

Breastfeeding Promotion CONSENSUS STATEMENT *January 2002*

POSITION

We believe that breastfeeding helps babies to get off to the best, healthiest start, and that the IPN has a responsibility to promote breastfeeding in Indiana. We support the American Academy of Pediatrics' position that exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first six months after birth. Gradual introduction of iron-enriched solid foods in the second half of the first year should complement the breast milk diet. It is recommended that breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired.

INTRODUCTION

Several global and national organizations, including the Academy of Women's Health, Obstetrics, and Neonatal Nurses (AWHONN); American Academy of Family Practitioners (AAFP); American Academy of Pediatrics (AAP); American College of Nurse Midwives (ACNM); American College of Obstetrics and Gynecology (ACOG); American Dietetics Association (ADA); Healthy People 2010; National Alliance of Breastfeeding Advocacy (NABA); UNICEF; and the World Health Organization (WHO) acknowledge breastfeeding as the "gold standard" of infant feeding and encourage increased breastfeeding. This position statement is based upon the collaboration of these organizations.

Human milk is the only substance that provides complete nutrition and immunologic protection to the human infant. Infant health outcomes from receiving human milk correlate with immediate and lifelong effects on children's lives. Added outcomes of human lactation are the physical and psychological benefits for the lactating woman. Additionally, lactation and breastfeeding have the potential to save money for families, tax payers, employers and health care systems.

Healthy People 2010 National Health Promotion and Disease Prevention sets forth the objective of "increasing to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are five to six months old and 25 percent at one year."¹ National statistics (1997) show a breastfeeding rate of 62.4 percent at birth and 26 percent at five to six months. In 1998, Indiana had a 55.9 percent breastfeeding-initiation rate (ISDH Vital Statistics). To help Indiana reach the Healthy People 2010 objectives, all persons involved in the wellbeing of mothers and infants must commit to and practice services that support mothers in providing their infants with human milk.

This position statement:

- Summarizes the many benefits of breastfeeding;
- Provides recommendations with strategies to establish positive, supportive breastfeeding communities.

Endorsing this promotion statement and implementing its strategies are the first steps to promoting wellness through breastfeeding in Indiana.

OVERVIEW OF RECOMMENDATIONS

- **Professional Education:** Facilitate integration of breastfeeding training into the curriculum at health-related professional schools throughout the state to ensure that health professionals are technically and culturally competent in delivering breastfeeding services.
- **Public Education:** Develop a multimedia approach to promoting positive breastfeeding images that target diverse cultures.
- **Health Care Systems:** Indiana health care institutions and health plans that provide maternal and child health services will facilitate breastfeeding for all women and infants, including those with special needs. Ultimately, all birthing facilities should obtain Baby Friendly Initiative designation.
- **Workplace and Educational Centers:** Work with small businesses, educational sites, corporate executives, employees, labor unions and others to promote breastfeeding-friendly workplaces and to negotiate health care plans with enhanced maternity and lactation benefits.

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Breastfeeding Committee Promotion Statement (*continued*)

NUTRITIONAL ADEQUACY OF HUMAN MILK

Human milk is nutritionally appropriate for most full-term, pre-term and low birth weight infants. It has all the essential nutrients and sufficient calories to meet nutritional demands and a low renal solute load (important for young kidneys). Further, human milk is easy to digest and absorb and changes its composition to meet the needs of a growing and developing infant. Galactosemia, a rare infant condition, is the only condition in which human milk is nutritionally contraindicated.²

Fortification of human milk might be necessary in cases such as prematurity, very low birth weight and certain metabolic diseases.² Infants with medical conditions such as phenylketonuria,³ Crohn's disease^{4,5} and cleft palate,⁶ to name just a few, might warrant the use of formulas. However, these infants have improved outcomes when they also receive human milk as a food source.

The nutrients from human milk are more bioavailable than nutrients from formulas.^{7,8} The complexity of compounds and the digestive enzymes contained in human milk aid in digestion and intestinal absorption of nutrients.⁹ Formulas contain significantly more vitamins and minerals to compensate for lower bioavailability. Further research needs to address the possible short- and long-term consequences of exposing an infant's gastrointestinal tract to these greater quantities of vitamins and minerals^{10,11} as well as to other substances not found in human milk such as non-human proteins.^{12,13}

Breastfeeding should be the benchmark for measuring optimal development. Human milk contains long-chain polyunsaturated fatty acids (PUFAs), specifically docosahexaenoic acid (DHA) and arachidonic acid (AA). Commercial formulas in the United States lack both DHA and AA. Current research suggests that variances of DHA in infants' diets might partially account for the differences in cognitive development and visual acuity scores seen among breastfed versus formula-fed infants.^{14,15,16,17,18,19} Cholesterol is virtually absent in formulas. Animal studies suggest cholesterol in the diet early in life might affect the mechanism for handling cholesterol in the body throughout life.²⁰ The effect of not receiving dietary cholesterol early in life is not yet clearly understood, especially in humans.²¹ More research is needed to help answer the question of whether the lack of cholesterol in formulas adversely affects blood-cholesterol levels later.

