CHAPTER 16
Breastfeeding

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Breast is best
Breast milk has all the nutrition a baby needs. It also gives many other benefits:

- Breast milk protects the baby against many illnesses including diarrhea, pneumonia, diabetes, and cancer.
- Sucking on the breast, close to the mother, helps the baby feel safe.
- Breast milk is always fresh, clean, and ready to eat.
- Breastfeeding helps the mother’s womb contract after birth and slows bleeding.
- Breastfeeding can prevent the mother from getting pregnant again right away.
- Breastfeeding helps protect the mother against brittle bones (osteoporosis) and some kinds of cancer later in her life.
- Breastfeeding costs nothing — it is free!

Baby formula can be dangerous
Companies that sell formula and other breast milk substitutes will say almost anything to make people buy them. They may say substitutes are modern, or clean, or as safe and nutritious as breast milk. But milk substitutes do not have all the benefits of breast milk and, for most babies, they are not safe.

- Formula is less nutritious. It often has too much of some things, and not enough of others.
- Formula is harder for the baby to digest.
- Bottle-feeding requires extra clean water and fuel to boil the water and bottles. If the bottles or water are dirty, bottle-feeding can cause dangerous diarrhea that can lead to death.
- Formula costs a lot of money.
- Some families try to make formula last longer by adding extra water. This makes babies grow more slowly and get sick more.
How to breastfeed

Help mothers start breastfeeding within an hour of the baby’s birth. The first yellow-colored milk, called colostrum, is just what a new baby needs. It has the right nutrition and provides extra protection against infection. Colostrum also cleans the baby’s intestines. There is no need to give teas or herbs to do this.

A baby will usually show she is ready to feed by moving toward her mother’s breast or by smacking her lips. If the baby has a hard time breastfeeding at first, the mother can put a few drops of milk on the baby’s lips and on her nipple to encourage the baby to suck.

A mother should feed her baby whenever he is hungry, day and night. Many new babies will suckle every 1 to 2 hours. The more the baby suckles, the more milk the mother will make.

Babies should have only breast milk (drink no other fluids and eat no other foods) for the first 6 months. And babies old enough to eat still need to breastfeed until they are about 2 years old or older.

How to hold the baby

A woman may have a difficult time learning to feed her first baby. You can help by encouraging her to keep trying and showing her good positions for breastfeeding. A good position helps the baby attach better to the breast, feed better, and prevents sore or cracked nipples.

The mother should support the baby’s head with her hand or arm. The baby’s whole body should face the mother so his neck is not turned. This position makes it easier for him to swallow.

When the baby opens his mouth wide, the mother should bring the baby onto her breast. The baby should have a big mouthful of the breast, with the nipple deep in his mouth.
Breastfeeding positions that work well

Chest to chest, chin to breast

The mother's back is straight.

The baby's head is supported and in a straight line with the rest of his body.

Use pillows or some rolled-up cloth under the baby.

The baby's body is straight and turned toward the mother's.

The baby suckles the breast, not just the nipple.

What the mother should eat while breastfeeding

To heal after a birth, and to have enough energy to feed and care for a baby, a woman should eat as much or more as when she was pregnant. And she should eat a wide variety of foods including fruits and vegetables and foods rich in protein and fats — like nuts, beans, cheese, eggs, and meat.

She also needs to drink plenty of liquids. Water, herb teas, fruit juices, and milk will all help her stay healthy and make breast milk.
When the mother works outside the home

When a mother works away from home, it can be hard for her to give her baby only breast milk during the first 6 months. If possible, the mother can bring her baby with her to work, or someone can bring the baby when it is time for her to feed.

In some places, people are trying to get laws passed that allow women workers to take breaks to breastfeed their babies or to remove breast milk by hand.

Removing milk from the breasts

Another way for the mother to give breast milk when she is away is to remove the milk from her breasts. Then someone else can feed the baby for her. She may also want to remove milk by hand if her breasts are too full, or if she cannot breastfeed for some reason but wants to keep making milk.

A woman may be able to get a breast pump to help her remove milk more easily. Some clinics and medical centers loan or rent out electric pumps. They may also sell simple hand pumps at low cost. Some women can easily remove milk by hand.
How to remove milk by hand

1. Wash a jar and lid with soap and clean water and leave them in the sun to dry.
   
   If possible, pour some boiling water into the jar and then pour it out just before using it. This will kill germs in the jar, and keep the milk safe.

2. Wash your hands well.

3. Put your fingers and thumb at the edge of the dark part of the breast (areola), and press in towards the chest.

4. Gently press the fingers together and roll them towards the nipple. Do not pinch or pull the nipple. Removing milk should not hurt.

