



# BREASTFEEDING IS PRICELESS

## There Is No Substitute for Human Milk

*A Coalition for Improving Maternity Services Fact Sheet*

The World Health Organization (WHO), 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 WHO and the American Academy of Pediatrics recommend that mothers exclusively breastfeed their infants for the first six months, and continue for at least a year and as long thereafter as mother and baby wish.<sup>1</sup>

*Human milk provides optimal benefits for infants, including premature and sick newborns. Human milk is unique. Superior nutrients and beneficial substances found in human milk cannot be duplicated. Breastfeeding provides optimum health, nutritional, immunologic and developmental benefits to newborns as well as protection from postpartum complications and future disease for mothers.*

A U.S. Healthy People 2010 goal is to have three-quarters of mothers initiate breastfeeding at birth, with half of them breastfeeding until at least the 5<sup>th</sup> or 6<sup>th</sup> month, and one-fourth to breastfeed their babies through the end of the first year.<sup>2</sup> In 2007 only four states met all five Healthy People 2010 targets for breastfeeding.<sup>3</sup>

### **Maternity Care Practices Greatly Affect Breastfeeding**

Labor, birth, and postpartum practices can facilitate or discourage the initiation, establishment, and continuation of breastfeeding.<sup>4, 5, 6, 7</sup> According to the U.S. Centers for Disease Control and Prevention (CDC), many birth facilities have policies and practices that are not evidence-based and are known to interfere with breastfeeding in the early postpartum period and after discharge.<sup>8</sup> The World Health Organization,<sup>9</sup> the American Association of Pediatrics,<sup>10</sup> the American Academy of Family Physicians,<sup>11</sup> and the Academy of Breastfeeding Medicine<sup>12</sup> recommend that maternity health professionals provide birth and postpartum care that is supportive of breastfeeding.

The World Health Organization has identified the following intrapartum mother-friendly childbirth practices as supportive of breastfeeding:

- minimizing routine procedures that are not supported by scientific evidence;
- minimizing invasive procedures and medications;
- providing emotional and physical support in labor;
- freedom of movement and choice of positions during labor and birth;
- staff trained in non-drug methods of pain relief and who do not promote the use of analgesics or anesthetic drugs unless required by a medical condition;
- no unnecessary induction or augmentation of labor, instrumental delivery, and cesarean section.<sup>13</sup>

The quality of care provided in the first 24 hours after birth is critical to the successful initiation and continuation of breastfeeding. Hospitals and birth centers which encourage and support breastfeeding are more likely to care for mothers and newborns in the following ways:

- Provide mothers with comprehensive, accurate, and culturally appropriate breastfeeding education and counseling.
- Encourage skin-to-skin contact for at least thirty minutes between mother and baby within one hour of an uncomplicated vaginal birth or within two hours for an uncomplicated cesarean birth.
- Give mothers the opportunity to breastfeed within one hour of uncomplicated vaginal birth and two hours of an uncomplicated cesarean birth.
- Encourage newborns to receive breast milk as their first feeding after both uncomplicated vaginal birth and cesarean birth.
- Perform routine newborn procedures while keeping mother and baby skin-to-skin.
- Help mothers with breastfeeding and teach parents how to recognize and respond to their baby's feeding cues.
- Encourage rooming in and help the mother to be comfortable with baby care in her own room.
- Avoid separations of healthy mothers and babies, and encourage continuous skin to skin contact. Promote as much skin to skin contact of sick babies with mothers as possible.
- Do not give pacifiers to breastfeeding newborns, or any other supplements, formula, water or glucose water to healthy babies.
- Do not give mothers discharge gift bags with formula samples or formula discount coupons.
- Provide mothers with breastfeeding support after hospital or birth center discharge. Support may include: a home visit or hospital postpartum visit, referral to local community resources, follow-up telephone contact, a breastfeeding support group, or an outpatient clinic.<sup>14</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 white blood cells that are transferred to the child, acting to fight infections from viruses, bacteria, and intestinal parasites.
- Human milk contains factors that enhance the immune response to inoculations against polio, tetanus, diphtheria, and influenza.<sup>15</sup>
- Breastfeeding reduces the incidence and/or severity of several infectious diseases including respiratory tract infections, ear infections, bacterial meningitis, pneumonia, urinary tract infections, and greatly reduces the incidence of infant diarrhea.
- After the first month of life, rates of infant mortality in the U.S. are reduced by 21% in breastfed infants.
- Breastfed infants are at lower risk for sudden infant death syndrome (SIDS).<sup>16</sup>

### 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, and may reduce the incidence of Type 2 diabetes later in life.
- Breastfed children are less likely to suffer from some forms of childhood cancer such as Hodgkin's disease, and leukemia.
- Breastfeeding reduces the risk for obesity, high blood pressure, and high cholesterol levels later in life.<sup>17</sup>
- Human milk contains anti-inflammatory factors that lower the incidence of bowel diseases such as Crohn's disease and ulcerative colitis.<sup>18</sup>
- The incidence of asthma and eczema are lower for infants who are exclusively breastfed for at least 4 months, especially in families at high risk for allergies.<sup>19</sup>

### Breastfeeding Premature and High-Risk Infants

- Breastfeeding and banked human milk are protective and beneficial for preterm infants.
- Hospitals and physicians should recommend human milk for premature and other high risk infants.<sup>20</sup>
- Breast milk lowers the premature infant's risk for gastrointestinal and infectious disease and reduces the incidence of necrotizing enterocolitis (inflammation with possible tissue death and perforation of the small intestines and colon).<sup>21</sup>
- Human milk enhances brainstem maturation. Compared to premature babies who receive formula, preterm infants who receive breast milk score higher on future I.Q. tests.
- Breastfeeding the premature infant reduces hospital costs and the length of hospital stay significantly.<sup>22</sup>

