



Is Breast Milk Best?

Deciding how to feed your baby is one of the most important decisions expectant parents make during pregnancy. The first year of your baby's life is a time of rapid growth. Most babies triple their birth weight during the first year.

During the first year of life, the brain is growing rapidly as well. The circumference of the head increases by 4 to 5 inches in the first year, and the brain and nervous system continue to develop until about age 3. That's why it's important to make sure your baby gets the nourishment he needs to develop to his fullest potential.

Average girls reach about half of their adult height by the age of 18 months, boys by 24 months. Until the age of 3, children should be weighed and measured by a health professional every six months to track their growth. Ask to see your baby's growth chart when you go for well-child check-ups.

► Is Breast Milk Best?

Breast milk has all the nutrients your baby needs in the right amounts. It also has antibodies from the mother's body, which help keep her baby from getting certain types of illnesses. For example, breastfed babies get fewer ear and respiratory infections. A baby who is sick less often is better able to learn. Breast milk provides everything most babies need to build a healthy brain and grow properly for the first six months of life.

► Ideally, How Long Should I Breastfeed?

For the first six months of life, breast milk provides all of the nutrients a baby needs. When babies are 6 months old, solid foods should be introduced to ensure that the baby is getting adequate nutrition. According to the American Academy of Pediatrics, it is ideal to breastfeed until the baby is at least 12 months old.

► Is Breast-Feeding Worth it if I Can Only Do It for a Short Time?

Absolutely! The first milk a new mother's body produces is the colostrum. Colostrum is especially high in antibodies, which help keep your baby from getting sick. Breastfeeding when your baby is born can help her

get a healthy start. Even if you breastfeed for fewer than 12 months, the nutrition your baby receives from breast milk contributes to healthy brain development.



► Can I Combine Breastfeeding and Bottle-Feeding?

Breastfeeding doesn't have to be "all or nothing." Some mothers find that breastfeeding once or twice a day, with bottle feedings in between, fits into their schedules better than breastfeeding exclusively. You should wait to do this until the baby is at least 3 to 4 weeks old to introduce bottle-feeding. This will allow enough time for your milk supply to become established and for the baby to get used to a regular breastfeeding routine.

Bottles should contain iron-fortified infant formula or breast milk. Be aware that the more formula the baby eats, the less breast milk he will want and the less milk your body will produce. Even though breast milk is uniquely designed for the needs of your baby, infant formula has also been made to be as close to breast milk as possible.

Even though it is made from cow's milk, soy milk, or other substances, it has been adjusted to make it more like breast milk by changing or adding certain nutrients. Like breast milk, formula will have everything your baby will need for the first six months. However, it does not have the antibodies contained in breast milk.

► What Can You Do?

Whether you breastfeed or bottle-feed your baby, make feeding time a special time. Research shows that you can enhance your baby's brain development. Here are some ways to do this:

- **Talk to your baby during feedings.** Babies whose parents talk to them often have larger vocabularies than other children.
- **Hold your baby when feeding him.** The baby's vision is most clear at about 10 inches—the distance between your eyes and hers when feeding.
- **Respond to your baby's signals.** Babies who turn away from the breast or bottle may not be hungry. Pay attention to the ways he responds. Your baby will communicate with you even before he can talk.
- **Hold the bottle upright when bottle-feeding.** This helps prevent ear infections, which could limit your baby's hearing and ability to learn.
- **Hug and cuddle your baby.** This helps your baby feel secure and leads to healthy psychosocial development.



Selected References:

- Bales, D. W., Falen, K., Butler, T., Marshall, L. E., Searle, L., & Semple, P. (2012). *Better Brains for Babies Trainer's Guide*, (2nd ed.).
- American Academy of Pediatrics (2009). *Pediatric nutrition handbook* (6th ed.). Elk Grove Village, IL: American Academy of Pediatrics.
- Brown, J. E. (2014). *Nutrition through the life cycle* (5th ed.). Stamford, CT: Cengage Learning.
- Herba, C. M., Roza, S., Govaert, P., Hofman, A., Jaddoe, V., Verhulst, F. C., & Tiemeier, H. (2013). *Breastfeeding and early brain development: the Generation R study. Maternal & Child Nutrition*, 9 (3), 332-349.
- Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.

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For more information about brain development, visit www.bbbgeorgia.org

Adapted from UGA Extension Series *Building Baby's Brain*, authored by Diane Bales and published August 2014

