

# Infant & Young Child Feeding Quick Reference Book (0- 24 months)



The 1st two years are critical for children's physical & brain development

How to process  
enriched flour for  
complementary  
foods



3 portions grain



+ 1 portion  
legumes



# ACKNOWLEDGMENTS

*This Infant and Young Child Feeding Quick Reference Book* is an aid to health care providers, frontline workers, and others involved in promotion and support of improved feeding practices. These practices can save lives, reduce illness, and prevent stunting. The Federal Ministry of Health acknowledges the technical and financial contribution of Alive & Thrive, with support from the Bill & Melinda Gates Foundation, for the development of this handy reference book. The content of the reference book draws upon materials developed by FHI 360/LINKAGES, UNICEF, and WHO as well as formative research conducted in Ethiopia. The reference booklet, an in-service training manual on complementary feeding, and counseling materials support efforts to prevent malnutrition in Ethiopia and promote growth and mental development. During field tests of the reference book, health extension workers said that they found it relevant and user friendly with attractive visuals and clear presentation of the information. The Federal Ministry of Health expresses gratitude to all those who participated in the development and testing of the reference book and to those who use it to ensure that families receive accurate and timely information on how to feed their children.



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# Introduction

## Why are feeding practices in the first two years of life so important?

This *Infant and Young Child Feeding Quick Reference Book* focuses on the first two years of life. This period is critical for the following reasons.

- Rates of malnutrition usually peak during the first 24 months of a child's life with consequences that persist throughout life.
- This period is important to ensure optimal child growth, health, and development.
- Good diet in the first two years of life lays the foundation for future health, growth, and educational achievement.
- Children at this time are especially vulnerable to irreparable growth retardation, damaged mental development, micronutrient deficiencies, and common childhood illnesses.
- Attention to feeding practices is important because inadequate knowledge about appropriate foods and feeding practices is more often a cause of malnutrition than lack of food.
- Poor health and hygienic conditions also contribute to malnutrition and need to be addressed.

This *Quick Reference Book* provides information that can help health workers counsel families so that they can adopt good feeding practices. The book is divided into four sections. The first three sections give succinct answers to questions mothers and caregivers often have about feeding their infants and young children. The first section focuses on exclusive breastfeeding in the first six months and the second on complementary feeding from 6-24 months along with practical solutions to address feeding challenges. The third section discusses feeding in special situations: low birth weight babies, non-breastfed babies, and babies of HIV-positive mothers. The fourth section answers questions on how health extension workers and others can promote and support good feeding practices and counsel mothers. More detailed information on topics covered in the *Quick Reference Book* can be found in the publications cited in the resource list.



# Section 1

## Feeding a child before 6 months: exclusive breastfeeding

### Why is breastfeeding important?

Breastmilk is the best food for the infant since it contains all the required nutrients for the first six months of life. Breastmilk:

- Promotes child growth and development.
- Saves money.
- Is always clean and ready for feeding.

Breastfeeding:

- Increases mother-child bonding.
- Reduces the mother's workload (no time is involved in boiling water, gathering fuel, and preparing milk).

### When should I start breastfeeding?

- Initiate breastfeeding within one hour of birth even before expulsion of the placenta.
- Make breastmilk a baby's first taste. There should be no pre-lacteal feeds such as fenugreek water, water with sugar, thin gruel, other liquids, or ritual foods.

### Advantages of early initiation of breastfeeding

- Facilitates expulsion of the placenta. When the baby is put to the breast immediately after birth, the baby's suckling stimulates uterine contractions.
- Ensures sufficient breastmilk production.
- Minimizes maternal bleeding after delivery.
- Prevents breast engorgement with immediate and frequent suckling.



## Why is feeding colostrum to newborn babies important?

Colostrum is the yellowish milk that is secreted in the first days after delivery. It should not be discarded because it is essential for the newborn baby's health.

### Advantages of colostrum

- Contains disease-protecting substances (antibodies) that defend against disease-causing organisms.
- Serves as the baby's first immunization.
- Helps the baby's intestine to mature.
- Prevents allergies.
- Reduces the severity of infections like measles and diarrhea.
- Stimulates passage of the infant's first stool (meconium) and cleans the stomach.

## Why is exclusive breastfeeding important during the first 6 months?

Exclusive breastfeeding means giving a baby only breastmilk, and no other liquids or solids, not even water. Medications prescribed by health professionals are permitted.

### Advantages of exclusive breastfeeding

- Breastmilk contains disease-protecting substances (antibodies) that protect against infection and are not found in other milks.
- Breastmilk completely satisfies an infant's nutritional and water needs for the first six months. Infants do not need water or other liquids such as sugar water, fenugreek water, thin gruel, etc., to maintain good hydration, even in hot climates.
- Breastmilk can be easily digested.
- Breastfeeding helps delay a new pregnancy and serves as a contraceptive method during the first 6 months, provided that breastfeeding is exclusive and the mother's menses has not returned.

### When do I stop feeding from one breast and switch to the other?

- The baby should get both the watery portion (fore milk) to satisfy the baby's thirst and the thicker milk (hind milk) to satisfy the baby's hunger before switching to the other breast.
- The nutritious hind milk, which is released after the fore milk, will help the baby grow to be strong and healthy.

### What will happen if I give the child water, other liquids, or foods before six months?

- Increases the risk of infection including diarrhea.
- Reduces breastmilk intake because there is less suckling.