### Benefits of Breastfeeding for the Mother

- Women who breastfeed benefit from an increased level of oxytocin, a hormone that stimulates uterine contractions lowering the risk for postpartum bleeding. Women recover better with less blood loss at birth.
- Exclusive breastfeeding frequently but not always delays the return of a woman's ovulation and menstruation for a variable 20 to 30 weeks or more. This provides a natural means of child spacing for many.
- Breastfeeding may enhance feelings of attachment between mother and baby.
- Breastfeeding lowers a mother's risk for developing ovarian and pre-menopausal breast cancer and heart disease, and may decrease the risk of osteoporosis later in life. The benefits increase the longer she breastfeeds.<sup>23</sup>
- Breastfeeding women without a history of gestational diabetes are less likely to develop Type 2 diabetes later in life.<sup>24</sup>

### The Cost of Not Breastfeeding

- Private and government insurers spend a minimum of \$3.6 billion dollars a year to treat medical conditions and diseases that are preventable by breastfeeding.<sup>25</sup>
- Since children who are not breastfed have more illnesses, employers incur additional costs for increased health claims, and mothers lose more time from work to care for sick children.<sup>26</sup>

## References

1. American Academy of Pediatrics, Committee on Breastfeeding, Breastfeeding and the Use of Human Milk, Revised, Pediatrics 115 (2005): 496-506.
2. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, (2000). Healthy People 2010, Maternal, Infant, and Child Health, 16-30. Washington, D.C. Healthy People, <http://www.healthypeople.gov/Document/pdf/Volume2/16MICH.pdf>
3. U.S. Centers for Disease Control and Prevention, Breastfeeding-Related Maternity Practices at Hospitals and Birth Centers-United States, 2007. *Morbidity and Mortality Weekly Report*, (June 13, 2008): 621-625. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5723a1.htm>
4. U.S. Department of Health and Human Services. Office on Women's Health, (2000). HHS Blueprint for Action on Breastfeeding. Washington, D.C. Office of Women's Health
5. American Academy of Pediatrics, 2005.
6. U.S. Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Report*, June 13, 2008
7. World Health Organization (2003). Infant and Young Child Feeding. A Tool for assessing National Practices, Policies and Programs. Geneva: WHO. [http://www.who.int/nutrition/publications/infantfeeding/inf\\_assess\\_nnp\\_eng.pdf](http://www.who.int/nutrition/publications/infantfeeding/inf_assess_nnp_eng.pdf)
8. U.S. Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, June 13, 2008.
9. World Health Organization, 2003.
10. American Academy of Pediatrics, 2005.
11. American Academy of Family Physicians (2007). Family Physicians Supporting Breastfeeding, Position Paper, <http://www.aafp.org/online/en/home/policy/policies/b/breastfeedingpositionpaper.printerview.html>
12. Academy of Breastfeeding Medicine, ABM Protocols, (2006). Protocol 15: Analgesia and Anesthesia for the Breastfeeding Mother. <http://www.bfmed.org/Resources/Protocols.aspx>
13. World Health Organization, 2003.
14. U.S. Centers for Disease Control and Prevention. Scoring Explanation for the 2007 CDC Maternity Practices in Infant Nutrition and Care (mPINC) Survey. [http://www.cdc.gov/breastfeeding/pdf/mPINC\\_Scoring\\_Explanation.pdf](http://www.cdc.gov/breastfeeding/pdf/mPINC_Scoring_Explanation.pdf)
15. U.S. Department of Health and Human Services. Office of Women's Health, (2000).
16. American Academy of Pediatrics, 2005.
17. American Academy of Pediatrics, 2005.
18. United States Breastfeeding Committee, (2002). Benefits of Breastfeeding. <http://www.usbreastfeeding.org/Issue-Papers/Benefits.pdf>
19. Greer FR, Sicherer SH, Burks AW, and the Committee on Nutrition and Section on Allergy and Immunology. Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Timing of Introduction of Complementary Foods, and Hydrolyzed Formulas. Pediatrics 2008;121:183-191.
20. American Academy of Pediatrics, 2005.
21. Agency for Healthcare Research and Quality, Evidence Reports and Summaries, 2007.
22. United States Breastfeeding Committee, 2002.
23. United States Breastfeeding Committee, 2002.
24. Agency for Healthcare Research and Quality, Evidence Reports and Summaries, 2007.
25. U.S. Breastfeeding Committee (2002). Economics of Breastfeeding. <http://www.usbreastfeeding.org/Issue-Papers/Economics.pdf>
26. Washington Business Group on Health (March 2000). Breastfeeding Support At The Workplace, Best Practices to Promote Health and Productivity, *Family Health in Brief*, Issue No. 2. [http://www.businessgrouphealth.org/pdfs/wbgh\\_breastfeeding\\_brief.pdf](http://www.businessgrouphealth.org/pdfs/wbgh_breastfeeding_brief.pdf)

For more references on breastfeeding, visit:

- US Breastfeeding Committee: [www.usbreastfeeding.org](http://www.usbreastfeeding.org)
- Centers for Disease Control: [www.cdc.gov/breastfeeding](http://www.cdc.gov/breastfeeding)
- La Leche League International: [www.llli.org](http://www.llli.org)
- International Lactation Consultant Association: [www.ilca.org](http://www.ilca.org)

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