

# Counseling Tool on Infant Feeding Options for PMTCT Sites

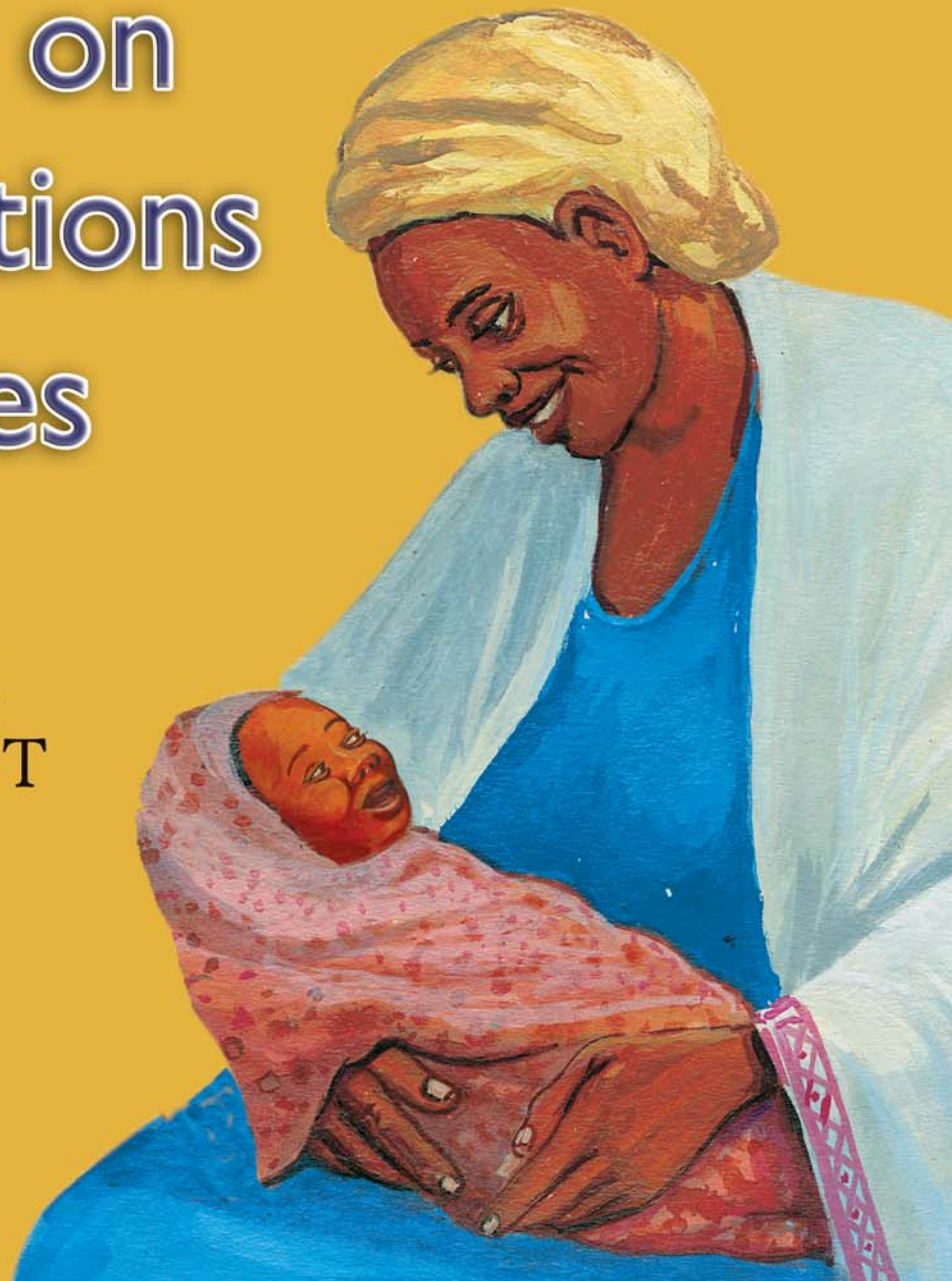
To be used by health personnel  
and counselors providing PMTCT  
services to communities



Federal Republic of Ethiopia  
Ministry of health  
Family Health Department  
Disease Control and Prevention Department