### How often should I breastfeed?

- Breastfeed your baby on demand, at least 8 times day and night, to produce enough milk and provide your baby with enough food for good health and growth.
- An infant's stomach is small and needs to be refilled often. Remember, crying is a late sign of hunger.
- Breastmilk is perfectly adapted to the baby's small stomach size and is easily digested.
- Frequent feedings help maintain the mother's milk supply, maximize the contraceptive effect, and provide immune factors at each feeding.
- Breastfeeding should be continued even when the mother is sick.



### What is the proper positioning and attachment for successful breastfeeding?

Proper attachment is important to enable the infant to suckle effectively, remove milk efficiently, and stimulate an adequate milk supply. To ensure good attachment, the baby needs to be well positioned to feed, and the mother should be comfortable.

#### Signs of proper positioning

- Baby's head and body are straight, not bent or twisted.
- Baby should be able to look up at the mother's face and should not be placed flat on her chest.
- Baby is held close to the mother.
- Baby's stomach is against the mother's stomach.
- Baby's whole body is supported, not just the head and shoulders.
- Mother holds her breast with her fingers to form a shape similar to the blade of a sickle or the letter C with the thumb above the areola and the other fingers below.

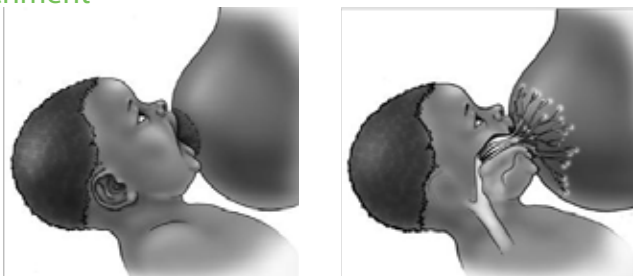
#### Proper attachment

- More of the dark area around nipple (areola) is visible above the baby's mouth than below.
- Baby's mouth is wide open and the lower lip curled outwards.

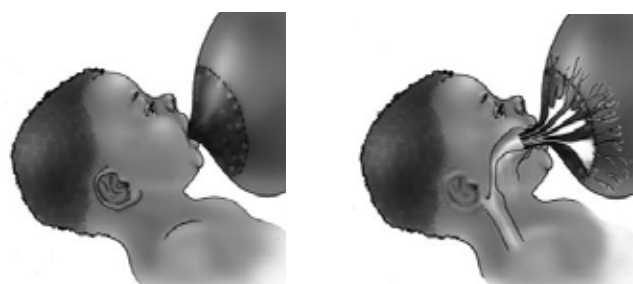


- Baby's chin touches the breast.
- Baby takes slow, deep sucks, sometimes pausing.
- Suckling is comfortable and pain free.

### Good Attachment



### Poor Attachment



WHO/UNICEF. Infant and Young child Feeding Counselling: An Integrated Course. 2006.

## What are common breastfeeding difficulties and how do I manage them?

Condition	Symptoms	Prevention	Treatment
Breast engorgement	The breasts are swollen and the skin looks shiny. The woman may have a fever that usually subsides in 24 hours.	<ul style="list-style-type: none"> <li>▪ Good attachment</li> <li>▪ Baby skin-to-skin with mother</li> <li>▪ Breastfeeding initiated within an hour of birth</li> <li>▪ Frequent, on-demand breastfeeding</li> </ul>	<ul style="list-style-type: none"> <li>▪ Apply warm compresses to the breast, which helps the milk flow</li> <li>▪ Use cold compresses after feeding or expressing, which helps reduce the swelling</li> <li>▪ Improve positioning and attachment</li> </ul>
Sore or cracked nipple	Mother has severe nipple pain when the baby is suckling. A visible crack may appear across the tip of the nipple or around the base.	<ul style="list-style-type: none"> <li>▪ Check for good attachment</li> <li>▪ Do not use feeding bottles</li> <li>▪ Do not use soap on nipple to prevent drying of the skin</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin to breastfeed on the side that hurts less</li> <li>▪ Make sure that the baby is properly positioned and attached. Often, as soon as the baby is well attached, the pain decreases</li> <li>▪ Do not use soap on nipple to prevent drying of the skin</li> <li>▪ Apply drops of breastmilk to nipples and allow drying</li> </ul>



Condition	Symptoms	Prevention	Treatment
Perceived insufficiency	The most common difficulty that mothers describe is a feeling that they do not have enough milk.	<ul style="list-style-type: none"> <li>Put baby skin-to-skin with mother after birth</li> <li>Start breastfeeding within an hour of birth</li> <li>Ensure good attachment</li> <li>Encourage frequent, on-demand feeding</li> <li>Let baby finish first breast before switching to the other breast</li> <li>Breastfeed exclusively day and night</li> </ul>	<ul style="list-style-type: none"> <li>Ask a health provider to observe a breastfeed and check the baby's attachment</li> <li>Increase frequency of breastfeeding</li> <li>Wake the baby up if baby sleeps throughout the night or longer than 3 hours during the day</li> <li>Make sure that the baby is attached and positioned properly</li> <li>Reassure mother that she is able to produce sufficient milk</li> </ul>

## How do I feed a sick baby?

### During illness:

- Increase the frequency of breastfeeding so the baby will recover faster.
- Breastfeed more during illness to help the baby fight the sickness and not lose weight.
- Breastfeed to comfort the baby.

### After illness:

- Increase the frequency of breastfeeding so the baby will regain health and weight lost during the illness.

## How do I express and store breastmilk?

There are situations when expressing breastmilk makes it possible for a mother to continue breastfeeding. Breastmilk can be stored for about eight hours at room temperature or up to 24 hours in a refrigerator.

