

Breastfeeding Is Priceless

No Substitute for Human Milk

A CIMS Fact Sheet

The World Health Organization, health care associations, and government health agencies affirm the scientific evidence of the clear superiority of human milk and of the hazards of artificial milk products. The World Health Organization recommends that mothers exclusively breastfeed their infants for at least the first six months, continuing breastfeeding for two years and beyond.¹ Human milk provides optimal benefits for all infants, including premature and sick newborns. The American Academy of Pediatrics encourages pediatricians to promote, protect, and support breastfeeding in their individual practices as well as in hospitals, medical schools, communities, and the nation.²

Although more US mothers are initially breastfeeding their infants, in 2001 less than half of mothers who initiated breastfeeding did so exclusively (without supplementing with artificial milk or cow's milk) and less than one in five were breastfeeding exclusively at 6 months.³ A Healthy People 2010 goal is to have three-quarters of mothers initiate breastfeeding at birth, half of them breastfeed until at least the fifth or sixth month, and one-fourth to breastfeed their babies through the end of the first year.⁴

Human milk is unique. Superior nutrients and beneficial substances found in human milk cannot be duplicated. Breastfeeding provides optimum health, nutritional, immunological and developmental benefits to children and protection from postpartum complications and future disease for mothers.

Benefits of Breastfeeding for Children

Enhanced Immune System and Resistance to Infections.

- ◆ The infant's immune system is not fully mature until about 2 years of age. Human milk contains an abundance of infection fighting factors that are transferred to the child, including agents that act against viruses, bacteria, and intestinal parasites.
- ◆ Breastfeeding reduces the incidence of respiratory infections, ear infections, pneumonia, diarrhea, and urinary tract infections.
- ◆ Breastfeeding helps protect against sudden infant death syndrome (SIDS).
- ◆ Human milk contains factors that enhance the immune response to polio, tetanus, diphtheria, and influenza.

Protection Against Chronic Disease

- ◆ Exclusive breastfeeding for a minimum of four months decreases the risk of Type I diabetes (insulin-dependent diabetes mellitus) for children with a family history of diabetes.
- ◆ Exclusive breastfeeding for a minimum of four months decreases the incidence of asthma and eczema.
- ◆ Anti-inflammatory factors in human milk reduce the incidence of bowel diseases such as Crohn's disease and ulcerative colitis.
- ◆ Breastfed children are less likely to develop Hodgkin's disease or leukemia in childhood.

Nutritional, Physical, and Mental Benefits

- ◆ Human milk is *the* ideally balanced and easily digested form of infant nutrition. Human milk is less stressful on immature infant kidneys and contains lipids and enzymes that promote efficient digestion and enhance nutrient absorption.
- ◆ The composition of human milk changes over the course of a feed, the day, and over time to accommodate the changing needs of the growing child.
- ◆ Breastfeeding reduces the risk of childhood obesity. Breastfed children gain less weight and are leaner at one year than formula-fed children.
- ◆ Human milk contains long-chain polyunsaturated fatty acids important for brain growth.
- ◆ School age children who were breastfed score higher on cognitive and IQ tests and tests of visual acuity.
- ◆ Breastfeeding decreases the incidence of dental cavities and the need for orthodontistry.

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Benefits of Breastfeeding for Premature Infants

- ◆ Mothers of premature infants produce milk that is higher in protein and other nutrients than milk produced by mothers of full-term infants.
- ◆ Human milk contains an enzyme that helps the baby digest fat more efficiently.
- ◆ Breastfeeding premature infants helps protect them against gastrointestinal and infectious disease.
- ◆ Human milk enhances brain stem maturation in premature infants and raises childhood IQ test scores.
- ◆ Breastfeeding the premature infant reduces hospital costs and length of hospital stay.

Benefits of Breastfeeding for the Mother

- ◆ Women who start breastfeeding immediately benefit from an increased level of oxytocin, a hormone that stimulates uterine contractions lowering the risk for postpartum bleeding.
- ◆ Women who breastfeed are more likely to lose their pregnancy weight and less likely to become obese.
- ◆ Breastfeeding reduces the risk of ovarian and pre-menopausal breast cancer, heart disease, and osteoporosis. The more months women breastfeed over their lifetime, the greater the protection.
- ◆ Exclusive breastfeeding delays the return of the menstrual cycle for 20 to 30 weeks and may lower the risk of anemia.

