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## **Breastfeeding and the Use of Human Milk**

Section on Breastfeeding

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American Academy of Pediatrics

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POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

Section on Breastfeeding

Breastfeeding and the Use of Human Milk

**ABSTRACT.** Considerable advances have occurred in recent years in the scientific knowledge of the benefits of breastfeeding, the mechanisms underlying these benefits, and in the clinical management of breastfeeding. This policy statement on breastfeeding replaces the 1997 policy statement of the American Academy of Pediatrics and reflects this newer knowledge and the supporting publications. The benefits of breastfeeding for the infant, the mother, and the community are summarized, and recommendations to guide the pediatrician and other health care professionals in assisting mothers in the initiation and maintenance of breastfeeding for healthy term infants and high-risk infants are presented. The policy statement delineates various ways in which pediatricians can promote, protect, and support breastfeeding not only in their individual practices but also in the hospital, medical school, community, and nation. *Pediatrics* 2005;115:496–506; *breast, breastfeeding, breast milk, human milk, lactation.*

ABBREVIATIONS. AAP, American Academy of Pediatrics; WIC, Supplemental Nutrition Program for Women, Infants, and Children; CMV, cytomegalovirus; G6PD, glucose-6-phosphate dehydrogenase.

INTRODUCTION

Extensive research using improved epidemiologic methods and modern laboratory techniques documents diverse and compelling advantages for infants, mothers, families, and society from breastfeeding and use of human milk for infant feeding.<sup>1</sup> These advantages include health, nutritional, immunologic, developmental, psychologic, social, economic, and environmental benefits. In 1997, the American Academy of Pediatrics (AAP) published the policy statement *Breastfeeding and the Use of Human Milk*.<sup>2</sup> Since then, significant advances in science and clinical medicine have occurred. This revision cites substantial new research on the importance of breastfeeding and sets forth principles to guide pediatricians and other health care professionals in assisting women and children in the initiation and maintenance of breastfeeding. The ways pediatricians can protect, promote, and support breastfeeding in their individual practices, hospitals, medical schools, and communities are delineated, and the central role of the pediatrician in coordinating breastfeeding management and providing a medical home for the child is emphasized.<sup>3</sup> These recommenda-

tions are consistent with the goals and objectives of *Healthy People 2010*,<sup>4</sup> the Department of Health and Human Services' *HHS Blueprint for Action on Breastfeeding*,<sup>5</sup> and the United States Breastfeeding Committee's *Breastfeeding in the United States: A National Agenda*.<sup>6</sup>

This statement provides the foundation for issues related to breastfeeding and lactation management for other AAP publications including the *New Mother's Guide to Breastfeeding*<sup>7</sup> and chapters dealing with breastfeeding in the AAP/American College of Obstetricians and Gynecologists *Guidelines for Perinatal Care*,<sup>8</sup> the *Pediatric Nutrition Handbook*,<sup>9</sup> the *Red Book*,<sup>10</sup> and the *Handbook of Pediatric Environmental Health*.<sup>11</sup>

THE NEED

Child Health Benefits

Human milk is species-specific, and all substitute feeding preparations differ markedly from it, making human milk uniquely superior for infant feeding.<sup>12</sup> Exclusive breastfeeding is the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes. In addition, human milk-fed premature infants receive significant benefits with respect to host protection and improved developmental outcomes compared with formula-fed premature infants.<sup>13–22</sup> From studies in preterm and term infants, the following outcomes have been documented.

*Infectious Diseases*

Research in developed and developing countries of the world, including middle-class populations in developed countries, provides strong evidence that human milk feeding decreases the incidence and/or severity of a wide range of infectious diseases<sup>23</sup> including bacterial meningitis,<sup>24,25</sup> bacteremia,<sup>25,26</sup> diarrhea,<sup>27–33</sup> respiratory tract infection,<sup>22,33–40</sup> necrotizing enterocolitis,<sup>20,21</sup> otitis media,<sup>27,41–45</sup> urinary tract infection,<sup>46,47</sup> and late-onset sepsis in preterm infants.<sup>17,20</sup> In addition, postneonatal infant mortality rates in the United States are reduced by 21% in breastfed infants.<sup>48</sup>

*Other Health Outcomes*

Some studies suggest decreased rates of sudden infant death syndrome in the first year of life<sup>49–55</sup> and reduction in incidence of insulin-dependent (type 1) and non-insulin-dependent (type 2) diabetes melli-

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tus,<sup>56–59</sup> lymphoma, leukemia, and Hodgkin disease,<sup>60–62</sup> overweight and obesity,<sup>19,63–70</sup> hypercholesterolemia,<sup>71</sup> and asthma<sup>36–39</sup> in older children and adults who were breastfed, compared with individuals who were not breastfed. Additional research in this area is warranted.