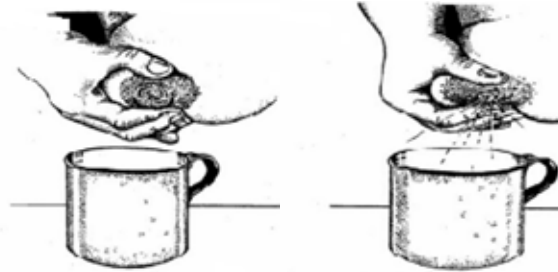
Expressing milk is useful for:

- Feeding a baby when a mother goes out or goes to work.
- Feeding a low birth weight baby who cannot breastfeed.
- Feeding a sick baby who cannot suckle well.
- Managing breast health conditions such as engorgement.

### How to express breastmilk

1. Wash hands thoroughly.
2. Sit or stand comfortably, and hold the container near the breast.
3. Put thumb on the breast, above the nipple and areola, and the first finger on the breast below the nipple and areola.

4. Support the breast with other fingers.
5. Press the thumb and first finger slightly inwards toward the chest wall.
6. Make sure that milk is expressed from all segments of the breast by changing the position of the thumb and first finger.
7. Express milk from one breast until the flow slows and then express milk from the other breast.
8. Repeat rhythmically: position, push, press; position, push, press.
9. Avoid rubbing or sliding the finger along the skin.
10. Avoid squeezing the nipple itself.  
Pressing or pulling the nipple will not express the milk.



#### How to prepare/clean a container for expressed breastmilk storage

- Choose a cup, glass, or jug with a wide mouth.
- Wash the cup in soap and water.
- Pour boiling water into the cup, and leave it for a few minutes.
- When ready to express milk, pour the water out of the cup.
- Cover the container immediately after expressing the milk into the container.

#### Why are cups better than bottles for feeding expressed breastmilk?

Feed the baby using a clean cup and never a bottle. Bottles are difficult to clean and may cause your baby to get diarrhea.



#### The advantages of cup feeding



- Easy to clean with soap and water, if boiling is not possible.
- Less likely than bottles to be carried around for a long time, giving bacteria time to breed.
- Does not interfere with suckling at the breast.
- Enables mothers to control intake.

## What more do I need to know?

- Mothers who are breastfeeding need two additional meals a day.
- Family members, especially the husband, need to support and encourage the mother to exclusively breastfeed.
- Mothers need to expose their children to sunlight for 20 to 30 minutes per day.
- Mothers should take vitamin A supplementation within 45 days of delivery for the baby's health and strength.
- Family members, especially women and children, need to sleep under an insecticide- treated net to prevent getting malaria.
- Mothers should make sure that their babies have started their immunizations.
- Mothers should bring their babies to a health facility whenever they are sick.
- Mothers should visit a health facility for family planning services.



# Section 2

## How to feed a child after 6 months: complementary feeding

### What is complementary feeding?

- Complementary feeding is giving suitable foods to babies in addition to breastmilk.
- These foods should complement, not replace, breastmilk.

### When should I start complementary feeding?

- Complementary foods should be introduced at 6 months.
- After 6 months breastmilk cannot meet all of the baby's energy and micronutrient requirements.
- Complementary feeding is needed to fill the gap between total nutrient needs of the growing baby and the nutrients provided by breastmilk.
- At 6 months a baby's digestive system is mature enough to digest different foods, and finely minced foods will not cause choking.



### What happens if complementary foods are introduced early or late?

#### **Early introduction of complementary foods before 6 months:**

- Displaces breastmilk since the baby will breastfeed less.
- Increases risk of diarrhea since complementary foods may not be contaminated.

#### **Late introduction of complementary foods after 6 months is dangerous because:**

- Child does not get the extra food needed to fill the energy and nutrient gaps.
- The risk of malnutrition and micronutrient deficiencies increases and child growth stops or slows.

## What are the advantages of continued breast-feeding for two years and beyond?

- Breastmilk continues to be an important source of nutrients for the first two years of life.
- From 6 up to 12 months, breastmilk supplies about half ( $\frac{1}{2}$ ) of the child's energy needs.
- From 12 up to 24 months, breastmilk supplies about one third ( $\frac{1}{3}$ ) of the child's energy needs.
- Continued breastfeeding protects children from illness and malnutrition, even when they have started eating complementary foods.
- Breastfeeding continues to provide closeness, comfort, and contact that help in child development.

## How can I enrich complementary foods?

Children need enriched foods because their stomachs are small, and they cannot eat large amounts of foods at each meal. Porridge made from a single staple cannot meet babies' needs fully. Simple household processing methods can make porridges more nutrient and energy rich, and easy for the child to eat.

### **Cereal or root based complementary foods can be enriched by:**

- Adding a small amount of germinated flour.
- Replacing water used for preparing porridges with milk.
- Adding butter/oil which will also make the thick porridge easier to eat.
- Mixing legumes such as pea, chick pea, or broad bean flour with the staple flour.
- Adding finely chopped meat, fish, or eggs.
- Adding finely chopped kale, carrots, or other vegetables.
- Adding mashed avocado, banana, papaya, or other fruits.
- Using iodized salt when preparing complementary foods.