The Cost of Not Breastfeeding

- ◆ US families spend \$2 billion a year on human milk substitutes such as artificial milk otherwise known as formula.
- ◆ It costs an additional \$1.3 billion dollars to cover sick-child office visits and prescriptions for respiratory infections, ear infections, and diarrhea in non-breastfed infants during the first year.
- ◆ In the first year of life, it will cost more than \$25,000 to treat lower-respiratory infections in 1,000 never-breastfed infants compared with 1,000 infants exclusively breastfed for at least three months.
- ◆ The excess cost of treating Type I diabetes (insulin-dependent diabetes mellitus) in formula-fed children is more than \$1 trillion.
- ◆ Private and government insurers spend a minimum of \$3.6 billion a year to treat medical conditions and diseases preventable by breastfeeding.

Formula has a long history of recalls for bacterial contamination or mis-manufacture that have in many cases resulted in instances of illness, permanent injury, or death. Information on formula recalls is available at: <http://www.salerts.com/rcls/category/child.htm>

Sources

¹ U.S. Department of Health and Human Services. *HHS Blueprint for Action on Breastfeeding*, Washington, D.C. Office of Women's Health, 2000. Available at: <http://www.cdc.gov/breastfeeding/report-blueprint.htm>

² American Academy of Pediatrics Policy Statement, Work Group on Breastfeeding. *Breastfeeding and the Use of Human Milk (RE9729)*. *Pediatrics* 1997; 1035-1039. Available at: <http://www.aap.org/policy/re9729.html>

³ Ryan, A. S. Breastfeeding continues to increase into the new millennium. *Pediatrics* 2002; 110: 1103-1109.

⁴ U.S. Department of Health and Human Services. *Healthy People 2010*, Washington, D.C. Office of Disease Prevention and Health Promotion, 2002. Available at: <http://www.healthypeople.gov>

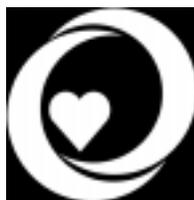
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The Coalition for Improving Maternity Services (CIMS), a United Nations recognized NGO, is a collaborative effort of numerous individuals, leading researchers, and more than 50 organizations representing over 90,000 members. Promoting a wellness model of maternity care that will improve birth outcomes and substantially reduce costs, CIMS developed the Mother-Friendly Childbirth Initiative in 1996. A consensus document that has been recognized as an important model for improving the healthcare and well being of children beginning at birth, the Mother-Friendly Childbirth Initiative has been translated into several languages and is gaining support around the world.

Please contact us for a complementary copy of this fact sheet, or other CIMS publications, please contact.



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Extended Breastfeeding Fact Sheet

Nursing toddlers benefit NUTRITIONALLY

Although there has been little research done on children who breastfeed beyond the age of two, the available information indicates that breastfeeding continues to be a valuable source of nutrition and disease protection for as long as breastfeeding continues.

"Breast milk continues to provide substantial amounts of key nutrients well beyond the first year of life, especially protein, fat, and most vitamins." (Dewey 2001)

In the second year (12-23 months), 448 mL of breastmilk provides: 29% of energy requirements, 43% of protein requirements, 36% of calcium requirements, 75% of vitamin A requirements, 76% of folate requirements, 94% of vitamin B₁₂ requirements & 60% of vitamin C requirements (Dewey 2001).

Studies done in rural Bangladesh have shown that breastmilk continues to be an important source of vitamin A in the second and third year of life (Persson 1998).

It's not uncommon for weaning to be recommended for toddlers who are eating few solids. However, this recommendation is *not* supported by research. According to Sally Kneidel in "Nursing Beyond One Year" (Kneidel 1990):

"Some doctors may feel that nursing will interfere with a child's appetite for other foods. Yet there has been no documentation that nursing children are more likely than weaned children to refuse supplementary foods. In fact, most researchers in Third World countries, where a malnourished toddler's appetite may be of critical importance, recommend continued nursing for even the severely malnourished (Briend et al, 1988; Tangermann, 1988; Shattock and Stephens, 1975; Whitehead, 1985). Most suggest helping the malnourished older nursing child not by weaning but by supplementing the mother's diet to improve the nutritional quality of her milk (Ahn and MacLean, 1980; Jelliffe and Jelliffe, 1978) and by offering the child more varied and more palatable foods to improve his or her appetite (Tangermann, 1988; Underwood, 1985)."

Nursing toddlers are SICK LESS OFTEN

The American Academy of Family Physicians notes that children weaned before two years of age are at increased risk of illness (AAFP 2001).

