

# Lamaze International

# Position Paper Breastfeeding is Priceless: No Substitute for Human Milk

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.

#### Introduction

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.<sup>1</sup> 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.<sup>2</sup>

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.<sup>3</sup> 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.<sup>4</sup>

## **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 also 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 also 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 also decreases the incidence of dental cavities and the need for orthodontistry.

#### 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 to 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 also 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 1,000 never-breastfed infections in 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

#### References

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

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

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

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

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The information provided in this position paper has been adopted from The Coalition for Improving Maternity Services (CIMS). The Coalition for Improving Maternity Services, 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.