Human milk is a dynamic, living fluid that changes to meet the specific needs of an infant. A mother's pre-term breastmilk has nutritional and immunological benefits for her premature infant. Preterm milk has higher concentrations of medium-chain triglycerides and long-chain polyunsaturated fatty acids. These prematurity-specific lipid differences may provide substrate for short-term energy needs and for long-term neurological and visual development.¹² Also, unrestricted access to colostrum (the first milk available at birth) benefits newborns with hypoglycemia and hyperbilirubinemia.^{22,23} Human milk changes within an individual feeding, throughout the months and years that a child nurses, and during growth spurts and the weaning process.

All infants, unless medically indicated, should ideally receive human milk exclusively for four to six months²⁴ and continue to get human milk as their primary food for the first year of life.¹² Infants will continue to receive nutritional and immunological benefits from human milk for as long as they receive any breastmilk. Infants with diagnosed medical conditions that preclude exclusive breastfeeding, such as some phenylketonuria, failure to thrive, cleft palate and premature babies, should still receive human milk in an amount that is medically safe and be supplemented with fortifiers or formulas when necessary. Other maternal contraindications to exclusive breastfeeding will include: the use of illicit drugs, active tuberculosis, history of extensive breast surgery, and very rarely, the use of certain medications. Currently, in the U.S. maternal HIV is a contraindication to breastfeeding.

INFANT HEALTH OUTCOMES

The health benefits of breastfeeding infants are well documented. In the period immediately following birth, the colostrum produced by a breastfeeding mother stimulates gastrointestinal maturation in the infant, causes the gut to pass meconium and facilitates digestion.²⁵ Colostrum also provides the baby's "first immunization" by immediately protecting the infant from disease and by boosting the infant's immune function.^{26,27}

Studies show that formula-fed infants have a higher incidence of gastrointestinal^{28,29} and non-gastrointestinal infections^{30,31,32,33,34} such as otitis media,³⁵ pneumonia, bacteremia, urinary-tract

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INFANT HEALTH OUTCOMES (CON'T)

infections,³⁶ meningitis, bronchitis and respiratory syncytial virus,³⁷ and atopic diseases⁷⁰. Breastfed babies are at decreased risk for allergies such as eczema, asthma, rhinitis, and food allergies that can be potentiated by exposure to both cow's milk and soy proteins.^{38,39}

Many factors are associated with Sudden Infant Death Syndrome (SIDS). Not having been breastfed is identified as one of those factors.^{40,41} Infants not breastfed were nearly twice as likely to die of SIDS. A similar protective association also exists for non-SIDS deaths, such as those from botulism, meningitis and diarrhea illness.^{42,11}

The long-term health benefits of breastfeeding are compelling. Research shows reduced rates of Type I diabetes mellitus,^{12,43,44,45,46,47,48} cancer and lymphoma,⁴⁹ Crohn's disease^{5,6} and celiac disease² in children who were breastfed. Breastfed babies exhibit improved oral facial development, preventing later problems such as speech impediments and poorly aligned teeth.^{50,51}

MATERNAL HEALTH OUTCOMES

Well documented maternal health benefits are associated with lactation. In the early postpartum period, breastfeeding stimulates the release of oxytocin that promotes uterine involution.² Breastfeeding also decreases the risk of hemorrhage.⁵⁷ These effects promote healing after delivery.

Psychologically, attachment between mother and infant is enhanced through breastfeeding.^{58,59} Breastfeeding mothers are more likely to express positive feelings and demonstrate increased interactions with their infants.² They also have less anxiety, stress and depression as compared to mothers who bottle feed.^{60,61} These factors tend to promote adaptation to the parenting role.⁶² Studies demonstrate that women of lower socioeconomic status who breastfeed have greater confidence in their parenting skills and this confidence endures beyond the breastfeeding period.⁵⁸

Lactation is not conclusively associated with an increased or decreased risk for breast cancer.⁶³ However, several studies demonstrate a decrease in the risk of developing breast cancer with long-term breastfeeding for premenopausal but not postmenopausal women.^{64,65,66} More research is needed in this area.