Nursing toddlers between the ages of 16 and 30 months have been found to have fewer illnesses and illnesses of shorter duration than their non-nursing peers (Gulick 1986).

"Antibodies are abundant in human milk throughout lactation" (Hamosh 1991; p. 134). In fact, some of the immune factors in breastmilk increase in concentration during the second year and also during the weaning process (Goldman 1983, Goldman & Goldblum 1983, Hamosh 1991).

Per the World Health Organization, *"a modest increase in breastfeeding rates could prevent up to 10% of all deaths of children under five: Breastfeeding plays an essential and sometimes underestimated role in the treatment and prevention of childhood illness."*

Nursing toddlers are SMART

Extensive research on the relationship between cognitive achievement (IQ scores, grades in school) and breastfeeding has shown the greatest gains for those children breastfed the longest.

Nursing toddlers have FEWER ALLERGIES

Many studies have shown that one of the best ways to prevent allergies and asthma is to breastfeed exclusively for at least 6 months and to continue breastfeeding long-term after that point. Breastfeeding can be helpful in preventing allergy by:

- (1) reducing exposure to potential allergens (when baby is exposed later, allergic reactions are less likely),
- (2) speeding maturation of the protective barrier in baby's intestines,
- (3) coating the gut and providing a barrier to potentially allergenic molecules,
- (4) providing anti-inflammatory properties that reduce the risk of infections (which can act as allergy triggers).

Nursing toddlers are WELL ADJUSTED SOCIALLY

According to Sally Kneidel in "Nursing Beyond One Year" (Kneidel 1990): *"Research reports on the psychological aspects of nursing are scarce. One study that dealt specifically with babies nursed longer than a year showed a significant link between the duration of nursing and mothers' and teachers' ratings of social adjustment in six- to eight-year-old children (Ferguson et al, 1987). In the words of the researchers, 'There are statistically significant tendencies for conduct disorder scores to decline with increasing duration of breastfeeding.'"*

Children who achieve independence at their own pace are more secure in that independence than children forced into independence prematurely. Per Elizabeth N. Baldwin, Esq. in "Extended Breastfeeding and the Law": *"Breastfeeding is a warm and loving way to meet the needs of toddlers and young children. It not only perks them up and energizes them; it also soothes the frustrations, bumps and bruises, and daily stresses of early childhood. In addition, nursing past infancy helps little ones make a gradual transition to childhood... Meeting a child's dependency needs is the key to helping that child achieve independence. And children outgrow these needs according to their own unique timetable."*

Nursing a toddler is NORMAL

The American Academy of Pediatrics recommends that *"Breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child... Increased duration of breastfeeding confers significant health and developmental benefits for the child and the mother... There is no upper limit to the duration of breastfeeding and no evidence of psychologic or developmental harm from breastfeeding into the third year of life or longer." (AAP 2005)*

The American Academy of Family Physicians recommends that breastfeeding continue throughout the first year of life and that *"Breastfeeding beyond the first year offers considerable benefits to both mother and child, and should continue as long as mutually desired."* They also note *"If the child is younger than two years of age, the child is at increased risk of illness if weaned."* (AAFP 2001)

A US Surgeon General has stated that it is a lucky baby who continues to nurse until age two. (Novello 1990)

The World Health Organization & UNICEF emphasize the importance of nursing up to two years of age or beyond (WHO 1992, 2002).

Scientific research by Katherine A. Dettwyler, PhD shows that 2.5 to 7.0 years of nursing is what our children have been designed to expect (Dettwyler 1995).

MOTHERS also benefit from nursing past infancy

- Extended nursing delays the return of fertility in some women by suppressing ovulation.
- Breastfeeding reduces the risk of breast cancer. Studies have found a significant inverse association between duration of lactation and breast cancer risk.
- Breastfeeding reduces the risk of ovarian cancer.
- Breastfeeding reduces the risk of uterine cancer.
- Breastfeeding reduces the risk of endometrial cancer.

- Breastfeeding reduces the risk of rheumatoid arthritis.
- Breastfeeding protects against osteoporosis. During lactation a mother may experience decreases of bone mineral. A nursing mom's bone mineral density may be reduced in the whole body by 1 to 2 percent while she is still nursing. This is gained back, and bone mineral density may actually increase, when the baby is weaned from the breast. This is not dependent on additional calcium supplementation in the mother's diet.
- Breastfeeding has been shown to decrease insulin requirements in diabetic women.
- Breastfeeding mothers tend to lose weight easier.

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