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Breast-Feeding Best Bet for Babies

by Rebecca D. Williams

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.

"There are 4,000 species of mammals, and they all make a different milk. Human milk is made for human infants and it meets all their specific nutrient needs," says Ruth Lawrence, M.D., professor of pediatrics and obstetrics at the University of Rochester School of Medicine in Rochester, N.Y., and spokeswoman for the American Academy of Pediatrics.

The academy recommends that babies 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," says Lawrence. "As long as the baby is eating age-appropriate solid foods, a mother may nurse a couple of years if she wishes. A baby needs breast milk for the first year of life, and then as long as desired after that."

In 1993, 55.9 percent of American mothers breast-fed their babies in the hospital. Only 19 percent were still breast-feeding when their babies were 6 months old. Government and private health experts are working to raise those numbers.

The U.S. Food and Drug Administration is conducting a study on infant feeding practices as part of its ongoing goal to improve nutrition in the United States. The study is looking at how long mothers breast-feed and how they introduce formula or other foods.

Health experts say increased breast-feeding rates would save consumers money, spent both on infant formula and in health-care dollars. It could save lives as well.

"We've known for years that the death rates in Third World countries are lower among breast-fed babies," says Lawrence. "Breast-fed babies are healthier and have fewer infections than formula-fed babies."

Human Milk for Human 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.

Breast-fed babies have fewer illnesses because human milk transfers to the infant a mother's antibodies to disease. 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 attachment 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. When nursing pads soaked with breast milk are placed in their cribs, they turn their faces toward the one that smells familiar.

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 Mothers

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 also 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.

Breast-feeding is economical also. 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 possible.

When Formula's Necessary

There are very few medical reasons why a mother shouldn't breast-feed, according to Lawrence.

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 shouldn't breast-feed, Lawrence says.

"Each case must be evaluated on an individual basis with the woman's doctor," she says.

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. Some small studies have suggested a link between breast-feeding with implants and later development of problems with the child's esophagus. Further studies are needed in this area. But if a woman with implants wants to breast-feed, she should first discuss the potential benefits and risks with her child's doctor.

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. While most nursing problems can be solved with home remedies, mastitis requires prompt medical care (see accompanying article).

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 her 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 on weekends with daytime bottles of formula.

In either case, a nursing mother is physically tied to her baby more than a bottle-feeding mother. The baby needs her for nourishment, and she needs to nurse regularly to avoid getting uncomfortably full breasts. But 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. Obstetricians, pediatricians, 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.

"We encourage mothers to come to La Leche League before their babies are born," says Mary Lofton, a league spokeswoman. "On-the-job training is hard to do. It's so important to learn how to breast-feed beforehand to avoid problems."

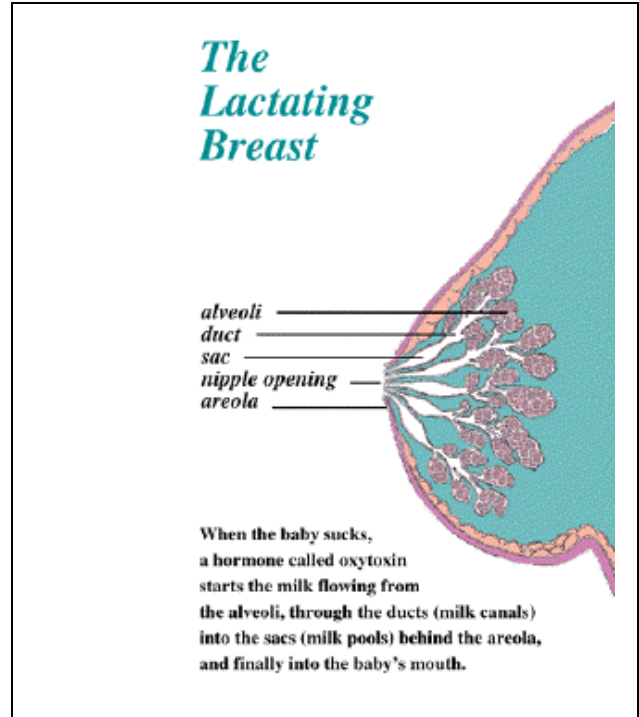
Interested women or couples are welcome to attend La Leche League meetings without charge. League leaders offer advice by phone as well. To find a convenient La Leche League chapter, call (1-800) LA-LECHE.

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Tips for Breast-Feeding Success

It's helpful for a woman who wants to breast-feed to learn as much about it as possible before delivery, while she is not exhausted from caring for an infant around-the-clock. 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 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. If the mother's very sore, the baby may 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.

--R.D.W.

Medicines and Nursing Mothers

Most medications have not been tested in nursing women, so no one knows exactly how a given drug will affect a breast-fed child. Since very few problems have been reported, however, most over-the-counter and prescription drugs, taken in moderation and only when necessary, are considered safe.

Even mothers who must take daily medication for conditions such as epilepsy, diabetes, or high blood pressure can usually breast-feed. They should first check with the child's pediatrician, however. To minimize the baby's exposure, the mother can take the drug just after nursing or before the child sleeps. In the January 1994 issue of *Pediatrics*, the American Academy of Pediatrics included the following in a list of drugs that are usually compatible with breast-feeding:

- acetaminophen
- many antibiotics
- antiepileptics (although one, Primidone, should be given with caution)
- most antihistamines
- alcohol in moderation (large amounts of alcohol can cause drowsiness, weakness, and abnormal weight gain in an infant)
- most antihypertensives
- aspirin (should be used with caution)
- caffeine (moderate amounts in drinks or food)
- codeine
- decongestants
- ibuprofen
- insulin
- quinine
- thyroid medications

Drugs That Are NOT Safe While Nursing

Some drugs can be taken by a nursing mother if she stops breast-feeding for a few days or weeks. She can pump her milk and discard it during this time to keep up her supply, while the baby drinks previously frozen milk or formula.

Radioactive drugs used for some diagnostic tests like Gallium-69, Iodine-125, Iodine-131, or Technetium-99m can be taken if the woman stops nursing temporarily.

Drugs that should never be taken while breast-feeding include:

Bromocriptine (Parlodel): A drug for Parkinson's disease, it also decreases a woman's milk supply.

Most Chemotherapy Drugs for Cancer: Since they kill cells in the mother's body, they may harm the baby as well.

Ergotamine (for migraine headaches): Causes vomiting, diarrhea, convulsions in infants.

Lithium (for manic-depressive illness): Excreted in human milk.

Methotrexate (for arthritis): Can suppress the baby's immune system.

Drugs of Abuse: Some drugs, such as cocaine and PCP, can intoxicate the baby. Others, such as amphetamines, heroin and marijuana, can cause a variety of symptoms, including irritability, poor sleeping patterns, tremors, and vomiting. Babies become addicted to these drugs.

Tobacco Smoke: Nursing mothers should avoid smoking. Nicotine can cause vomiting, diarrhea and restlessness for the baby, as well as decreased milk production for the mother. Maternal smoking or passive smoke may increase the risk of sudden infant death syndrome (SIDS) and may increase respiratory and ear infections.

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