## Why are fruits and vegetables a good way to enrich complementary foods?

- Fruits and vegetables protect against illness and help babies stay healthy and grow strong.
- When available, good foods to give children as often as possible include orange and colored fruits and vegetables and dark green leafy vegetables.
- A home garden in a small plot of land near the home is an easy way to increase the availability of vegetables.
- Agriculture development agents are good sources of information on how to grow vegetable and fruits



## How do I enrich my child's diet with animal-source foods?

- Animal-source foods are valuable for the baby's physical and brain development. Priority should be given to feeding them to children as often as possible.
- Animal foods can be mashed or chopped into small pieces to make them easy for the child to eat.
- When available, adding small amounts of finely ground meat, fish, or chicken to complementary foods adds nutrients and is good for the child.
- Organ meats such as liver, heart, and kidney are often less expensive and can be used to enrich complementary foods.



## How do I enrich the flour used to make porridge for my child?

**Step 1:** Prepare 3 portions of cereal (corn, barley, teff, sorghum, or any available cereal in the locality) and 1 portion of legumes (peas, chickpeas, beans, or lentils).

**Step 2:** Clean cereals and legumes and roast them separately until light brown; split roasted legumes and remove the cover.

**Step 3:** Mix the 3 portions of cereal and 1 portion of legume.

**Step 4:** Mill in a local mill.



**Step 5:** Sift and store enriched flour in a covered container in a cool dry place.

**Step 6:** Use whenever preparing the porridge.

**Step 7:** Add a teaspoon of germinated flour when preparing the porridge to make it energy dense (procedure of preparing germinated grain flour is described in the next section).

## How do I prepare germinated/sprouted grain flour to enrich complementary foods?

### Benefits of adding germinated or sprouted flour to child's porridge

- Flour made from germinated cereal grains does not thicken much during cooking.
- Less water is needed when preparing complementary foods which will improve the nutrient content.
- Adding a pinch of germinated flour (bikil flour) to cooked thick porridge will make the porridge softer and easier for the child to eat.

### Steps for preparation of germinated flour

**Step 1:** Clean any available cereal (maize, sorghum, etc.).

**Step 2:** Soak for 1-2 days.

**Step 3:** Drain.

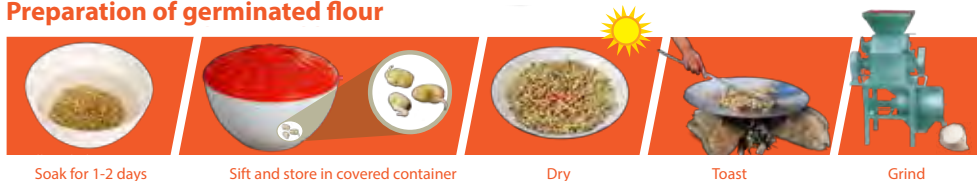
**Step 4:** Store in a covered container.

**Step 5:** Spread in the sun for about 15-20 minutes to dry.

**Step 6:** Roast in a pan until light brown.

**Step 7:** Mill into flour at a local mill, store in a separate container, and add a small amount (about 1 teaspoon) whenever preparing the baby's porridge.

### Preparation of germinated flour



Soak for 1-2 days

Sift and store in covered container

Dry

Toast

Grind

## How do I prepare meat powder to enrich complementary foods?

Adding a very small amount / pinch of dried meat powder will make the baby stay healthy and develop physically and mentally.



**Preparation of meat powder** to add to the baby's porridge

**Step 1:** Prepare at least ½ kg of red meat (no fat, to avoid rancidity).

**Step 2:** Cut meat into thin strips (kuanta).

**Step 4:** Add a small amount of salt (1 teaspoon).

**Step 5:** Dry meat by hanging on a string in the house.  
(Meat can also be dried out in the sun on a sieve or tray but should be covered to avoid flies.)

**Step 6:** Pound the dried meat well and sieve out items not powdered.

**Step 7:** Store powdered meat in a covered container in a cool dark place.

**Step 8:** Whenever preparing the baby's porridge, add just 1 teaspoon of meat powder.



### Preparation of meat powder



**Note:** Animal-source foods such as meat are more expensive than other foods, but considering the benefits and long-term impact on children's development, it is worth finding alternatives, such as meat powder, that can be added to the child's porridge.

## What foods are good for my child?

Feeding children a variety of foods is important for healthy growth and development.

- Complementary food should come from different food groups so that it contains all the required nutrients.
- In addition to complementary foods, children need snacks (mekses) to fill energy gaps.
- Snacks should be easy to prepare and provide both energy and micronutrients.
- Tea and coffee contain substances that can interfere with iron absorption and thus are not recommended for young children.
- Sugary drinks, such as coca-cola, should be avoided because they decrease the child's appetite.
- Boiled animal milk is good for the child. Removing (skimming off) the fat will reduce the energy, so don't remove it.



## Different food groups for preparing complementary foods

<p><b>Staples:</b> grains such as maize, wheat, barely, teff, millet , sorghum, and roots crops such as kocho, cassava, and potatoes</p>	
<p><b>Legumes</b> such as beans, chickpeas, lentils, and peas</p>	
<p><b>Vitamin A-rich fruits and vegetables</b> such as mango, papaya, dark-green leaves, carrot, yellow sweet potato and pumpkin and <b>other fruits and vegetables</b> such as banana, pineapple, avocado, watermelon, tomato, eggplant, and cabbage</p>	
<p><b>Animal-source foods</b> including flesh foods such as finely minced meat, dried meat ( kunata) powder, chicken, fish, liver, eggs, milk and milk products</p> <p><b>Note: animal-source foods should be introduced starting at 6 months</b></p>	
<p>Small amount of oil or butter added to vegetables and other foods will provide extra energy. Infants need a very small amount (no more than half a teaspoon per day). Do not remove the fat layer of the boiled milk</p>	






## What should be the consistency (thickness) of complementary foods?

- The consistency or thickness of foods determines if complementary foods are rich in nutrients or not.
- Cooking porridges with less water makes them thicker and denser.
- Complementary foods should be thick enough to be fed by hand.
- A thin porridge that can be fed from a feeding bottle or drunk from a cup does not provide the child with what he/she needs to grow strong and healthy.



