

## FEEDING INFANTS

Not long after clothing the infant, you will hear some cries of hunger from the baby. Now what? You can't give a baby a Coke and a Snickers bar!

There are three basic options for feeding an infant:

1. Breast feeding.
2. Bottle feeding.
3. A combination of breast and bottle feeding.

An infant's feeding schedule will vary during the first year. The following are the average feeding schedules for the different ages:

0-3 months	An infant will eat every three to four hours, including a 2:00 a.m. or 3:00 a.m. feeding
3-5 months	An infant will eat every five hours with an 11:00 p.m. and 5:30 a.m. feeding.
6 months	An infant will eat every six hours without any feeding during the night.

As you can see, this feeding routine will take some time and work. It is good to carefully weigh the options of how you will feed your baby.

### BREAST FEEDING

During pregnancy, the breasts enlarge with the development of a network of milk-producing glands and ducts to carry milk to the nipple opening. After birth the pituitary gland produces a hormone called PROLACTIN. Prolactin is what produces the milk. When the infant nurses, more prolactin is produced. The more an infant nurses, the more prolactin is produced and, therefore, more milk is produced. It works similarly to the law of supply and demand.

OXYTOCIN is another hormone that is released that causes the tiny muscle cells around the milk glands to contract and eject the milk into the ducts and out through the nipple. This is called the let-down reflex. This let-down reflex can be triggered by just hearing the cry of an infant or even the thought of the infant. Remember--it's a reflex and is difficult to control.

After the baby is born, colostrum, not milk, is first produced by the mother's body. Colostrum is a thick watery looking premilk fluid that is produced by the breast the first few days of breast feeding before the milk "comes in." Colostrum is extremely high in protein, vitamins, and minerals and has a large amount of antibodies, white blood cells, and other immunological properties. It is also low in fat and lactose (milk sugar).

**Advantages of breast feeding:**

1. Breast milk contains the right proportions of protein, carbohydrates, fats, vitamins, minerals, and water that the baby needs.
2. Breast milk is easy for the baby to digest.
3. Breast milk is always ready; there is no mixing, sterilizing, or warming.
4. Parents are not tempted to overfeed the baby. (Over feeding results in abdominal cramps and loose stools and may set the stage for obesity.)
5. Babies fed entirely on breast milk are seldom constipated.
6. Breast-fed babies have fewer digestive upsets and disorders, skin disorders, and respiratory infections as compared with formula-fed babies.
7. Vigorous sucking required for breast feeding usually satisfies the need for sucking and promotes good development of facial structures.
8. Mother's immunities to certain diseases are passed to the baby through the colostrum (a liquid that comes from the breasts for two or three days after delivery).
9. Breast feeding is advantageous to the mother because nursing stimulates hormones to be released that help the uterus contract to normal size.

**Disadvantages of breast feeding:**

1. Illnesses and stresses of the mother can limit milk supply.
2. Other caregivers may not assist with feeding the infant as often.
3. The mother may feel reluctant to feed a hungry infant if others are present.
4. Mother's diet affects milk and therefore must be watched closely.
5. Mother's milk lacks iron and fluoride. Iron-fortified foods must be added to a breast-fed baby's diet after the baby triples his/her birth weight.

Many people think that a mother who works out of the home cannot breast feed. Have the students discuss this idea. Explain how a breast pump works and how it relates to the supply of the breast milk. Breast feeding is indeed possible for working mothers!

**FORMULA FEEDING:**

Formula feeding is used by many people. This is one of the best ways to involve the father in the feeding process. A breast-fed baby cannot be fed by his/her father in the middle of the night! Some women have medical problems that prevent them from breast feeding a baby. Other women make a conscious choice to bottle feed a baby.

