

Benefits of Breastfeeding



Breastfeeding is universally endorsed by the world's health and scientific organizations as the best way of feeding infants.^{1–3} Years of research have shed light on the vast array of benefits not only for children but also for mothers and society.

For children, breastfeeding supports optimal development and protects against acute and chronic illness.

For mothers, breastfeeding helps with recovery from pregnancy and childbirth and provides lifelong health advantages.

For society, breastfeeding provides a range of economic and environmental rewards.

Benefits for Children

Breastfeeding offers advantages for children that cannot be duplicated by any other form of feeding. The benefits of breastfeeding begin from the first moments after childbirth and last for many years after breastfeeding ends. Compared with formula-fed children, those who are breastfed are healthier and have fewer symptoms and shorter illnesses when they do get sick. Breastfed children:

- score higher on cognitive and IQ tests at school age, and also on tests of visual acuity⁴⁻⁶
- have a lower incidence of sudden infant death syndrome (SIDS)
- are less likely to suffer from infectious illnesses and their symptoms (e.g., diarrhea,⁷ ear infections,^{7,8} respiratory tract infections, meningitis⁷)
- have a lower risk of the two most common inflammatory bowel diseases (Crohn's disease, ulcerative colitis)⁹
- suffer less often from some forms of cancer (e.g., Hodgkin's disease,¹⁰ childhood leukemia)
- have a lower risk of juvenile onset diabetes, if they have a family history of the disease and are breastfed exclusively for at least 4 months⁹

- are significantly protected against asthma and eczema, if at risk for allergic disorders and exclusively breastfed for at least 4 months^{11,12}
- may have a lower risk of obesity in childhood and in adolescence^{13,14}
- have fewer cavities and are less likely to require braces

Breastfeeding provides benefits not just for full-term infants but also for premature and low birthweight infants.

Compared with premature infants who receive human milk, those who receive formula have future IQs that are 8–15 points lower.

For premature infants, human milk:

- significantly shortens length of hospital stay
- reduces hospital costs
- hastens brainstem maturation
- reduces the risk of life-threatening disease of the gastrointestinal system and other infectious diseases

Benefits for Mothers

Breastfeeding offers a range of benefits for mothers as well as their children.

Women who have breastfed are less likely to develop ovarian and premenopausal breast cancers.^{16,17} The more months a woman has spent breastfeeding, the greater the beneficial effect.

Breastfeeding reduces osteoporosis.

Breastfeeding mothers enjoy a quicker recovery after childbirth, with reduced risk of postpartum bleeding.¹⁶

Mothers who breastfeed are more likely to return to their prepregnancy weight than mothers who formula feed.¹⁶ Breastfeeding reduces the risk for long-term obesity.

Exclusive breastfeeding may reduce the risk of anemia by delaying the return of the menstrual cycle for 20 to 30 weeks.¹⁷



Exclusive breastfeeding for the first 6 months postpartum, in the absence of menses, is 98 percent effective in preventing pregnancy.¹⁷

Breastfeeding mothers are reported to be more confident and less anxious than bottle-feeding mothers.¹⁸

Breastfeeding contributes to feelings of attachment between a mother and her child.

Breast Milk Facts

Breast milk is an amazing substance that cannot be duplicated by any artificial means.^{7,15} Unique in its composition and function, breast milk:

- contains an ideal balance of nutrients that the infant can easily digest
- changes over time, and even over the course of a day, to meet the changing needs of the growing child
- contains substances essential for optimal development of the infant's brain, with effects on both cognitive and visual function⁹
- supplies growth factors that combine to mature the infant gut
- provides the infant with immune factors manufactured to fight allergens and illnesses specific to the mother's and infant's environment

Benefits for Society

Breastfeeding offers society not only improved health of children and mothers but also economic and environmental benefits.

Breastfeeding reduces the need for costly health services that must be paid for by insurers, government agencies, or families.

Breastfeeding reduces the number of sick days that families must use to care for their sick children.

The estimated cost of artificial feeding (up to \$1,200 per year for powdered formula) is four times that of breastfeeding (approximately \$300 per year for increased food for a lactating woman).

Concentrated and ready-to-feed formulas are even more expensive than powdered formula. The cost of artificial feeding has increased steadily over the last 10 years.

Electricity or fuel are consumed in the preparation of infant formula.

Breastfeeding requires no packaging, and its production does not harm the environment.

What's Needed

Though any amount of breastfeeding is beneficial, exclusive breastfeeding that lasts beyond the first few weeks of life is best.

Exclusive breastfeeding for the first 6 months of life, with gradual introduction of solid foods after 6 months, is recognized as the preferred method of infant feeding.

Breastfeeding provides ideal nutrition despite any social or economic disadvantages that may exist for the child.

Greater numbers of women are choosing to initiate breastfeeding, but ethnic and social disparities persist.

Breastfeeding rates can be increased by:

- Culturally appropriate and skilled lactation support
- Worksite support for breastfeeding mothers
- Accommodation for human milk feeding in child care settings
- Appropriate legislation

For more information on breastfeeding benefits and promotion, visit the United States Breastfeeding Committee's Web site at www. usbreastfeeding.org.