- For optimal child growth, porridge should be made thicker as the child grows.
- At 6 months infants can eat pureed, mashed, and semi-solid foods.
- Beginning at 8 months they can also eat foods that they can hold in their hands, like a piece of fruit.
- At 12 months, most children can eat family foods that are modified to meet their needs.
- Family foods can be modified by mashing them or adding, for example, extra mashed vegetables to the family foods.

## How often and how much complementary food should I give my child?

Age		Recommendations	
When?	Types of foods	How often? The number of times a child needs to be fed within a day	How much? The amount of food an average child will usually eat in a day (in addition to breast milk)
At 6 months 	Breastfeed on demand  Start with soft enriched porridge + Animal-source foods ( eggs, liver, meat powder, etc.)	2 to 3 times plus frequent breastfeeds	Start with 2 to 3 tablespoons and gradually increase the amount to three coffee cups
From 6 up to 12 months 	+ Enriched flour made from 3 portions of cereal ( i.e., barley, sorghum) one portion of legumes ( peas, chick peas, lentils, etc.)	2 to 3 meals plus frequent breastfeeds 1 to 2 snacks may be offered	3 full coffee cups 
From 12 up to 24 months 	+ Fruits (banana, papaya, avocado, etc.) + Vegetables (kale, carrots, pumpkin, sweet potatoes, etc.)	3 to 4 meals plus breastfeeds 1 to 2 snacks may be offered	4 full coffee cups 

Federal Democratic Republic of Ethiopia, Ministry of Health. Essential Nutrition Actions ( ENA) Counselor's Guide ( to improve nutrition of women and children), January 2005

## How do I prepare safe and clean complementary foods?

As the intake of complementary foods increases, the incidence of diarrheal diseases also increases. Safe preparation and feeding of complementary foods is essential to reduce the risk of contamination and illness. Hence, extra care should be taken to keep complementary foods safe and clean.



- Babies should be fed using a clean cup and spoon.
- Bottles should never be used because they are difficult to clean and can cause diarrhea.
- Hands should be washed with soap and water before preparing food, before eating, and before feeding young children.
- Hands should always be washed after going to the toilet.
- Food and kitchen areas should be protected from insects, pests, and other animals.
- Complementary foods need to be prepared in very small amounts and served soon after preparation.

### Important tips for safe preparation of complementary foods

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>▪ Clean hands</li><li>▪ Clean utensils</li><li>▪ Separate raw and cooked foods</li></ul> | <ul style="list-style-type: none"><li>▪ Safe water and food</li><li>▪ Safe storage</li><li>▪ Thoroughly cooked foods</li><li>▪ Foods kept at safe temperature</li></ul> |
|--|---|

### Safe storage

- Store foods in covered containers
- Don't store foods for a long period of time
- Cook small amounts to avoid long periods of storage and spoilage

## How do I encourage my child to eat more?

How, when, where, and by whom a child is fed are important factors to ensure optimal complementary feeding.

- Children should be fed slowly and patiently, and should be encouraged to eat.
- They should never be forced to eat.
- Talking with children, playing with them, and maintaining eye-to-eye contact during feeding is one way of encouraging them to eat more.

- Feeding times should be periods of learning and love.
- If children refuse foods, different food combinations, tastes, textures, and methods of encouragement should be tried.
- Distractions during meals should be minimized.
- New foods should be offered several times since children may not like them at first.
- Older infants can be given foods that they can hold and eat by themselves. Mothers need to encourage them and make sure the food goes into the child's mouth.



## How should I feed my child during sickness and recovery?

### Feeding during illness

- During illness, the need for food and fluids is higher than normal.
- Even though appetite may be reduced, continued consumption of complementary foods is recommended to maintain nutrient intake, avoid weight loss, and enhance recovery.
- Fluid intake should be increased during illness, including more frequent breastfeeding and additional food.
- Even when children have diarrhea, it is better for them to keep eating.
- During illness, children should be:
  - Encouraged to eat small and frequent meals.
  - Given varied, appetizing, and favorite foods.
  - Fed when alert and not sleepy to avoid possible choking.
  - Offered mashed, soft foods if there is difficulty swallowing.
  - Fed slowly and patiently.



### Feeding during recovery

- After illness, a child's appetite increases, so the amount of complementary food and the feeding frequency should increase.
- The child should be encouraged to eat extra food to make up for nutrient losses during illness and allow for catch-up growth.
- Extra food is needed until the child has regained weight loss and is growing well again.

- Caregivers should actively encourage the child to eat one additional meal of solid food each day during the two weeks following illness.
- The child should be encouraged to eat as much as possible at each meal.

### What more do I need to know?

- Be sure your child gets vitamin A supplementation every six months to make the child strong.
- Use iodized salt when preparing foods.
- Start immunizations on schedule and finish all of them by the time the child is 1 year old.
- Take the child to a health facility whenever he or she is sick.
- Take the child to growth monitoring sessions.
- Eat two additional meals when breastfeeding.
- Sleep under an insecticide-treated net to prevent getting malaria and make sure your children and others in your family do so as well.
- Visit a health facility for family planning services.



# Section 3

## Feeding practices in special situations

Families of infants in special situations require practical support to feed their children adequately. Low birthweight babies, non-breastfed infants, and babies of HIV-positive mothers require extra attention. Their mothers also need support and confidence to feed their children appropriately.