Developed by AED-LINKAGES Project



# **Infant Feeding Counseling Tool for PMTCT**

## **(Prevention of Mother to Child Transmission of HIV)**

**This counseling tool is to be used by health professionals working in PMTCT sites for the purpose of counseling and demonstrating of recommended infant feeding options to be considered by mothers and families and which if followed correctly, will help the baby to grow well and stay healthy.**

**The counseling tool has the following themes:**

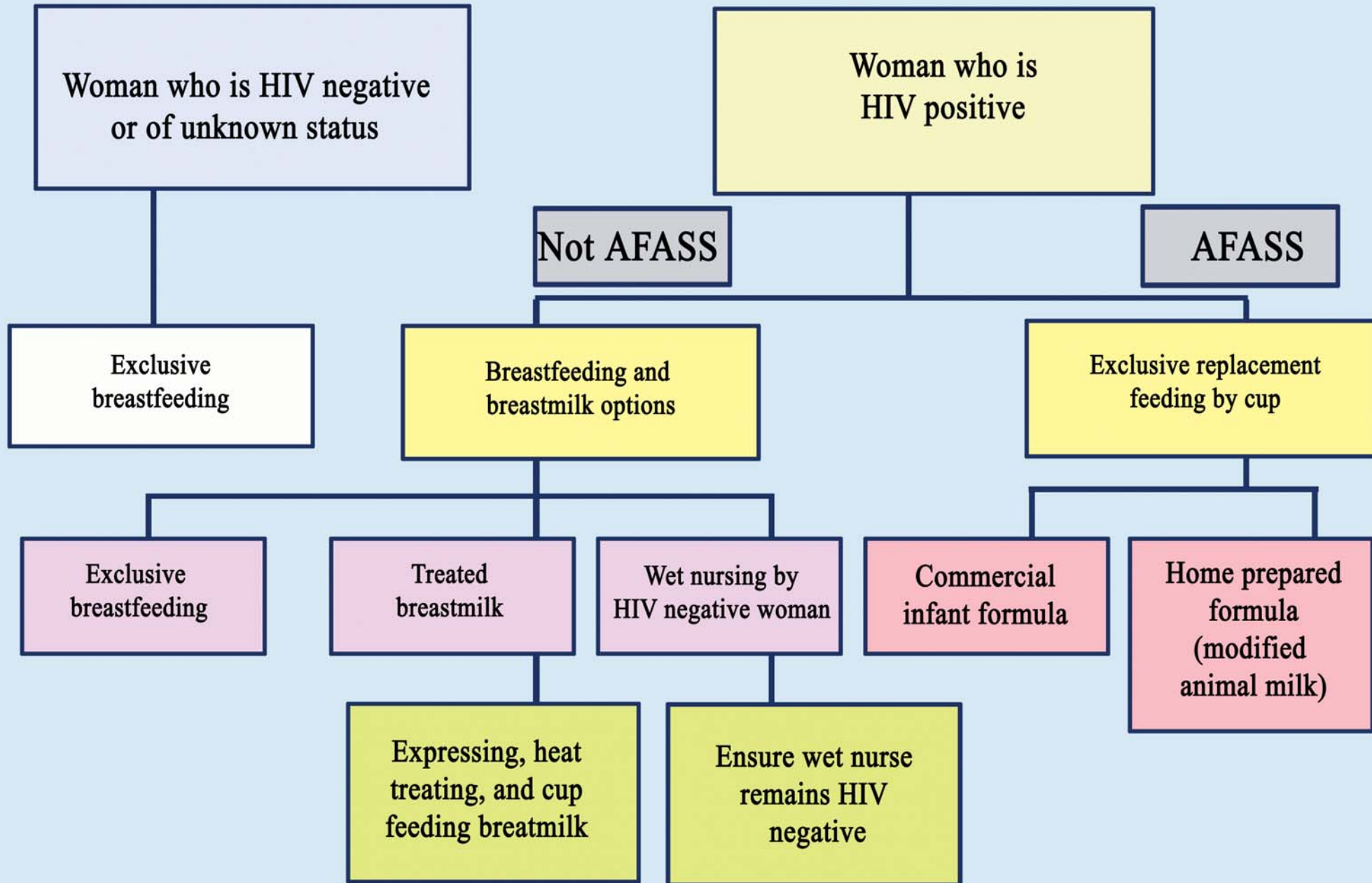
- 1. What are the different infant feeding options?**
- 2. Helping the mother and family decide how to feed their infant**
- 3. How to breastfeed safely**
- 4. How to express and heat breast milk, and feed it to the baby**
- 5. How to prepare cow's milk, and feed it to the baby**
- 6. How to prepare commercial formula, and feed it to the baby**
- 7. How to initiate complementary feeding at six months**

