

**BASIC INFORMATION****DESCRIPTION**

• New parents want to give their babies the very best. When it comes to nutrition, the best first food for babies is breast milk. More than two decades of research have established that breast milk is perfectly suited to nourish infants and protect them from illness. Breast-fed infants have lower rates of hospital admissions, ear infections, diarrhea, rashes, allergies, and other medical problems than bottle-fed babies.

• Babies should be breast-fed for six to 12 months. The only acceptable alternative to breast milk is infant formula. Solid foods can be introduced when the baby is 4 to 6 months old, but a baby should drink breast milk or formula, not cow's milk, for a full year. There aren't any rules about when to stop breast-feeding. As long as the baby is eating age-appropriate solid foods, a mother may nurse for years if she wishes. A baby needs breast milk for the first year of life, and then as long as desired after that.

BENEFITS TO INFANTS

• The primary benefit of breast milk is nutritional. Human milk contains just the right amount of fatty acids, lactose, water, and amino acids for human digestion, brain development, and growth. Cow's milk contains a different type of protein than breast milk. This is good for calves, but human infants can have difficulty digesting it. Bottle-fed infants tend to be fatter than breast-fed infants, but not necessarily healthier.

• Because human milk transfers to the infant the mother's antibodies to disease, breast-fed babies have fewer illnesses. About 80 percent of the cells in breast milk are macrophages, cells that kill bacteria, fungi and viruses. Breast-fed babies are protected, in varying degrees, from a number of illnesses, including pneumonia, botulism, bronchitis, staphylococcal infections, influenza, ear infections, and German measles. Furthermore, mothers produce antibodies to whatever disease is present in their environment, making their milk custom-designed to fight the diseases their babies are exposed to as well.

• A breast-fed baby's digestive tract contains large amounts of *Lactobacillus bifidus*, beneficial bacteria that prevent the growth of harmful organisms. Human milk straight from the breast is always sterile, never contaminated by polluted water or dirty bottles, which can also lead to diarrhea in the infant.

• Human milk contains at least 100 ingredients not found in formula. No babies are allergic to their mother's milk, although they may have a reaction to something the mother eats. If she eliminates it from her diet, the problem resolves itself.

• Sucking at the breast promotes good jaw development as well. It's harder work to get milk out of a breast than a bottle, and the exercise strengthens the jaws and encourages the growth of straight, healthy teeth. The baby at the breast also can control the flow of milk by sucking and stopping. With a bottle, the baby must constantly suck or react to the pressure of the nipple placed in the mouth.

• Nursing may have psychological benefits for the infant as well, creating an early bond between mother and child. At birth, infants see only 12 to 15 inches, the distance between a nursing baby and its mother's face. Studies have found that infants as young as 1 week prefer the smell of their own mother's milk.

• Many psychologists believe the nursing baby enjoys a sense of security from the warmth and presence of the mother, especially when there's skin-to-skin contact during feeding. Parents of bottle-fed babies may be tempted to prop bottles in the baby's mouth, with no human contact during feeding. But a nursing mother must cuddle her infant closely many times during the day. Nursing becomes more than a way to feed a baby; it's a source of warmth and comfort.

BENEFITS TO MOTHER

• Breast-feeding is good for new mothers as well as for their babies. There are no bottles to sterilize and no formula to buy, measure and mix. It may be easier for a nursing mother to lose the pounds of pregnancy as well, since nursing uses up extra calories. Lactation stimulates the uterus to contract back to its original size.

• A nursing mother is forced to get needed rest. She must sit down, put her feet up, and relax every few hours to nurse. Nursing at night is easy as well. No one has to stumble to the refrigerator for a bottle and warm it while the baby cries. If she's lying down, a mother can doze while she nurses.

• Nursing is also nature's contraceptive—although not a very reliable one. Frequent nursing suppresses ovulation, making it less likely for a nursing mother to menstruate, ovulate, or get pregnant. There are no guarantees, however. Mothers who don't want more children right away should use contraception even while nursing. Hormone injections and implants are safe during nursing, as are all barrier methods of birth control. The labeling on birth control pills says if possible another form of contraception should be used until the baby is weaned. If birth control pills are selected, pills with progesterone only are preferable, because they have no recognized effects on milk production or quality.

• Breast-feeding is also economical. Even though a nursing mother works up a big appetite and consumes extra calories, the extra food for her is less expensive than buying formula for the baby. Nursing saves money while providing the best nourishment.

WHEN SHOULD YOU NOT BREAST-FEED

• There are very few medical reasons why a mother shouldn't breast-feed. Most common illnesses, such as colds, flu, skin infections, or diarrhea, cannot be passed through breast milk. In fact, if a mother has an illness, her breast milk will contain antibodies to it that will help protect her baby from those same illnesses.

• A few viruses can pass through breast milk, however. HIV, the virus that causes AIDS, is one of them. Women who are HIV positive should not breast-feed.

• A few other illnesses, such as herpes, hepatitis, and beta-streptococcus infections, can also be transmitted through breast milk. But that doesn't always mean a mother with those diseases should not breast-feed. Each case must be evaluated on an individual basis.

• Breast cancer is not passed through breast milk. Women who have had breast cancer can usually breast-feed from the unaffected breast. There is some concern that the hormones produced during pregnancy and lactation may trigger a recurrence of cancer, but so far this has not been proven. Studies have shown, however, that breast-feeding a child reduces a woman's chance of developing breast cancer later.

• Silicone breast implants usually do not interfere with a woman's ability to nurse, but if the implants leak, there is some concern that the silicone may harm the baby. If a woman with implants wants to breast-feed, she should first discuss the potential benefits and risks with her child's health care provider.