**Advantages of formula feeding:**

1. Formulas are similar to breast milk.
2. Formulas have iron; breast milk is low in iron.
3. Bottle feeding makes it easier to be away from home.
4. Because non-nursing mothers do not need as many calories, it is easier for them to return to a prepregnancy size.
5. No nursing pads or special brassieres are needed.
6. There are no worries about an inadequate supply of milk.
7. Formula is not affected by the mother's diet, illnesses, or medications.
8. Anyone can help feed the baby. Feeding the baby may help fathers and others develop a good relationship with the baby.

**Disadvantages of formula feeding:**

1. Formula may be more difficult for some infants to digest.
2. Preparation time to sterilize and prepare the formula and equipment is required.
3. Formula feeding is more expensive.

An infant should never be left with a bottle propped up by a pillow or blanket. Feeding time is a vital time in which one-on-one interaction and bonding take place. An infant should be held gently in your arms during feedings. Leaving an infant with a bottle in its mouth to fall asleep can also cause tooth decay later on in life.

It is important that you clean a bottle and nipple with HOT, SOAPY water after each use. Over time, the rubber in the nipples begins to stretch, enlarge, and even break and/or crack; therefore, they need to be checked often and discarded if there are problems. Mixing the formula correctly is also vital to the infant's development and health. Too little formula means too few nutrients. Too much formula can affect the fluid balance in the body and even cause dehydration.

Infants have a strong desire and need to suck. Sucking is the primary means by which they are fed for the first 6 months of life. However, most babies have a need to suck even beyond sucking a bottle or at the breast. This need is called nonnutritive sucking and is met with the use of a pacifier or thumb or finger. In the past, pacifiers and thumb or finger sucking was considered unnecessary and even harmful by many parents and critics. The American Academy of Pediatrics says that pacifiers and thumb or finger sucking are not harmful in any way as long as they do not replace or delay meals. They should be used just after or between feedings. Infants should not learn to fall asleep with a pacifier because they learn to rely on them, and when the pacifier falls out during their sleep and they are unable to put it back in their mouth, they need a parent to put it back in for them. Never use a nipple from a bottle as a pacifier, because they may be harmful and cause the infant to swallow and suck air. Pacifiers should be one piece, have a ring that is at least 1 1/2 inches across, have ventilation holes, and be dishwasher safe. Pacifiers come in many different nipple shapes and sizes. There are many different nipple shapes and sizes of pacifiers. (Teacher: have some different types and sizes of pacifiers to show the students.)

During feeding, an infant takes in a certain amount of air. This air eventually turns into a bubble in the stomach. Because the infant's stomach is small, the air bubble causes pain and therefore needs to be released. Breast-fed infants seem to need a bit less burping than bottle-fed infants do. This is mainly due to breast milk being easier to digest. Often an air bubble is caused by the stream or flow of the milk from a bottle being too fast OR too slow. Either way, the infant takes in too much air. To check a bottle's flow, turn it upside down and time the drops. There should be one drop per second. If the flow is slower than that, the hole can be made larger. If the flow is faster than one drop per second, it should be discarded. (Teacher: have a bottle with some water in it to demonstrate this idea.)

A breast-fed infant should be burped twice: once after nursing from each breast. A bottle-fed infant should be burped after every two ounces. However, do not stop feeding an infant that is contentedly eating just to burp him/her. When he/she needs to be burped, he/she will stop feeding.

To burp an infant, gently rub and pat its back. The infant can be placed in one of three positions: resting over the shoulder, lying down across your lap with its stomach down, or sitting on your lap facing one side with one of your hands supporting its chest and the other rubbing and patting its back.

An infant's circular or sphincter muscle, which is between the stomach and esophagus, is not very well developed; therefore, milk often will slip back up after a feeding. Spitting up is different than vomiting. When an infant spits up, the contents of the stomach simply drizzle or dribble out of his/her mouth. When an infant vomits, the contents of the stomach actually project a few inches into the air. If an infant vomits and appears to be ill, a physician should be consulted.

To lessen the problem of spitting up, there are several suggestions to try: feed the infant more slowly and burp him/her more frequently, feed the infant in a more restful and relaxing setting, or hold the infant in a more upright position.