**On each card, appropriate practices are explained with text and pictures and to be shown to the mother and family as the feeding options are explained. Additional information for the counselor or health worker about each option is provided on the back of each card.**

**It is very important to explain that once the mother and family select a feeding option for their baby, they must stay with it. Explain that if they decide to exclusively breastfeed they must do only that. If they select another feeding option they must not breastfeed. Mixed feeding is VERY dangerous for a young infant and increases the likelihood that the baby will contract HIV.**



# Infant Feeding Options



## Infant Feeding Options

What types of infant feeding options are there for feeding infants in the context of PMTCT?

### 1. For the HIV Negative mother or mother who does not know her status:

- ❖ **Exclusive breastfeeding for 6 months:** An infant breast feeds only and is given no other liquids or foods, not even water, for the first six months of life.

### 2. For HIV Positive mother:

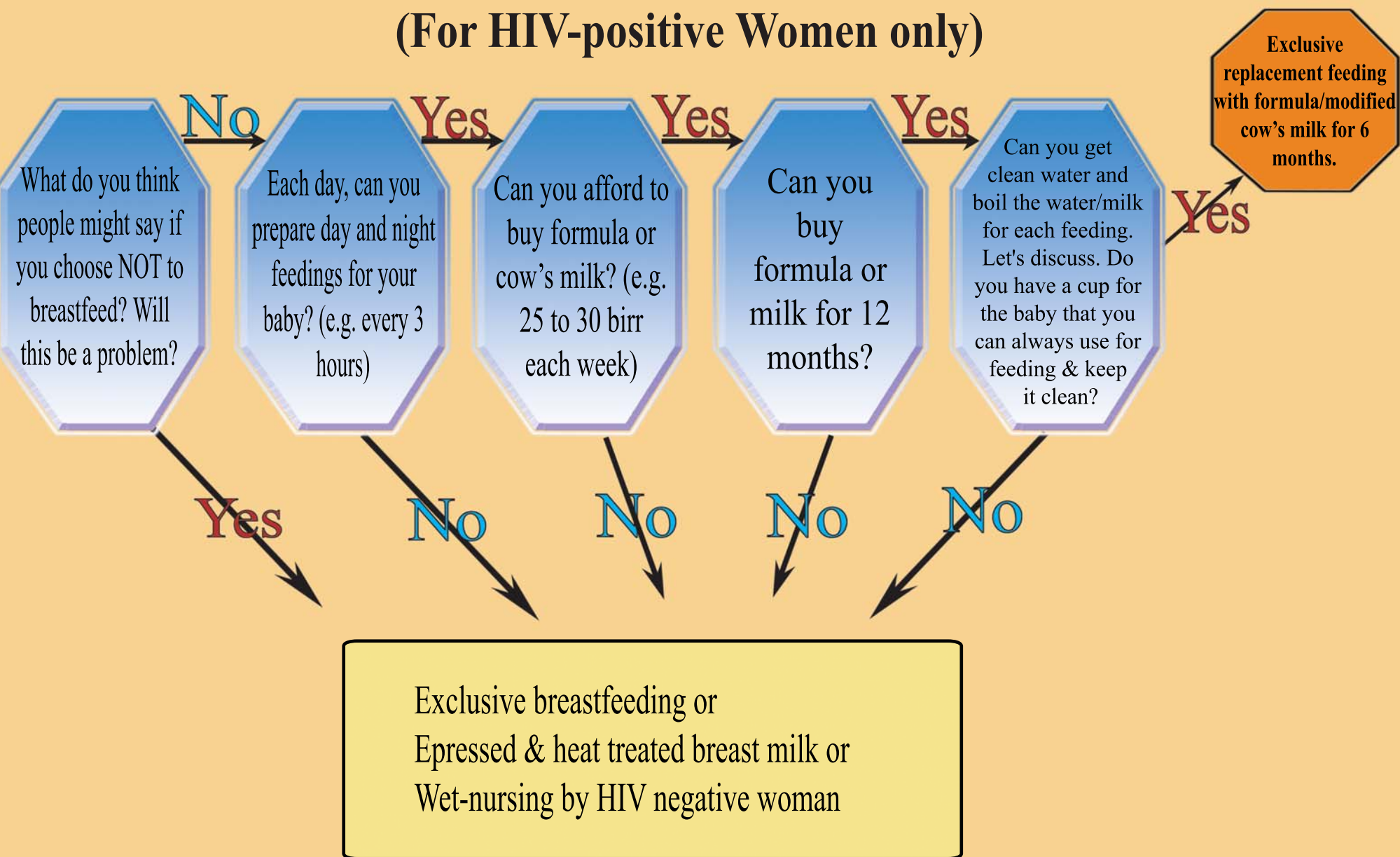
- ❖ **Exclusive breastfeeding for about six months:** An infant breast feeds only and is given no other liquids or foods, not even water.
- ❖ **Wet Nursing:** Another mother who is HIV negative exclusively breastfeeds the infant for 6 months
- ❖ **Expressing and heat-treating breast milk:** Breast milk is expressed by hand into a cup, and is made safe for the infant by heating it to kill HIV.
- ❖ **Home modified animal milk:** Fresh or processed animal milk (cow or goat) is modified by the addition of clean water and sugar in the right proportions.
- ❖ **Commercial infant formula:** Milk that is especially formulated for infants, usually available in powdered form is mixed with clean water