### Feeding low birthweight babies (babies weighing less than 2.5 kg at birth)

Low birthweight (LBW) babies have an increased risk of infection and are more likely to die. They need frequent breastfeeding and optimum care so that their growth can catch up.

#### What should a low birthweight baby be fed, when, and how?

A mother's milk is the best food for low birthweight babies. Some LBW babies are unable to breastfeed and require alternative feeding methods such as cup feeding.

- The baby should be put on the breast immediately after birth.
- Breastmilk should be expressed and fed to the baby with a cup if breastfeeding is not possible. Mothers should express breastmilk on the day of delivery to start the flow of breastmilk.
- When a LBW baby starts to suckle effectively, he/she may frequently pause during feeds for long periods.
- Care should be taken to make sure that the baby suckles in a good position. The best positions for a mother to hold her LBW baby at the breast are:
  - a. The underarm position
  - b. Across her body, holding the baby with the arm on the opposite side to the breast
- The baby should be held in a way that allows as much skin-to-skin contact as possible to help breastfeeding and bonding.



a) The underarm position



b) Holding with the arm opposite the breast

### Feeding non-breastfed children 6–23 months of age

Children aged 6-23 months that cannot be breastfed for various reasons need more food than a breastfed child to compensate for not receiving breastmilk.



To compensate for lack of breastfeeding:

- A non-breastfed child should be given extra meals .

**Note:** Non-breastfed children need to eat **4–5 meals** per day with additional nutritional snacks **1–2 times** per day as desired.

- Foods of thick consistency or with some added fat help ensure an adequate intake of energy for a child.
- Meat, poultry, or fish should be eaten often, daily if possible, to ensure that the child gets enough iron and other nutrients.
- A non-breastfed child needs 4–6 buns or coffee cups of milk or yoghurt every day.

## Infant and young child feeding in the context of HIV

The best Infant feeding option for babies whose mothers are HIV positive depends on the circumstances. Mothers need to be counseled about the advantages and disadvantages of each option so that they can make an informed choice.

### Infant feeding options for HIV-positive women

#### Option 1: Exclusive replacement feeding

- When replacement feeding is Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS) for an HIV-positive mother and her family, breastfeeding should be avoided.

<b>Acceptable</b>	The mother sees no barrier to choosing replacement feeding for cultural or social reasons, or for fear of stigma and discrimination.
<b>Feasible</b>	The mother or family has adequate time, knowledge, skills, resources, and support to correctly prepare breastmilk substitutes and feed the infant 8–12 times in 24 hours.
<b>Affordable</b>	The mother and family can pay the costs associated with the purchase/production, preparation, storage, and use of replacement feeds without compromising the health and nutrition of the family.
<b>Sustainable</b>	A continuous, uninterrupted supply and a dependable system for distribution of all ingredients and products needed to safely practice replacement feeding are available for as long as needed.
<b>Safe</b>	Replacement foods are correctly and hygienically stored and prepared and fed with clean hands using clean cups and utensils, not bottles.

- All the AFASS criteria should be met before a mother chooses this option.
- Replacement feeding should be exclusive.
- A baby should not be breastfed if the mother is practicing replacement feeding because mixed feeding is more dangerous to the baby than exclusive breastfeeding.
- Replacement feeding should be done with a cup.

**Note:** If AFASS criteria are not met, the following options are available.

### **Option 2: Exclusive breastfeeding**

- HIV-positive mothers who choose this option should exclusively breastfeed.
- Exclusive breastfeeding during the first few months of life carries a lower risk of HIV transmission than mixed feeding.
- At 6 months, if adequate feeding from other sources cannot be ensured, HIV-infected women should continue to breastfeed their infants and give complementary foods.
- All breastfeeding should stop at any time when AFASS criteria for replacement feeding are met.
- Proper positioning and attachment are important to prevent breastfeeding difficulties.
- If a breast problem occurs, the mother should seek treatment immediately and breastfeed from the unaffected breast. Breastmilk from the affected milk should be expressed and discarded.
- A mother should seek immediate treatment if the child has an oral lesion or thrush.

### **Disadvantages of exclusive breastfeeding for an HIV-positive mother**

- As long as the mother breastfeeds, her baby is exposed to HIV.
- If the mother gives water, other liquids, or foods to the baby while she is breastfeeding, this increases the risk of diarrhea and other infections, and increases the risk of HIV transmission.
- It may be difficult to exclusively breastfeed if the mother gets very sick.

### **Option 3: Expressing and heat treating breastmilk**

Breastmilk can be expressed and heat-treated to destroy the virus so that the milk can be cup fed to the baby.

### **How to express and heat treat breastmilk and feed a baby**

1. Prepare and wash all utensils and hands.
2. Massage or pat breasts while thinking of the baby to initiate milk flow.
3. Express breastmilk into a clean cup.
4. Heat breastmilk to the boiling point.

5. Pour the breastmilk into a cup and let it cool in a larger container filled with water.
6. Feed the baby with a cup.
7. Throw out leftover milk and wash utensils.

**Option 4: Exclusive breastfeeding with a wet nurse**

To protect the baby from HIV a wet nurse should:

- Be tested and confirmed to be HIV negative.
- Protect herself from HIV the entire time of breastfeeding.
- Be available to breastfeed the baby frequently day and night or be able to express her milk if she and the baby are separated.