References

- American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics* 1997; 100: 1035–1039.
- Institute of Medicine. Nutrition during lactation. Washington, DC: National Academy Press, 1991.
- World Health Organization. The optimal duration of exclusive breastfeeding: results of a WHO Systematic Review. Available at: http://www.who.int/ inf-pr-2001/en/note2001-07.html
- Anderson JW, Johnstone BM, Remley DT. Breastfeeding and cognitive development: a meta-analysis. *Am J Clin Nutr* 1999; 70: 525–535.
- Drane DL, Logemann JA. A critical evaluation of the evidence on the association between type of infant feeding and cognitive development. *Pediatr Epidemiol* 2000; 14: 349–356.
- Lykke Mortensen E, Fleischer Michaelsen K, Sanders SA, Reinisch JM. The association between duration of

Economic Facts

Economic facts related to breastfeeding in the United States include:

- \$2 billion per year is spent by families on breast milk substitutes such as infant formula
- \$578 million per year in federal funds is spent by the U.S. Department of Agriculture's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) to buy formula for babies who are not breastfeeding
- Every 10 percent increase in the breastfeeding rate among WIC recipients would save WIC \$750,000 per year
- \$1.3 billion more is spent by insurers, including Medicaid, to cover sick-child office visits and prescriptions to treat the three most common illnesses—respiratory infections, otitis media (ear infections), and diarrhea—in the first year of life for formula-fed infants versus breastfed infants.¹⁹
- \$3.6 to 7 billion excess dollars are spent every year on conditions and diseases that are preventable by breastfeeding²⁰

breastfeeding and adult intelligence. *JAMA* 2002; 287: 2365–2371.

- Heinig MJ. Host defense benefits of breastfeeding for the infant: effect of breastfeeding duration and exclusivity. *Pediatr Clin North Am*, 2001; 48: 105–123.
- Uhari M, Matysaari K, Niemela M. A meta-analytic review of the risk factors for acute otitis media. *Clin Infect Dis* 1996; 22: 1079–1083.
- 9. Heinig MJ, Dewey KG. Health advantages of breastfeeding for infants: a critical review. *Nutr Res Rev* 1996; 9: 89–110.
- Davis MK. Review of the evidence for an association between infant feeding and childhood cancer. *In J Cancer* Suppl 1998; 11: 29–33.
- Gdalevich M, Mimouni D, David M, Mimouni M. Breast-feeding and the onset of atopic dermatitis in childhood: a systematic review and meta-analysis of prospective studies. *J Am Acad Dermatol* 2001; 45:520–527.
- Gdalevich M, Mimouni D, Mimouni M. Breast-feeding and the risk of bronchial asthma in childhood: a systematic review with meta-analysis of prospective studies. *J Pediatr* 2001; 139: 261–266.
- Butte NF. The role of breastfeeding in obesity. *Pediatric Clinics of North America* 2001; 48: 189–198.
- Gillman MW, Rifas-Shiman SL, Camargo CA Jr, Berkey CS, Frazier AL, Rockett HR, Field AE, Colditz GA. Risk of overweight among adolescents who were breastfed as infants. *JAMA* 2001; 285: 2461–2467.
- Picciano MF. Nutrient composition of human milk. *Pediatr Clin North Am* 2001; 48: 53–67.
- Heinig MJ, Dewey KG. Health advantages of breastfeeding for mothers: a critical review. *Nutr Res Rev* 1997; 10: 35–56.
- Labbok MH. Effects of breastfeeding on the mother. *Pediatr Clin North America* 2001; 48: 143–158.
- Lawrence RA, Lawrence RM. Breastfeeding: a guide for the medical profession. 5th edition. Mosby, St. Louis, 1999.
- Weimer J. *The economic benefits of* breastfeeding: a review and analysis.
 Washington, DC: USDA; 2001 Mar. ERS Food Assistance and Nutrition Research Report No. 13.
- Ball TM, Wright AL. Health care costs of formula feeding in the first year of life. *Pediatrics* 1999; 103 (4 pt 2): 870–876.

For Further Information

For further information, contact:

U.S. Department of Health and Human Services, Maternal and Child Health Bureau (MCHB)

www.mchb.hrsa.gov

United States Breastfeeding Committee

www.usbreastfeeding.org

Goals of the United States Breastfeeding Committee

protecting | promoting | supporting

The mission of the United States Breastfeeding Committee (USBC) is to protect, promote, and support breastfeeding in the United States. The USBC exists to ensure the rightful place of breastfeeding in society.

The USBC works to achieve the following goals:

Goal I

Ensure access to comprehensive, current, and culturally appropriate lactation care and services for all women, children, and families.

Goal II

Ensure that breastfeeding is recognized as the normal and preferred method of feeding infants and young children.

Goal III

Ensure that all federal, state, and local laws relating to child welfare and family law recognize and support the importance and practice of breastfeeding.

Goal IV

Increase protection, promotion, and support for breastfeeding mothers in the work force.

Visit us at www.usbreastfeeding.org.

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