### Does every HIV positive mother transmit HIV to her baby?

- ❖ Only a few HIV positive women will pass HIV to her baby during pregnancy, delivery or during breastfeeding.
- ❖ Out of every ten HIV positive pregnant women, about 6 to 7 will not transmit HIV. Certain services available at this PMTCT site can help reduce the possibility of transmitting the virus to the baby.
- ❖ It is very important that all mothers know if they are HIV positive. If a mother is HIV positive, there are actions she can take that will decrease the chance that HIV will be passed on to baby.



# How to Evaluate AFASS? And How to Assess the Woman's Situation (For HIV-positive Women only)



### How to assess AFASS for HIV positive woman to determine whether exclusive replacement feeding is appropriate?

#### **A** Will Replacement Feeding be **ACCEPTABLE**?

- ⚙ The mother has no reason to believe that there will be a problem if she doesn't breastfeed. She has adequate support from her family and community

*e.g: Will a mother who doesn't breastfeed be accepted in the community?*

#### **F** Will Replacement Feeding be **FEASIBLE**?

- ⚙ The mother has adequate time, knowledge, skills, to prepare and feed the infant

*e.g: Can a mother prepare fresh home replacement feeding every three hours, day and night?*

#### **A** Will Replacement Feeding be **AFFORDABLE**?

- ⚙ The mother can pay for the purchase of all ingredients, equipments, fuel, and clean water

*e.g: Can the mother afford to pay 160 Birr the first month to feed the baby (or 240 to 320 Birr in later months)*

#### **S** Will Replacement Feeding be **SUSTAINABLE**?

- ⚙ Replacement Feeding must be practiced exclusively during six months, day & night
- ⚙ Supply of all ingredients is continuous, uninterrupted and dependable for as long as the infant needs it

*e.g: Can the mother/family buy formula (or milk) and equipment and until the baby reaches one year of age ?*

*e.g: Is the mother certain that, even under family pressure, that she will NEVER breast feed.*

#### **S** Will Replacement Feeding be **SAFE**?

- ⚙ Replacement feeding is prepared and stored in hygienic conditions

*e.g: Does the mother have easy access to clean water?*

*e.g: Can the mother wash her hands and use clean utensils each time for preparing and feeding the child?*

# How to exclusively breastfeed safely (1)



Breastfeed within one hour of delivery



If you decide to exclusively breastfeed, stay with that method. Giving other foods, water or liquids to your baby when you are breastfeeding is dangerous if you are HIV positive.