# Section 4

## Promotion of optimal infant and young child feeding practices

Optimal infant and young child feeding practices can be promoted through individual counseling with mothers and other family members and during community conversation sessions. Community sensitization and mobilization are important ways of gaining social support for the adoption of optimal infant and young child feeding practices. This section of the Quick Reference Book answers questions on how health extension workers and others can promote optimal IYFC.

### How do I counsel mothers and their family members on infant feeding?

Listening skills enable the counselor to understand how mothers and family members feel and help them decide the best infant and young children feeding options for their personal situation.

A mother may not talk easily and readily about her feelings. The counselor needs skills to listen and make the mother feel that the counselor is concerned and understands her. This will encourage her to speak more freely with the counselor.

#### **Listening and learning skills needed for effective counseling**

1. Use helpful non-verbal (without speaking) communication to encourage a mother to talk.
  - Keep head level with mother/father/caregiver
  - Pay attention (maintain eye contact)
  - Take time; do not hurry
  - Touch in a culturally appropriate way
2. Ask questions that allow mother/father/caregiver to give detailed information.
3. Use responses and gestures that show interest such as nodding, smiling, and responses such as “Aha”.
4. Listen to mother’s/father’s/caregiver’s concerns.
5. Reflect back what the mother/father/caregiver says.
6. Avoid using judging words such as right, wrong, well, badly, good, enough, and properly

A counselor can help a mother feel confident about her decision on what is best for her and her family. Supporting a mother is more useful than giving direct advice which she may not use.

### Skills for building confidence and giving support

1. Accept (respond in a neutral way, do not agree or disagree) what a mother thinks to establish confidence. Give correct information after hearing her views and concerns.
2. Recognize and praise what a mother and other family members are doing correctly.
3. Give practical help such as holding a baby or helping a mother feel comfortable.
4. Give relevant information (information that is useful now) after listening to the caregiver.
5. Use simple language.
6. Use appropriate counseling card(s).
7. Make one or two suggestions, not commands.

### Using the GALIDRAA steps for counseling and negotiation

GALIDRAA is an aid to help health workers recall the steps that go into a counseling session. Each letter represents a counseling step. The GALIDRAA steps can be used during counseling sessions to:

- Assess age-appropriate infant and young child feeding practices.
- Identify difficulty and if there is more than one – prioritize.
- Discuss and suggest relevant information to mothers and agree on feasible doable actions to improve infant and young child feeding practices.

### GALIDRAA Steps

1. **Greet** the mother or caregiver.
2. **Ask** the mother or caregiver to describe her complementary feeding practice and the condition of her baby.
3. **Listen** attentively.
4. **Identify** difficulties and prioritize the most important one to work on.
5. **Discuss** feeding options (use counseling cards to discuss feeding options and their benefits).
6. **Recommend** simple doable actions and help her choose an action that she can practice to solve the difficulties based on available resources in the household. Discuss advantages of practicing the actions and barriers and opportunities for accomplishing the agreed-upon actions.
7. Help the mother or caregiver **Agree** to try one of the options and ask her to repeat the agreed-upon actions.
8. **Appoint** a time for the next visit.

## Why and when are counseling cards helpful and how should I use them?

Counseling cards can be used for individual counseling sessions with mothers and their families as well as for groups. Situations in which counseling cards can be used include:

- Home visits
- Group sessions
- Advocacy activities with community leaders
- Community mobilization sessions



Counseling cards are useful for the following reasons:

- They are appealing and provide pictures to aid communication of messages.
- They help mothers identify with the persons in the card and feel that they are like them. For that reason, they are more likely to feel that they too can try the suggested practices.
- Mothers and family members become more interested in conversations or counseling sessions that include counseling cards.
- Counseling cards can be used to organize topics for discussion with mothers and other family members.
- They also remind health extension workers and others of what needs to be discussed.
- Repeated use of these tools helps health extension workers and others memorize the key infant and young child feeding points to discuss with mothers and other family members.

## How do I sensitize community leaders and mobilize the community for IYCF?

Community mobilization can bring to a community's attention a problem that affects the whole community and encourages problem solving. Community mobilization is an important approach for improving infant and young child feeding practices that are deeply rooted in the society.

Community mobilization is a way to:

- Identify IYCF-related problems and address them.
- Identify all available resources in the community and plan how best to use them.



- Establish responsibility for the promotion and adoption of optimal IYCF practices.
- Enable the community to better govern itself.

### **Mobilizing for IYCF**

- Community participation in IYCF involves engaging representatives of the target population in infant and young child feeding related problem identification, planning, implementation, and evaluation of the interventions.
- Sensitizing community leaders and respected members of the community in identifying and addressing IYCF-related problems is one way of getting the support of the whole community.

### **Steps to consider for IYCF-focused community participation**

1. Have a clear plan of ways to involve the community in supporting IYCF efforts.
2. Look for support and commitment of influential community members to take part in the process of bringing about change. These members can be:
  - Community leaders
  - Religious leaders
  - Elders
  - Idir leaders
  - Women's groups
  - Kebele leaders
  - School teachers
  - Development agents
  - Mothers who have adopted good feeding practices
3. Engage the community right from the beginning.
  - Raise awareness of all community members about infant and young child feeding
  - Identify problems
4. Facilitate a process of social change.
  - Identify and mobilize local resources
  - Link with other programs
5. Provide repeated exposure to ideas.
  - Community members need to be exposed to regular messages that reinforce each other from a variety of sources and over a long period of time. This contributes to building a supportive environment in the community for optimal feeding practices and building a force for change.