#### Neurodevelopment

Breastfeeding has been associated with slightly enhanced performance on tests of cognitive development.<sup>14,15,72–80</sup> Breastfeeding during a painful procedure such as a heel-stick for newborn screening provides analgesia to infants.<sup>81,82</sup>

#### Maternal Health Benefits

Important health benefits of breastfeeding and lactation are also described for mothers.<sup>83</sup> The benefits include decreased postpartum bleeding and more rapid uterine involution attributable to increased concentrations of oxytocin,<sup>84</sup> decreased menstrual blood loss and increased child spacing attributable to lactational amenorrhea,<sup>85</sup> earlier return to prepregnancy weight,<sup>86</sup> decreased risk of breast cancer,<sup>87–92</sup> decreased risk of ovarian cancer,<sup>93</sup> and possibly decreased risk of hip fractures and osteoporosis in the postmenopausal period.<sup>94–96</sup>

#### Community Benefits

In addition to specific health advantages for infants and mothers, economic, family, and environmental benefits have been described. These benefits include the potential for decreased annual health care costs of \$3.6 billion in the United States<sup>97,98</sup>; decreased costs for public health programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)<sup>99</sup>; decreased parental employee absenteeism and associated loss of family income; more time for attention to siblings and other family matters as a result of decreased infant illness; decreased environmental burden for disposal of formula cans and bottles; and decreased energy demands for production and transport of artificial feeding products.<sup>100–102</sup> These savings for the country and for families would be offset to some unknown extent by increased costs for physician and lactation consultations, increased office-visit time, and cost of breast pumps and other equipment, all of which should be covered by insurance payments to providers and families.

#### CONTRAINDICATIONS TO BREASTFEEDING

Although breastfeeding is optimal for infants, there are a few conditions under which breastfeeding may not be in the best interest of the infant. Breastfeeding is contraindicated in infants with classic galactosemia (galactose 1-phosphate uridylyltransferase deficiency)<sup>103</sup>; mothers who have active untreated tuberculosis disease or are human T-cell lymphotropic virus type I- or II-positive<sup>104,105</sup>; mothers who are receiving diagnostic or therapeutic radioactive isotopes or have had exposure to radioactive materials (for as long as there is radioactivity in the milk)<sup>106–108</sup>; mothers who are receiving antimetabolites or chemotherapeutic agents or a small number of other medications until they clear the milk<sup>109,110</sup>;

mothers who are using drugs of abuse (“street drugs”); and mothers who have herpes simplex lesions on a breast (infant may feed from other breast if clear of lesions). Appropriate information about infection-control measures should be provided to mothers with infectious diseases.<sup>111</sup>

In the United States, mothers who are infected with human immunodeficiency virus (HIV) have been advised not to breastfeed their infants.<sup>112</sup> In developing areas of the world with populations at increased risk of other infectious diseases and nutritional deficiencies resulting in increased infant death rates, the mortality risks associated with artificial feeding may outweigh the possible risks of acquiring HIV infection.<sup>113,114</sup> One study in Africa detailed in 2 reports<sup>115,116</sup> found that exclusive breastfeeding for the first 3 to 6 months after birth by HIV-infected mothers did not increase the risk of HIV transmission to the infant, whereas infants who received mixed feedings (breastfeeding with other foods or milks) had a higher rate of HIV infection compared with infants who were exclusively formula-fed. Women in the United States who are HIV-positive should not breastfeed their offspring. Additional studies are needed before considering a change from current policy recommendations.

