place and use it within one hour.

- Feed the baby using a cup. Discard any unused milk.

- Your baby needs _____ml per feed, _____ feeds every 24 hours.

- Wash the utensils.

- Come back to see me on _____. 
CUP FEEDING

- Wash your hands.
- Clean the cup with soap and water.
- Make sure that the baby is awake and held sitting upright. Put a cloth underneath his/her chin to catch any dribble.
- Hold the cup to the baby's lips and tilt it just enough so that the milk touches the 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.
- Keep the cup tilted so that he/she can sip the milk. Do not pour the milk or push on the baby's lower lip.
- Your baby has had enough when he/she closes his/her mouth and does not take any more.
- If the baby does not drink a lot, offer him/her more at the next feeding or feed him/her earlier than usual.
- Discard any unused milk or formula.
- Talk to the baby and look into his/her eyes to show your love.
- Wash the utensils.
- Come back to see me on ________.
CRACKED NIPPLES AND RED OR PAINFUL BREASTS

- Cracked nipples can be prevented by making sure that your baby is well attached at the breast. If you feel any pain in the nipples try to improve the baby's attachment.

- To prevent red or painful breasts make sure your baby feeds freely from your breasts, taking all of the milk at each feeding. This can be done by allowing your baby to feed on each breast until he/she comes off by him/herself.

- If you have cracked nipples, rub a few drops of breast milk on your nipples and let dry. Then continue suckling with good attachment. Feed the baby with the healthy breast only

- If your breast becomes swollen with milk, apply warm compresses between feeds.

- If your breast is swollen, red, painful, or hard you may have a breast infection. Go to the health centre or clinic right away to get treatment for the infection. Also, drink more liquids than normal and rest.

- Do not feed your baby from the affected breast. Express the milk and throw it away. Feed your baby from the healthy breast.

- Come back to see me on _____.

Mastitis
FEEDING YOUR BABY FROM 6 TO 24 MONTHS

- Wash your hands.

- Give a mineral vitamin supplement as recommended by the health worker.

- If your baby refuses many foods, try giving different types of foods in different combinations.

- Feed younger infants yourself. Feed them slowly and patiently. Help older children to feed themselves. Encourage children to eat, but do not force them.

- Remember to wash your hands and the baby's hands before preparing food and feeding. Be sure to clean all of the bowls, cups and utensils.

- Cover cooked food and eat it within 2 hours if you do not have a refrigerator.

- If you are giving your baby fresh animal's milk, boil it to kill bacteria.

- If you are giving powdered or evaporated milk, add clean water following the directions.

- If you are giving processed/pasteurized or UHT milk, no preparation is needed. If the milk has been open for more than an hour, though, it will need to be boiled.

- Come back to see me on _____.
FEEDING YOUR BABY FROM 6 TO 24 MONTHS

- Start by giving your child 1 or 2 teaspoons of food, twice per day. Slowly increase the amount and the types of food that you give.

- If your baby is 7-8 months old and receiving at least two milk feeds of any kind, give him/her:
  - 2-3 meals per day
  - 2/3 of a cup of food each time
  - food that is mashed, pureed or semi-solid.

- If your baby is 9-11 months old and receiving at least one milk feed of any kind give him/her:
  - 3-4 meals per day
  - 2/3 of a cup of food each time
  - food that is mashed or cut into small pieces
  - additional healthy snacks as desired.

- If your baby is 7-11 months old and not receiving milk of any kind, give him/her the same as above, but 5 times a day.

- If your baby is 12-24 months old give him/her:
  - 3-4 meals per day
  - 1 cup of food each time
  - foods from the family pot
  - milk products if available
  - additional healthy snacks as desired.
You may want to consider stopping breastfeeding early so that your baby is no longer exposed to HIV.

The best time to stop is different for every woman, and it depends on her baby’s health, her own health and her family situation. We can discuss the best time for you if you come back to see me before you stop breastfeeding.

Once you decide to stop breastfeeding, these steps can help you do it more easily:

- First, teach your baby to drink expressed breast milk from a cup.

- Once he/she can drink from a cup, give one cup-feed per day instead of a breastfeed.

- After a few days, replace another breastfeed with a cup-feed. A responsible family member can help cup-feed the baby.

- Stop putting your baby to the breast completely as soon as he/she is accustomed to frequent cup-feeding. Now it is best to heat-treat your breast milk.
HOW TO STOP BREASTFEEDING EARLY

- You can gradually replace the breast milk with formula or home-modified animal milk.

- If your baby needs to suck, give him/her a clean finger.

- To avoid breast engorgement, express a little milk and discard it. Wear a firm bra to prevent breast discomfort.

- If your breasts become engorged, put warm compresses on your breasts or take a warm shower and express enough milk to reduce discomfort. After expressing milk use cold compresses to reduce the inflammation.

- **Do not begin breastfeeding again once you have stopped.** If you do, the risk of passing HIV to your baby will continue.

- Begin using the family planning method of your choice as soon as you stop breastfeeding.
For further information, please contact:
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