Exclusively breastfeed for the first 6 months. The infant takes only breastmilk and no other liquids or solids, not even water, to protect her/him from illnesses like diarrhea and pneumonia.



Breastfeed the baby on demand, day and night, for as long the baby wants; it helps to produce enough milk

Sit comfortably to breastfeed  
Ensure correct positioning and attachment to avoid breast problems





## **Additional information for health workers and counselors on the advantages and disadvantages of exclusive breastfeeding**

**Why is Exclusive Breastfeeding always recommended for babies of mothers who are HIV negative ?**

*Advantages:*

- ❖ **Breast milk is the perfect food for babies;**
- ❖ **Breast milk saves lives since it protects babies from many diseases, especially diarrhea and pneumonia;**
- ❖ **Breast milk is free, always available and does not need any special preparation;**
- ❖ **Breastfeeding helps a mother recover from childbirth and protects her from getting pregnant again.**

*Disadvantages:*

- ❖ **Continuing exclusive breastfeeding for 6 months may be difficult if the mother has to be away from the baby for long periods of time**

**Why is Exclusive Breastfeeding recommended for some babies of mothers who are HIV positive?**

*Advantages:*

- ❖ **Exclusive breastfeeding for the first 6 months of life is the safer option for HIV positive mothers who cannot afford or safely prepare replacement feeding;**
- ❖ **Exclusive breastfeeding protects the baby against many common illnesses including diarrhea and pneumonia;**
- ❖ **The risk of passing HIV to the baby through breast milk is lower if breastfeeding is truly exclusive;**

*Disadvantages:*

- ❖ **The baby will be exposed to HIV in the breast milk as long the mother is breastfeeding;**
- ❖ **Mixed feeding (breastfeeding with other foods or liquids) particularly when the baby is less than 6 months old is dangerous and increases the risk for the baby to get the virus.**



## How to exclusively breastfeed safely (2)

If you decide to exclusively breastfeed, stay with that method. Giving other foods, water or liquids to your baby when you are breastfeeding is dangerous for your baby if you are HIV positive.

Give the baby enough time to empty one breast before switching to the other breast  
Allow the baby to come off the breast on its own



### Be careful!

Make sure that there are no open sores in your baby's mouth.

Do not make incisions such as avulectomy or make any cuts in the baby's mouth

In this case, seek immediate help from your health center.



If you are HIV positive and if you have a sore breast, immediately stop feeding your baby from that breast and seek advice from the health center.





# Card #4 Additional information for health workers and counselors

## Actions that decrease the risk of mother to child transmission of HIV through breastfeeding

### **Practice safer sex to prevent infection or re-infection**

New HIV infections result in higher transmission rates during breastfeeding.

Partners need to be faithful with one another and to use condoms during sexual intercourse to protect against HIV infection.

### **Practice exclusively breastfeed during first six months**

-If HIV positive mother gives other food, water and liquids this can result in higher HIV transmission rates to the baby, especially during the early months of life

### **Improve the mother's diet & nutrition**

**Each day she has to:**

- Eat 1 to 2 additional meals
- Take iron-folate tablets for 6 months
- Eat a varied diet and different foods
- Take multi-vitamins

**Mothers who are very sick with HIV or have AIDS should stop breastfeeding**

### **When the mother is HIV positive, a Wet Nurse can breastfeed the baby:**

- Have another mother who is HIV negative exclusively breastfeed the baby
- Make sure the wet-nurse is HIV negative and counsel her on how to stay negative (she must practice safer sex),

**An HIV positive mother can consider cessation of breastfeeding if and when AFASS criteria can be satisfied.**

- HIV positive mothers can consider stopping breastfeeding completely, usually around 6 months of age.



# How to express and heat-treat breast milk and feed it your baby ?



1. Prepare and wash utensils and hands.



2. Massage or pat your breasts thinking of the baby in order to initiate milk flow



3. Express your breast milk in a clean cup.



4. Bring your breast milk to boiling point.  
Pour in a cup and let it cool in a large container filled with cool water



5. Feed the baby with a cup

6. Throw out left over milk and wash utensils

## **Additional information for health workers and counselors on expressing and treating breast milk**

### **Advantages**

- ❖ Breast milk is the best food for the baby and it is always available;
- ❖ The virus is killed when the milk is brought to a boil
- ❖ Other family members can help to feed the baby

### **Disadvantages**

- ❖ It takes time, and is difficult to do over a period of 6 months
- ❖ Heat-treated milk has to be used within one hour and any unused portion thrown out
- ❖ Requires clean water and clean utensils as well as fuel

### **1. Heating the expressed breast milk:**

- Bring the expressed milk to boiling point in a small heat-proof jar or can. Once it starts to boil, remove it from the heat
- Place the jar in a container of cool water or let it stand alone to cool, until the milk reaches room temperature
- Cover the container immediately.