#### CONDITIONS THAT ARE NOT CONTRAINDICATIONS TO BREASTFEEDING

Certain conditions have been shown to be compatible with breastfeeding. Breastfeeding is not contraindicated for infants born to mothers who are hepatitis B surface antigen-positive,<sup>111</sup> mothers who are infected with hepatitis C virus (persons with hepatitis C virus antibody or hepatitis C virus-RNA-positive blood),<sup>111</sup> mothers who are febrile (unless cause is a contraindication outlined in the previous section),<sup>117</sup> mothers who have been exposed to low-level environmental chemical agents,<sup>118,119</sup> and mothers who are seropositive carriers of cytomegalovirus (CMV) (not recent converters if the infant is term).<sup>111</sup> Decisions about breastfeeding of very low birth weight infants (birth weight <1500 g) by mothers known to be CMV-seropositive should be made with consideration of the potential benefits of human milk versus the risk of CMV transmission.<sup>120,121</sup> Freezing and pasteurization can significantly decrease the CMV viral load in milk.<sup>122</sup>

Tobacco smoking by mothers is not a contraindication to breastfeeding, but health care professionals should advise all tobacco-using mothers to avoid smoking within the home and to make every effort to wean themselves from tobacco as rapidly as possible.<sup>110</sup>

Breastfeeding mothers should avoid the use of alcoholic beverages, because alcohol is concentrated in breast milk and its use can inhibit milk production. An occasional celebratory single, small alcoholic drink is acceptable, but breastfeeding should be avoided for 2 hours after the drink.<sup>123</sup>

For the great majority of newborns with jaundice and hyperbilirubinemia, breastfeeding can and should be continued without interruption. In rare instances of severe hyperbilirubinemia, breastfeed-

**TABLE 1.** Breastfeeding Rates for Infants in the United States: Any (Exclusive)

	Actual: 2001			<i>Healthy People 2010</i> Goals <sup>4</sup>		
	Initiation <sup>125</sup>	6 mo <sup>125</sup>	1 y <sup>132</sup>	Initiation	6 mo	1 y
All women	70% (46%)	33% (17%)	18%	75%	50%	25%
Black	53% (27%)	22% (11%)	12%			
Hispanic	73% (36%)	33% (16%)	18%			
Asian	NA	NA	NA			
White	72% (53%)	34% (19%)	18%			

NA indicates that the data are not available.

ing may need to be interrupted temporarily for a brief period.<sup>124</sup>

### THE CHALLENGE

Data indicate that the rate of initiation and duration of breastfeeding in the United States are well below the *Healthy People 2010* goals (see Table 1).<sup>4,125</sup> Furthermore, many of the mothers counted as breastfeeding were supplementing their infants with formula during the first 6 months of the infant's life.<sup>5,126</sup> Although breastfeeding initiation rates have increased steadily since 1990, exclusive breastfeeding initiation rates have shown little or no increase over that same period of time. Similarly, 6 months after birth, the proportion of infants who are exclusively breastfed has increased at a much slower rate than that of infants who receive mixed feedings.<sup>125</sup> The AAP Section on Breastfeeding, American College of Obstetricians and Gynecologists, American Academy of Family Physicians, Academy of Breastfeeding Medicine, World Health Organization, United Nations Children's Fund, and many other health organizations recommend exclusive breastfeeding for the first 6 months of life.<sup>‡</sup><sup>127–130</sup> Exclusive breastfeeding is defined as an infant's consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications.<sup>131</sup> Exclusive breastfeeding has been shown to provide improved protection against many diseases and to increase the likelihood of continued breastfeeding for at least the first year of life.

Obstacles to initiation and continuation of breastfeeding include insufficient prenatal education about breastfeeding<sup>132,133</sup>; disruptive hospital policies and practices<sup>134</sup>; inappropriate interruption of breastfeeding<sup>135</sup>; early hospital discharge in some populations<sup>136</sup>; lack of timely routine follow-up care and postpartum home health visits<sup>137</sup>; maternal employment<sup>138,139</sup> (especially in the absence of workplace facilities and support for breastfeeding)<sup>140</sup>; lack of family and broad societal support<sup>141</sup>; media portrayal of bottle feeding as normative<sup>142</sup>; commercial promotion of infant formula through distribution of hospital discharge packs, coupons for free or discounted formula, and some television and general magazine advertising<sup>143,144</sup>; misinformation; and

lack of guidance and encouragement from health care professionals.<sup>135,145,146</sup>