5. Move your fingers all the way around the areola so the milk can come out of the whole breast. Do this with each breast until it is empty.

   At first, not much milk will come out, but with practice, more will come. The mother can usually remove more milk if she is in a quiet, calm place and feels relaxed. Thinking about her baby while she removes her milk may help the milk flow for her.

Saving milk

Breast milk should be saved in clean, boiled containers. Keep it covered in a cool place, away from sunlight.

   Breast milk can sit in a room for about 8 hours before it spoils — as long as the room is not very hot. It can be stored even longer if it is kept cold. Try wrapping the jar in wet cloths. Milk stored in a refrigerator can last for 2 or 3 days. It can also be kept in a very cold freezer for up to 2 weeks, but once it thaws it should not be frozen again.

   To warm up milk that has been stored, put the container of milk in a bowl of warm water. Do not microwave breast milk.

**WARNING!** Milk that cannot be kept cold will spoil and should be thrown out. If milk smells sour or strange, throw it out. **Spoiled breast milk can make a baby very sick.**
Feeding milk that has been removed

When feeding milk or formula to a young baby, use a very clean cup or spoon. Even newborn babies can drink from cups. Do not pour the milk into the baby’s mouth or she will choke. An older baby can drink from a cup or a feeding bottle and rubber nipple.

Whatever a baby drinks from must be very clean. Unclean bottles and rubber nipples in particular often carry germs that cause serious infections in babies. Boil the cup, bottle, and nipple before using them. If this is not possible, wash them with clean water and soap and let them dry in bright sunlight.

Sharing breast milk

Breastfeeding another woman’s baby is a common practice. Many mothers do this for friends or family members when a mother needs to be away from her baby at feeding time. Sharing breast milk is free, easy, and can make ties between families stronger. But if a woman has HIV, it is possible she can pass her infection to the baby through her breast milk (see page 293). This can happen even if she seems healthy or does not know she has HIV. It is best if women are tested for HIV before sharing breast milk.

Common difficulties while breastfeeding

Fear of not having enough milk

Some women are afraid that they do not have enough breast milk. Health workers or family members may even tell them they do not have enough. Assure the mother that this is almost never true. The more a baby suckles, the more milk a mother’s breasts will make.

- If the baby does not seem satisfied,
- do not give solid food or a bottle.
- Help him breastfeed more!
At times the baby may suddenly want more milk than before. Assure the mother that this is normal. It means the baby is growing and so is his hunger. The baby does not need anything else to eat or drink — just let him breastfeed more often and for as long as he wants. After about 2 days of extra breastfeeding, the mother’s milk supply will have grown to meet the baby’s needs.

The baby is getting enough breast milk if he gains weight and urinates more than 6 times a day.

Breast milk gives a baby all the water and nutrition she needs.

Some people give water, teas, tinned milk, or other drinks to their babies — but for the first 6 months this is not necessary and is in fact dangerous. Giving other drinks can fill the baby up without giving her nutrition. Water and other drinks that are not clean can cause infection.

Flat or inverted nipples

Some women’s nipples are flat or inverted (sink into the breast). Even so, the baby can usually breastfeed without a problem. But the mother and baby may need some help in the first few days.

Breastfeeding with flat nipples

- Start breastfeeding right after birth — before the breasts become full.
- If the breasts are very full, remove some milk by hand to make them softer.
- Gently roll the nipple to make it stand out.
- Cup a hand around the breast and pull back. The nipple will pop out.
Engorged (swollen) breasts

Sometimes a mother’s breasts get very full and hard, especially during the first few days after the birth. This can be painful for the mother and also makes her more likely to develop a breast infection. It can also make it hard for the baby to suck the breast. If the mother begins breastfeeding the baby very soon after the birth, and feeds often, she may avoid this problem.

But if a mother’s breasts do get swollen, she can try the following:

- Breastfeed the baby more often, both day and night (every 1 or 2 hours, and on both breasts).
- Place hot, wet cloths on the breasts for 15 to 20 minutes before each feeding.
- Put ice, cool cloths, or fresh cabbage leaves on the breasts between feedings. Let the milk leak freely and support the breasts with a bra or cloth.
- If the baby has trouble getting onto the breast because it is swollen, remove a little milk by hand until the breast is soft enough for the baby to take.

Encourage the mother and remind her that this problem will go away soon.

Painful lump in the breast (abscess)

If a painful lump forms in the breast, the milk is probably getting stuck in one part of the breast. If the lump is not treated, the breast can easily become infected.