### **2. Storing the expressed breast milk:**

- Unheated breast milk can be stored up to 8 hours at room temperature or up to 24 hours in a refrigerator;
- Once breast milk has been heated it has to be given to the baby within one hour. Any un used breast milk should be thrown away

A mother who chooses to express and heat breast milk also needs to be counseled to practice safer sex and encouraged to adopt a family planning method as soon as possible after birth.

### **Steps for expressing breast milk**

1. Wash Hands
2. Prepare a clean container
3. Gently massage breasts in a circular motion
4. Position thumb on the upper edge of the areola and the first two fingers on the under-side of the breast behind the areola.
5. Push straight in to the chest wall
6. Avoid spreading the fingers apart
7. Roll thumb and fingers forward as if making thumb and fingerprints
8. Repeat rhythmically: position, push, roll; position, push, roll
9. Rotate the thumb and finger positions to remove milk from other parts of the breast.
10. Cover the container immediately

Mothers should avoid squeezing the breast or pulling out the nipple and breast. They should express each breast until the flow of milk slows

**Never breastfeed your baby if you have chosen this feeding option**

# How to safely prepare cow's milk to feed your baby ?

1. Get proper utensils.  
Wash utensils & hands.



2. Measure the water.  
Measure the milk.  
Add sugar.



3. Boil for 10 minutes on low heat/flames.  
Pour in a cup and let it cool in a large container filled with cool water



4. Feed prepared milk to the baby with a cup.
5. Give the baby multi vitamin with a spoon once a day.
6. Wash utensils.



**Do not feed the leftover milk to a baby at the later time: an older child or the mother can drink the milk.**



## Additional information for health workers and counselors on using modified cow's milk

### Advantages:

- ❖ There is no risk of passing HIV to the baby through cow's milk;
- ❖ Modified cow's milk may be cheaper than infant formula. It is often easily available, especially if the family has a cow;
- ❖ Other family members can help feed the baby.

### Disadvantages:

- ❖ Doesn't have special substances or agents that protect the baby from infection, the baby is more likely to get life-threatening infections and malnutrition;
- ❖ Doesn't contain every substance that the baby needs (vitamins, minerals, fatty acids);
- ❖ It takes time to prepare and must be prepared fresh each time the baby is fed;
- ❖ It is costly: about 15 liters of milk per month for the first 6 months plus cost of sugar and multivitamins;
- ❖ Has to be exclusive replacement feeding with no breastfeeding (More HIV transmission with mixed feeding);
- ❖ Need reliable supply of clean water for diluting cow's milk plus fuel and soap;

### Guidelines for the preparation of modified cow's milk

1. Prepare modified cow's milk fresh for each feeding
2. Wash hands and clean all utensils, containers, and cups with soap and water
3. Measure the amount of water and milk needed
4. Measure the exact amount of sugar and mix it with the liquid
5. Boil for 10 minutes on low heat
6. Feed the baby by cup. The baby will have to learn to drink from a cup.
7. Give the baby multivitamins syrup with a spoon once a day

Baby's Age (months)	Milk Needed (ml)	Water Needed (ml)	Sugar Needed
Birth to 1 month	40ml	20ml	1 tsp
1 to 2 months	60ml	30ml	1 & 1/2 tsp
2 to 3 months	80ml	40ml	2 tsp
5 to 6 months	100ml	50ml	2 & 1/2 tsp

### How much milk is needed?

As your baby grows older, it would need more of the modified cow's milk. The table shows how many times a day your baby should be fed, how much your baby will need for each feed, and the total amount of cow's milk needed each day.

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

The instructions for modified cow's milk need to be followed exactly. Adding too much or too little water or sugar can be dangerous for you baby.