### RECOMMENDATIONS ON BREASTFEEDING FOR HEALTHY TERM INFANTS

- Pediatricians and other health care professionals should recommend human milk for all infants in whom breastfeeding is not specifically contraindicated and provide parents with complete, current information on the benefits and techniques of breastfeeding to ensure that their feeding decision is a fully informed one.<sup>147–149</sup>
  - When direct breastfeeding is not possible, expressed human milk should be provided.<sup>150,151</sup> If a known contraindication to breastfeeding is identified, consider whether the contraindication may be temporary, and if so, advise pumping to maintain milk production. Before advising against breastfeeding or recommending premature weaning, weigh the benefits of breastfeeding against the risks of not receiving human milk.
- Peripartum policies and practices that optimize breastfeeding initiation and maintenance should be encouraged.
  - Education of both parents before and after delivery of the infant is an essential component of successful breastfeeding. Support and encouragement by the father can greatly assist the mother during the initiation process and during subsequent periods when problems arise. Consistent with appropriate care for the mother, minimize or modify the course of maternal medications that have the potential for altering the infant's alertness and feeding behavior.<sup>152,153</sup> Avoid procedures that may interfere with breastfeeding or that may traumatize the infant, including unnecessary, excessive, and overvigorous suctioning of the oral cavity, esophagus, and airways to avoid oropharyngeal mucosal injury that may lead to aversive feeding behavior.<sup>154,155</sup>
- Healthy infants should be placed and remain in direct skin-to-skin contact with their mothers immediately after delivery until the first feeding is accomplished.<sup>156–158</sup>
  - The alert, healthy newborn infant is capable of latching on to a breast without specific assistance within the first hour after birth.<sup>156</sup> Dry the infant, assign Apgar scores, and perform the initial physical assessment while the infant

‡ There is a difference of opinion among AAP experts on this matter. The Section on Breastfeeding acknowledges that the Committee on Nutrition supports introduction of complementary foods between 4 and 6 months of age when safe and nutritious complementary foods are available.

- is with the mother. The mother is an optimal heat source for the infant.<sup>159,160</sup> Delay weighing, measuring, bathing, needle-sticks, and eye prophylaxis until after the first feeding is completed. Infants affected by maternal medications may require assistance for effective latch-on.<sup>156</sup> Except under unusual circumstances, the newborn infant should remain with the mother throughout the recovery period.<sup>161</sup>
4. Supplements (water, glucose water, formula, and other fluids) should not be given to breastfeeding newborn infants unless ordered by a physician when a medical indication exists.<sup>148,162-165</sup>
  5. Pacifier use is best avoided during the initiation of breastfeeding and used only after breastfeeding is well established.<sup>166-168</sup>
    - In some infants early pacifier use may interfere with establishment of good breastfeeding practices, whereas in others it may indicate the presence of a breastfeeding problem that requires intervention.<sup>169</sup>
    - This recommendation does not contraindicate pacifier use for nonnutritive sucking and oral training of premature infants and other special care infants.
  6. During the early weeks of breastfeeding, mothers should be encouraged to have 8 to 12 feedings at the breast every 24 hours, offering the breast whenever the infant shows early signs of hunger such as increased alertness, physical activity, mouthing, or rooting.<sup>170</sup>
    - Crying is a late indicator of hunger.<sup>171</sup> Appropriate initiation of breastfeeding is facilitated by continuous rooming-in throughout the day and night.<sup>172</sup> The mother should offer both breasts at each feeding for as long a period as the infant remains at the breast.<sup>173</sup> At each feed the first breast offered should be alternated so that both breasts receive equal stimulation and draining. In the early weeks after birth, nondemanding infants should be aroused to feed if 4 hours have elapsed since the beginning of the last feeding.
    - After breastfeeding is well established, the frequency of feeding may decline to approximately 8 times per 24 hours, but the infant may increase the frequency again with growth spurts or when an increase in milk volume is desired.
  7. Formal evaluation of breastfeeding, including observation of position, latch, and milk transfer, should be undertaken by trained caregivers at least twice daily and fully documented in the record during each day in the hospital after birth.<sup>174,175</sup>
    - Encouraging the mother to record the time and duration of each breastfeeding, as well as urine and stool output during the early days of breastfeeding in the hospital and the first weeks at home, helps to facilitate the evaluation process. Problems identified in the hospital should be addressed at that time, and a documented plan for management should be clearly communicated to both parents and to the medical home.
  8. All breastfeeding newborn infants should be seen by a pediatrician or other knowledgeable and experienced health care professional at 3 to 5 days of age as recommended by the AAP.<sup>124,176,177</sup>
    - This visit should include infant weight; physical examination, especially for jaundice and hydration; maternal history of breast problems (painful feedings, engorgement); infant elimination patterns (expect 3-5 urines and 3-4 stools per day by 3-5 days of age; 4-6 urines and 3-6 stools per day by 5-7 days of age); and a formal, observed evaluation of breastfeeding, including position, latch, and milk transfer. Weight loss in the infant of greater than 7% from birth weight indicates possible breastfeeding problems and requires more intensive evaluation of breastfeeding and possible intervention to correct problems and improve milk production and transfer.
  9. Breastfeeding infants should have a second ambulatory visit at 2 to 3 weeks of age so that the health care professional can monitor weight gain and provide additional support and encouragement to the mother during this critical period.
  10. Pediatricians and parents should be aware that exclusive breastfeeding is sufficient to support optimal growth and development for approximately the first 6 months of life† and provides continuing protection against diarrhea and respiratory tract infection.<sup>30,34,128,178-184</sup> Breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child.<sup>185</sup>
    - Complementary foods rich in iron should be introduced gradually beginning around 6 months of age.<sup>186-187</sup> Preterm and low birth weight infants and infants with hematologic disorders or infants who had inadequate iron stores at birth generally require iron supplementation before 6 months of age.<sup>148,188-192</sup> Iron may be administered while continuing exclusive breastfeeding.
    - Unique needs or feeding behaviors of individual infants may indicate a need for introduction of complementary foods as early as 4 months of age, whereas other infants may not be ready to accept other foods until approximately 8 months of age.<sup>193</sup>
    - Introduction of complementary feedings before 6 months of age generally does not increase total caloric intake or rate of growth and only substitutes foods that lack the protective components of human milk.<sup>194</sup>
    - During the first 6 months of age, even in hot climates, water and juice are unnecessary for breastfed infants and may introduce contaminants or allergens.<sup>195</sup>
    - Increased duration of breastfeeding confers significant health and developmental benefits for the child and the mother, especially in delaying return of fertility (thereby promoting optimal intervals between births).<sup>196</sup>