If a mother has a painful lump, she should:

- breastfeed frequently (every 1 or 2 hours), giving the baby the sore breast first. If for some reason the mother cannot breastfeed, she must remove the milk by hand.
- stay in bed and keep the baby with her so he can feed often.
- drink lots of liquid.
- place hot, wet cloths on the sore breast for 15 to 20 minutes before each feeding.
- use ice or cold cloths between feedings to lessen the pain.
- gently massage the lump as the baby feeds.

Some women have gotten rid of an abscess by drinking 1 tablespoon of vinegar in a cup of water every hour. Putting cabbage leaves on the abscess also might help.
Breast infection (mastitis)

Infection inside the breast can occur if the mother has sore, cracked nipples or full, engorged breasts, if she wears a very tight bra or binding clothing, or if she is very tired or in poor health. Preventing these situations will help prevent breast infection.

**Signs of breast infection:**
- abscess (painful lump in the breast)
- hot, red, sore area on the breast
- body aches and pains
- fever of 38°C (100.4°F) or higher

**For breast infection**
- give 500 mg dicloxacillin .......................................................... by mouth, 4 times a day for 7 days

  or

  If you cannot find this medicine, or if the woman is allergic to penicillin
  - give 500 mg erythromycin ...................................................... by mouth, 2 times a day for 7 days

**For fever and pain**
- give 500 to 1000 mg paracetamol ........................................ by mouth, every 4-6 hours, as needed (do not take more than 4000 mg in a day)

If there is no improvement after 2 days, the woman should be treated in a hospital.

If a breast infection is not treated early, it will get worse. If an abscess develops and antibiotics do not make it go away, the woman should see a health worker who has been trained to drain an abscess using sterile equipment.

The mother can keep breastfeeding, but try to keep the baby’s mouth and hands from touching the abscess or its drainage. Cover the abscess with a clean, dry cloth.
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Sore or cracked nipples

If a woman feels pain in her nipples while breastfeeding, the baby is probably not in a good position. If the baby keeps breastfeeding in a bad position, the mother’s nipples may crack. Cracked nipples can become infected.

To treat sore or cracked nipples:

• Help the mother hold the baby in a position that allows the baby to get a large mouthful of breast (see page 282).

• The mother can rub breast milk into her nipple. This will prevent infection in the cracks and keep the nipples soft so they will not crack more.

• Encourage the mother to leave her breasts open to air and sunlight when she is not breastfeeding.

• Encourage the mother to keep feeding from both breasts — but she can start with the less sore breast and switch to the cracked one once the milk starts flowing.

• If the pain is too great to breastfeed, the mother can remove her milk by hand and feed the baby with a cup and spoon for a few days.

Thrush

If a baby is in a good position while suckling and the mother still has pain in the nipples that lasts for more than a week, it may be caused by thrush (a yeast infection on the nipple or in the baby’s mouth). The mother may feel an itch on her nipples or a stabbing burning pain. The baby may have white spots or redness in her mouth.

How to treat thrush

Cover the white spots in the baby’s mouth with nystatin drops. Use 2 full droppers (0.5 ml of nystatin per dropper) 4 times a day. Continue giving this medicine for 2 days after the patches are gone, or they may come back.

If the mother has itching or pain on her nipples, she should treat her nipples the same way she treats the baby’s mouth, with nystatin drops.

The mother should keep breastfeeding. If the thrush does not get better in 3 days, get medical advice.
The baby has gas pains (colic)

If a baby starts to cry and pull his legs up soon after he starts to suck, he may have gas — too much air in the belly. Some babies swallow air when they breastfeed. It may help to let the baby burp.

- Lay the baby on your shoulder and rub or pat his back.
- Lay the baby across your knees and rub or pat his back.
- Sit the baby up leaning forward and rub or pat his back.

Sometimes a baby seems to get gas pains when the mother eats a certain food or spice. The mother can try eating food without spices, or stop eating a food that may be causing gas for 2 or 3 days (if she is getting enough nutrition from other foods). There is no particular food that should be avoided, because each baby is different.

Gas pains usually stop when the baby is about 4 months old.

Situations that affect breastfeeding

Twins

Twins should be breastfed just like other babies. Remember, the more a mother breastfeeds, the more milk her body will make. A mother can breastfeed both babies at the same time or she can breastfeed them one at a time.

A mother with twins will need more rest, food, drink, and help from her family and from you.
Breastfeeding while pregnant

It is safe to breastfeed while pregnant or to breastfeed an older child and a new baby. The mother should eat even more food and get plenty of rest.

The new baby should always be fed before the older baby.

Small babies and early babies

Most small babies and early babies need breast milk. If the baby is too weak to suck from the breast, a mother can remove her milk by hand and then feed her baby with a cup or spoon until the baby is strong enough to breastfeed. See page 256 for more on caring for small babies.