### **Tips for community mobilization**

- Be very clear about what you want to achieve.
- Keep your messages simple.
- Speak clearly, loudly, and with confidence.
- Relate your message to the community's experience.
- Indicate in your messages that everyone is affected by inappropriate infant and young child feeding practices and should be concerned with the issue.
- Be a "change agent," inspire, encourage, and support others in the community to make positive changes that will lead to change in infant and young child feeding.



#### 6. Promote community ownership

- The process of changing infant and young child feeding practices can be facilitated by health extension workers and others; however, the change occurs in the community members themselves.

#### **Benefits of community mobilization**

- Fosters collective power
- Requires continued engagement with the community
- Promotes activism
- Requires involvement of a range of people, groups, and institutions
- Goes beyond individuals and influence groups
- Stimulates problem analysis
- Takes a holistic and collective approach
- Creates a positive and supportive environment

### How do I facilitate a community conversation session?

A community conversation is a discussion among community members. Community conversations can be used to generate collective community action to improve infant and young child feeding and bring about individual and collective change.

#### **Planning a community conversation**

- Select different influential people from the community to participate in the community conversation.
- Review the IYCF community conversation guide to support the community in identifying feeding issues that matter to them, and to generate action for positive change.
- Hold the conversation in a welcoming and quiet place where everyone can hear each other, and make sure that there will not be any interruptions.
- Use a community conversation notetaking form to record agreements and planned actions, modifying the form as needed.

#### **Conducting a community conversation**

1. Welcome the participants and thank them for coming.
2. Tell the participants that they are there to discuss IYCF practices in the community and ways they can work to improve them.
3. Explain how the results of the conversations will be used.

4. Briefly mention activities in the community related to infant and young child feeding practices.
5. Help the community assess the current situation. Encourage discussion on optimal infant and young child feeding practices; inform community members about specific IYCF practices reported in formative research studies.
6. Lead the community in identifying and prioritizing two of the most important and feasible actions to address inappropriate infant and young child feeding practices.
7. Define the selected actions and categorize them according to those that will be addressed by the households and those by the community in a reasonable and commonly agreed upon time frame.
8. Along with the community, decide how, when, and who will perform the actions and who will monitor the process and conduct follow up.
  - Decide on the agenda for the next meeting.
  - Thank the community for their time and participation.
  - Hand out any relevant additional information or announcements.
  - Set the time for the next meeting.

#### Community conversation notetaking form

Identified problems	Prioritized problems	Selected actions	Who will address the actions?	Time frame	How	Follow up

#### **Guiding Principles for facilitating a community conversation**

1. Be sensitive to community experiences, beliefs, cultures and values.
2. Rely on voluntary participation.
3. Facilitate dialogue.
4. Trust the process.
5. Be gender sensitive.
6. Encourage mutual learning.
7. Adapt a participatory approach.
8. Form teams for implementation.
9. Respect differences and develop mutual trust.
10. Believe that communities have the capacity to identify needed changes and 'own' these changes.

### **How do I identify and work with positive deviant mothers?**

Positive deviant mothers are those mothers whose children grow and develop adequately even though they are resource poor and live in communities with high numbers of children who are malnourished and frequently ill. The identification of a "positive deviant" mother will be beneficial to help mothers adopt positive IYCF behaviors.

#### **Steps to identify positive deviant mothers/families**

1. Identify resource-poor families with well-nourished children through observations of infant and young child feeding practices during home visits and interviews.
2. Identify and record best practices that have enabled positive deviant mothers and families to have well-nourished children despite being resource poor.
3. Choose from the best practices those that are accessible at present to all members of the community.
4. Mention these practices during counseling as examples of how mothers can improve the health of their child.

### **How do I demonstrate preparation of complementary foods?**

Demonstration of complementary food preparation is a practical way of transferring key messages on appropriate complementary feeding.

### **Demonstrations help mothers understand:**

- What foods should be mixed with common staple foods to prepare complementary foods
- Appropriate consistency of complementary foods for children of different ages
- The amount of complementary foods for children of different ages
- How meat and vegetables can be added to complementary foods

### **Guidelines for conducting a complementary food preparation demonstration**

1. Gather the equipment and materials needed for the demonstration

- Food
- Utensils
- Table
- Fuel
- Handwashing facilities
- Complementary food recipe

2. Decide on key messages

- Select one to three key messages to focus on during the demonstration.

3. Demonstrate preparation of the food

1. Thank mothers/caregivers for coming and present the recipe that will be prepared.
2. Show each of the ingredients and suggest substitutes for ingredients that are difficult to obtain.
3. Invite at least two mothers/caregivers to prepare the food with you.
4. Wash hands and use clean utensils.
5. Talk to the mothers/caregivers through each step of the preparation.
6. Point out the consistency of the food during the preparation and demonstrate with a spoon when the preparation is finished.
7. Invite the mothers/caregivers to taste the food and give it to their children. Ask for their opinions.
8. Discuss the key messages you selected.
9. After each message, ask open-ended questions related to the message delivered to check if mothers/caregivers understand and remember the message.
10. Ask the mothers/caregivers if they could prepare the food in their home.



4. Ask questions to check understanding and commitment
  - Ask the mother/caregiver what foods are used in the recipe.
  - Ask the mothers/caregivers when they think they can prepare this food for their child.
5. Conclude demonstration
  - Thank the mothers/caregivers for coming and participating.
  - Ask the mothers/caregivers to share their new knowledge of preparing this food with a neighbor who has small children.

**Note:** Health posts could be good demonstration centers for growing vegetables. Work in collaboration with the agricultural extension workers. Try to link mother/caregiver to available food security programs.

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