- 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.<sup>197</sup>
  - Infants weaned before 12 months of age should not receive cow's milk but should receive iron-fortified infant formula.<sup>198</sup>
11. All breastfed infants should receive 1.0 mg of vitamin K<sub>1</sub> oxide intramuscularly after the first feeding is completed and within the first 6 hours of life.<sup>199</sup>
    - Oral vitamin K is not recommended. It may not provide the adequate stores of vitamin K necessary to prevent hemorrhage later in infancy in breastfed infants unless repeated doses are administered during the first 4 months of life.<sup>200</sup>
  12. All breastfed infants should receive 200 IU of oral vitamin D drops daily beginning during the first 2 months of life and continuing until the daily consumption of vitamin D-fortified formula or milk is 500 mL.<sup>201</sup>
    - Although human milk contains small amounts of vitamin D, it is not enough to prevent rickets. Exposure of the skin to ultraviolet B wavelengths from sunlight is the usual mechanism for production of vitamin D. However, significant risk of sunburn (short-term) and skin cancer (long-term) attributable to sunlight exposure, especially in younger children, makes it prudent to counsel against exposure to sunlight. Furthermore, sunscreen decreases vitamin D production in skin.
  13. Supplementary fluoride should not be provided during the first 6 months of life.<sup>202</sup>
    - From 6 months to 3 years of age, the decision whether to provide fluoride supplementation should be made on the basis of the fluoride concentration in the water supply (fluoride supplementation generally is not needed unless the concentration in the drinking water is <0.3 ppm) and in other food, fluid sources, and toothpaste.
  14. Mother and infant should sleep in proximity to each other to facilitate breastfeeding.<sup>203</sup>
  15. Should hospitalization of the breastfeeding mother or infant be necessary, every effort should be made to maintain breastfeeding, preferably directly, or pumping the breasts and feeding expressed milk if necessary.