When the mother is sick

It is usually best for a mother to keep breastfeeding even when she is sick. To prevent becoming more sick, the mother can:

- drink plenty of fluids.
- lie down while breastfeeding.

Family members and friends can help the mother with her chores so she can rest.

Medicines

If possible, breastfeeding mothers should not take drugs or medicines. But some mothers who are sick must take medicines. These women should use medicines that are safe to take while breastfeeding.

Most of the medicines listed in this book are safe to take while breastfeeding. A few that are not safe are marked with this symbol in the Medicines Pages starting on page 467.
HIV and breastfeeding

Someone who is breastfeeding should take special care not to become infected with HIV (see page 334). Anyone who has HIV should start treatment as soon as possible to control their HIV. This protects the health of partners and prevents HIV from spreading to babies during pregnancy and breastfeeding. Well-controlled HIV rarely spreads by breastfeeding.

No one knows for sure exactly why breast milk sometimes spreads HIV to a baby and sometimes does not. HIV seems to pass more easily during breastfeeding when:

- the mother was recently infected with HIV or is very sick with other infections. There is more HIV in the mother's body then.
- the baby is given formula or other fluids or foods as well as breast milk.
- the mother has cracked nipples or the baby has thrush in her mouth.

In many places, breastfeeding is usually the safest way to feed babies even when mothers with HIV are not yet on treatment. This is because formula and other milks cause babies to get sick or die from diarrhea or malnutrition. Especially for mothers on treatment for HIV, more babies would die from formula than will get sick or die from HIV passed through breastfeeding.

To make breastfeeding most safe help women with HIV:

- Get on treatment for HIV and take it consistently. See pages 334 to 335 and pages 495 to 502. Be sure to give recommended medicines to the baby too.
- Give only breast milk for the first 6 months. Formula, teas, and other foods or drinks can irritate the baby's digestion. And they have neither the nutrition nor protections against illness that breast milk does.
- If you have enough food to give your baby, make that the baby's main food after 12 months. But you can continue to breastfeed as long as the child wants to.
- Position the baby correctly for feeding to avoid cracked nipples.
- Treat thrush, cracked nipples, and breast infections right away.
- Women with HIV should not feed the baby from a breast that has mastitis or an abscess — instead, remove the milk and throw it away.
Heating breastmilk to prevent passing HIV

Breast milk can be heated almost to boiling to kill the HIV virus. A baby will not be at risk of getting HIV from this heated milk. Heating breast milk takes work, but it can be done if a woman has clean water, fuel, and support.

How to heat breast milk

1. Place a jar of breast milk in a pot of water.
2. Bring the water to a boil.
3. Immediately remove the pot from the heat.
4. Let the milk cool before feeding it to the baby with a cup or bottle.

Alternatives to breastfeeding

Breastfeeding is best, but there are a few times when it is not possible. If a mother is infected with HIV, if she is very sick, or if she adopts a child, she may not be able to or may choose not to breastfeed.

For some families, formula may be a safe alternative to breast milk.

Formula is only safe when:

- the family has enough clean water to make plenty of formula to feed the baby.
- the family has enough fuel to boil bottles.
- the family can afford to buy all the formula the baby needs (and will not dilute it with too much water to save money).

Families who give formula must follow the directions on the package exactly. Do not thin the formula by adding extra water or by using less milk or powder. Dirty bottles and nipples or watered-down formula can kill a baby.
Families who cannot afford formula might try other ways to feed their babies. These ways are not possible for every mother, but may be for some.

- A relative or friend who does not have HIV can breastfeed the child.
- Animal milks can be fed to a baby. Animal milks have more fat and less sugar than human milk, so they must be mixed with water and sugar to be fed to a baby. People do not agree on one recipe that will make animal milk most healthy for a baby. Here are 2 ways to make it, depending on the kind of animal milk you have.

### To feed a baby with animal milk

**From cow milk, goat milk, or camel milk:**

- mix 100 ml fresh milk with 50 ml clean water and 10 g (2 tsp) sugar

**From sheep milk or buffalo milk:**

- mix 50 ml fresh milk with 50 ml clean water and 5 g (1 tsp) sugar

Bring the formula to a boil and then remove it from the heat. Let it cool and then feed immediately.

Animal milks do not have all the vitamins a growing baby needs — so the baby should be given a wide variety of vegetables, fruits, and other foods starting at about 6 months of age.

When a family gives formula or animal milk they must keep everything very clean. The cup, spoon, bottle, rubber nipples, and any containers used for milk or formula should be washed thoroughly and boiled for 20 minutes before each use.

Prepared formula, tinned milk that has been opened, and animal milks should never be left at room temperature for more than 2 hours. They will spoil and could make the baby very sick. Formula can sit in a cold refrigerator for up to 12 hours.