The impact of breastfeeding on maternal bone health was extensively researched. Although the period of lactation might be associated with short-term bone loss, this loss is regained during and after weaning.^{58,68}

Ovarian cancer risk is associated with ovulatory patterns. Several studies demonstrate reduced risk for ovarian cancer with lactation, especially of a prolonged period.^{58,69}

COST BENEFITS

Breastfeeding promotes health, helps prevent infant and childhood diseases and reduces health care costs. By decreasing the incidence of GI infections and UTI, lower RTI, otitis media, bacteremia, and meningitis, breastfeeding provides, (as analyzed by Wichita State University)⁷³ potential health care savings of over 1 billion dollars annually. Kaiser Permanente, one of the U.S. largest and most successful HMOs, found through their research, that an infant who was breastfed for a minimum of 6 months experienced \$1,435.00 less in health care claims than did a formula fed infant.⁷⁴ A recent study of Colorado WIC and Medicaid participants found total Medicaid costs were \$111.63 lower for every breastfed baby during the 1st 6 months of life. Medicaid pharmacy reimbursements were significantly lower—\$29.82 lower for males and \$12.16 for females who received human milk. Certainly, breastfeeding is also economical at an individual family level. Breastfeeding requires that a mother consume an additional 200 kcal per day, the equivalent of two tablespoons of peanut butter. The annual cost is \$57.00! If the mother needs to rent an electric breast pump, the costs average \$50/month, \$130/3 months, or \$175/5 months. Long term rental for one year is approximately \$450.00 Depending upon the brand used, formula for one baby will cost a family between \$96.67-\$326.25 per month, or \$1160.00-\$3915.00 per year. Even if a mother receives formula from WIC, she will still need to buy approximately 200 cans of concentrate in order to feed her baby formula for the first year of life.⁷² If WIC mothers breastfed, \$2,665,715 would be saved each year for basic food packages. Breastfeeding education and support should be an integral part of health care, especially in managed care that rewards the prevention of health problems.

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Breastfeeding Committee Promotion Statement (*continued*)

RECOMMENDATIONS & STRATEGIES

Professional Education:

Facilitate integration of breastfeeding training into the curriculum at health-related professional schools throughout the state to ensure that health professionals are technically and culturally competent in delivering breastfeeding services.

- Conduct an assessment of the breastfeeding content of curricula offered through statewide medical, nursing, dental and nutrition programs.
- Convene a statewide committee of teams from each health professional school (including those with breastfeeding expertise and those in positions to influence curricula) to discuss and develop a plan to strengthen breastfeeding content.

Public Education:

Develop a multi-media approach to promoting positive breastfeeding images that targets diverse cultures and focus not solely on mothers and newborns, but are aimed at all segments of society.

- Incorporate breastfeeding information/promotion into the *Baby First* campaign.
- Promote public awareness of the WHO/UNICEF Baby Friendly Hospital initiative.
- Prepare appropriate press releases to support media events related to breastfeeding support, education and promotion activities. Link with relevant nonprofit groups that can help organize media appearances.
- Participate in appropriate media events such as World Breastfeeding Week, Public Health Week and Nation's Nutrition Month.
- Conduct media-watch efforts to respond to both negative and positive portrayals of breastfeeding.

Health Care Systems:

- Indiana health care institutions and health plans that provide maternal and child health services will facilitate breastfeeding for all women and infants, including those with special needs. Ultimately, all birthing facilities should obtain Baby Friendly Initiative designation.
- Encourage basic breastfeeding competencies from all health care workers who interact with pregnant women and children to the age of three years.
- All hospitals with obstetric services need to have certified lactation consultants on staff. Currently, the Joint Commission on Accreditation of Health Care Organizations (JCAHO), and the International Lactation Consultant Association (ILCA), are collaborating efforts to establish lactation standards for obstetric units that need to be met for accreditation.
- Health care providers should discuss the benefits of breastfeeding at the first prenatal contact and reinforce these messages throughout pregnancy, therefore allowing mothers to make an informed infant feeding choice.
- As supported by the American Medical Association (AMA), and the American Academy of Pediatrics, (AAP), breastfeeding services and supplies, including, clinical lactation therapy, and electric breast pumps, be included in health benefit plans offered by all private and public insurers.
- Mothers of special needs babies should be supported through provision of clinical lactation therapy and electric breast pumps included in their health benefit plans.

Workplace and Educational Centers

- Work with small businesses, educational sites, corporate executives, labor unions and others to promote breastfeeding-friendly workplaces and to negotiate healthcare plans with enhanced maternity and lactation benefit.
- Provide workplaces with information on breastfeeding friendly company programs in place in Indiana.
- Provide breastfeeding-friendly benefits packages to businesses.

CONCLUSION

Scientific research shows that the time to promote, protect and support breastfeeding is now. We are all capable of improving current practices so they truly facilitate breastfeeding as the norm and human milk as the "gold standard."

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