**Never breastfeed the baby if you have chosen this feeding option**

# **How to prepare commercial infant formula to feed your baby ?**



1. Get proper utensils.

2. Wash utensils & hands.  
Boil the water for 10 minutes.  
Pour in a cup and let it cool in a large container filled with cold water.



3. Measure water.  
Follow instructions to measure amount of powder.  
Mix correct amount of powder with water and stir well.



4. Feed the baby with a cup.

5. Wash utensils



**Do not feed the leftover milk to the baby at a later time: an older child or the mother can drink it.**

## Additional information for health workers and counselors on the preparation of commercial infant formula

### Advantages of using commercial infant formula:

- ❖ There is no risk of passing HIV to the baby through infant formula;
- ❖ Many of the nutrients that a baby needs have already been added to the formula
- ❖ Other family members can help feed the baby

### Disadvantages of commercial infant formula:

- ❖ Lacks special substances or agents that protect the baby from infection; formula fed babies are more likely to get diarrhea, chest infections and malnutrition;
- ❖ Takes time to prepare and must be prepared fresh each time that the baby is fed, both day and night
- ❖ Formula is expensive as well as fuel and clean water
- ❖ Requires a reliable supply of clean water (boiled for 10 minutes);
- ❖ Has to be exclusive replacement feeding with no breastfeeding

If you run out of infant formula, don't add more water to make it last longer as this is very dangerous and can make your baby sick. Until you get more formula, feed your baby modified cow's milk until you can buy more infant formula.

### Guidelines for the Preparation of Commercial Infant Formula

1. Prepare infant formula for each feeding
2. Clean hands and all utensils, containers, and cups with soap and water
3. Read or have someone read instructions on the formula tin
4. Boil water for 10 minutes and let it cool.  
Measure the amount of milk powder needed for the one feed and mix it with the correct amount of boiled cooled water.
5. Prepare fresh commercial formula before each feed  
Feed the baby by cup.

### Amount of formula you will need to buy each month

Age in Months	500g tin	450g tin	400g tin
Birth to 1 month	4 tins	5 tins	5 tins
1 to 2 months	6 tins	6 tins	8 tins
2 to 3 months	7 tins	8 tins	9 tins
3 to 4 months	7 tins	8 tins	9 tins
4 to 5 months	8 tins	8 tins	10 tins
5 to 6 months	8 tins	9 tins	10 tins



# Introduce complementary feeding at six months?

At 6 months, begin to feed your baby foods frequently:

- 2-3 times a day for infants 6 to 8 months old
- 3-4 times a day for young children 9 to 24 months old, including 1 to 2 nutritious snacks a day.

Interact with infant and young child during feeding to help her/him eat more food.



Give a variety of foods, accustom child to family foods.

- at 6 months of age: feed infant pureed, mashed, and semi-solid foods
- at 8 months of age: feed foods that infant can eat alone, such as cut-up fruit and vegetables
- by 12 months of age: feed the baby family foods.

Feed liquids (including milks) from a small cup or bowl. Bottles should **NEVER** be used as they are difficult to keep clean and can cause life-threatening diarrhea.

- Wash your hands and your child's hands with soap and water before eating and use clean utensils and dishes to avoid introducing dirt and germs that might cause diarrhea and other infections.
- Feed food to infant immediately after it has been prepared.

### **Mothers who are HIV negative or with unknown status**

Continue breastfeeding the infant and young child until she/he 2 years old and beyond to protect her/him from illnesses.

### **For HIV positive mothers only: Information on early cessation of breastfeeding**

When and if AFASS conditions can be met, HIV positive mothers can consider stopping breastfeeding completely, usually about 6 months of age

When an infant is 6 months old it can take unmodified cow's milk or full cream commercial powdered milk

### **Feeding during and after illnesses:**

- ❖ If mother is breastfeeding, increases the frequency of breastfeeding during and after illness
- ❖ During illness, offer additional food to your child to regain health and strength
- ❖ After illness, give her/him an additional meal to help child to quickly recover and catch-up on growth

### **For all infants and young children:**

- ❖ Advise mother to return with the child for its immunization
- ❖ Ensure that infants and children receive their vitamin A supplementation when needed as well as iron folic acid tablets