BREAST-FEEDING

(Sheet 2 of 2)

POSSIBLE PROBLEMS

- For all its health benefits, breast-feeding does have some disadvantages. In the early weeks, it can be painful. A woman's nipples may become sore or cracked. She may experience engorgement more than a bottle-feeding mother, when the breasts become so full of milk they're hard and painful. Some nursing women also develop clogged milk ducts, which can lead to mastitis, a painful infection of the breast. Mastitis requires prompt medical care.
- Another possible disadvantage of nursing is that it affects a woman's entire lifestyle. A nursing mother with baby-in-tow must wear clothes that enable her to nurse anywhere, or she'll have to find a private place to undress. She should eat a balanced diet and she might need to avoid foods that irritate the baby. She also shouldn't smoke, which can cause vomiting, diarrhea and restlessness in the baby, as well as decreased milk production.
- Women who plan to go back to work soon after birth will have to plan carefully if they want to breast-feed. If her job allows, a new mother can pump the breast milk several times during the day and refrigerate or freeze it for the baby to take in a bottle later. Or, some women alternate nursing at night and weekends with daytime bottles of formula.
- The immediate demands of nursing are potentially greater than those of bottle-feeding. However, if you consider the additional childhood illnesses, risk of colic or poor tolerance to formula, breast-feeding may actually be both easier and more time-efficient. Instead of feeling it's a chore, nursing mothers often cite this close relationship as one of the greatest joys of nursing. Besides, nursing mothers can get away between feedings if they need a break.
- Finally, some women just don't feel comfortable with the idea of nursing. They don't want to handle their breasts, or they want to think of them as sexual, not functional. They may be concerned about modesty and the possibility of having to nurse in public. They may want a break from child care to let someone else feed the baby, especially in the wee hours of the morning.
- If a woman is unsure whether she wants to nurse, she can try it for a few weeks and switch if she doesn't like it. It's very difficult to switch to breast-feeding after bottle-feeding is begun.
- If she plans to breast-feed, a new mother should learn as much as possible about it before the baby is born. Doctors, childbirth instructors, nurses, and midwives can all offer information about nursing. But perhaps the best ongoing support for a nursing mother is someone who has successfully nursed a baby.
- La Leche League, a national support organization for nursing mothers, has chapters in many cities that meet regularly to discuss breast-feeding problems and offer support. League leaders offer advice by phone as well. To find a convenient La Leche League chapter, call 1-800-LALECHE; website www.la lecheleague.org.

MEDICATIONS

- Most medicines have not been tested in nursing mothers.
- A nursing mother should advise any health care professional who prescribes a medication for her that she is breast-feeding.
- Read the instructions on nonprescription drugs to see if they are safe for breast-feeding. Ask the pharmacist or your health care provider if unsure.
- Avoid all drugs of abuse if breast-feeding.
- Some prescription drugs can be taken by a nursing mother if she stops breast-feeding for a few days or weeks. To maintain milk supply, she can pump her breasts and discard the milk; baby can be fed formula temporarily.

BREAST-FEEDING INSTRUCTIONS

- It's helpful for a woman who wants to breast-feed to learn as much about it as possible before delivery. The following tips can help foster successful nursing:
 - Get an early start: Nursing should begin within an hour after delivery if possible, when an infant is awake and the sucking instinct is strong. Even though the mother won't be producing milk yet, her breasts contain colostrum, a thin fluid that contains antibodies to disease.
 - Proper positioning: The baby's mouth should be wide open, with the nipple as far back into his or her mouth as possible. This minimizes soreness for the mother. A nurse, midwife, or other knowledgeable person can help her find a comfortable nursing position.
 - Nurse on demand: Newborns need to nurse frequently, at least every two hours, and not on any strict schedule. This will stimulate the mother's breasts to produce plenty of milk. Later, the baby can settle into a more predictable routine. But because breast milk is more easily digested than formula, breast-fed babies often eat more frequently than bottle-fed babies.
 - No supplements: Nursing babies don't need sugar water or formula supplements. These may interfere with their appetite for nursing, which can lead to a diminished milk supply. The more the baby nurses, the more milk the mother will produce.
 - Delay using artificial nipples: It's best to wait a week or two before introducing a pacifier, so that the baby doesn't get confused. Artificial nipples require a different sucking action than real ones. Sucking at a bottle could also confuse some babies in the early days. They, too, are learning how to breast-feed.
 - Air dry: In the early postpartum period or until her nipples toughen, the mother should air dry them after each nursing to prevent them from cracking, which can lead to infection. If her nipples do crack, the mother can coat them with breast milk or other natural moisturizers to help them heal. Vitamin E oil and lanolin are commonly used, although some babies may have allergic reactions to them. Proper positioning at the breast can help prevent sore nipples. Soreness can be caused when the baby does not have the nipple far enough back in his or her mouth.
 - Watch for infection: Symptoms of breast infection include fever and painful lumps and redness in the breast. These require immediate medical attention.
 - Expect engorgement: A new mother usually produces lots of milk, making her breasts big, hard and painful for a few days. To relieve this engorgement, she should feed the baby frequently and on demand until her body adjusts and produces only what the baby needs. In the meantime, the mother can take over-the-counter pain relievers, apply warm, wet compresses to her breasts, and take warm baths to relieve the pain.
 - Eat right, get rest: To produce plenty of good milk, the nursing mother needs a balanced diet that includes 500 extra calories a day and six to eight glasses of fluid. She should also rest as much as possible to prevent breast infections, which are aggravated by fatigue.

Note: This information adapted in part from the FDA Consumer (the magazine of the United States Food and Drug Administration).



NOTIFY OUR OFFICE IF

You or a family member has questions about breast-feeding.