#### ADDITIONAL RECOMMENDATIONS FOR HIGH-RISK INFANTS

- Hospitals and physicians should recommend human milk for premature and other high-risk infants either by direct breastfeeding and/or using the mother's own expressed milk.<sup>13</sup> Maternal support and education on breastfeeding and milk expression should be provided from the earliest possible time. Mother-infant skin-to-skin contact and direct breastfeeding should be encouraged as early as feasible.<sup>204,205</sup> Fortification of expressed human milk is indicated for many very low birth weight infants.<sup>13</sup> Banked human milk may be a suitable

- feeding alternative for infants whose mothers are unable or unwilling to provide their own milk. Human milk banks in North America adhere to national guidelines for quality control of screening and testing of donors and pasteurize all milk before distribution.<sup>206-208</sup> Fresh human milk from unselected donors is not recommended because of the risk of transmission of infectious agents.
- Precautions should be followed for infants with glucose-6-phosphate dehydrogenase (G6PD) deficiency. G6PD deficiency has been associated with an increased risk of hemolysis, hyperbilirubinemia, and kernicterus.<sup>209</sup> Mothers who breastfeed infants with known or suspected G6PD deficiency should not ingest fava beans or medications such as nitrofurantoin, primaquine phosphate, or phenazopyridine hydrochloride, which are known to induce hemolysis in deficient individuals.<sup>210,211</sup>

#### ROLE OF PEDIATRICIANS AND OTHER HEALTH CARE PROFESSIONALS IN PROTECTING, PROMOTING, AND SUPPORTING BREASTFEEDING

Many pediatricians and other health care professionals have made great efforts in recent years to support and improve breastfeeding success by following the principles and guidance provided by the AAP,<sup>2</sup> the American College of Obstetricians and Gynecologists,<sup>127</sup> the American Academy of Family Physicians,<sup>128</sup> and many other organizations.<sup>5,6,8,130,133,142,162</sup> The following guidelines summarize these concepts for providing an optimal breastfeeding environment.

##### General

- Promote, support, and protect breastfeeding enthusiastically. In consideration of the extensively published evidence for improved health and developmental outcomes in breastfed infants and their mothers, a strong position on behalf of breastfeeding is warranted.
- Promote breastfeeding as a cultural norm and encourage family and societal support for breastfeeding.
- Recognize the effect of cultural diversity on breastfeeding attitudes and practices and encourage variations, if appropriate, that effectively promote and support breastfeeding in different cultures.

##### Education

- Become knowledgeable and skilled in the physiology and the current clinical management of breastfeeding.
- Encourage development of formal training in breastfeeding and lactation in medical schools, in residency and fellowship training programs, and for practicing pediatricians.
- Use every opportunity to provide age-appropriate breastfeeding education to children and adults in the medical setting and in outreach programs for student and parent groups.

##### Clinical Practice

- Work collaboratively with the obstetric community to ensure that women receive accurate and

sufficient information throughout the perinatal period to make a fully informed decision about infant feeding.

- Work collaboratively with the dental community to ensure that women are encouraged to continue to breastfeed and use good oral health practices. Infants should receive an oral health-risk assessment by the pediatrician between 6 months and 1 year of age and/or referred to a dentist for evaluation and treatment if at risk of dental caries or other oral health problems.<sup>212</sup>
- Promote hospital policies and procedures that facilitate breastfeeding. Work actively toward eliminating hospital policies and practices that discourage breastfeeding (eg, promotion of infant formula in hospitals including infant formula discharge packs and formula discount coupons, separation of mother and infant, inappropriate infant feeding images, and lack of adequate encouragement and support of breastfeeding by all health care staff). Encourage hospitals to provide in-depth training in breastfeeding for all health care staff (including physicians) and have lactation experts available at all times.
- Provide effective breast pumps and private lactation areas for all breastfeeding mothers (patients and staff) in ambulatory and inpatient areas of the hospital.<sup>213</sup>
- Develop office practices that promote and support breastfeeding by using the guidelines and materials provided by the AAP Breastfeeding Promotion in Physicians' Office Practices program.<sup>214</sup>
- Become familiar with local breastfeeding resources (eg, WIC clinics, breastfeeding medical and nursing specialists, lactation educators and consultants, lay support groups, and breast-pump rental stations) so that patients can be referred appropriately.<sup>215</sup> When specialized breastfeeding services are used, the essential role of the pediatrician as the infant's primary health care professional within the framework of the medical home needs to be clarified for parents.
- Encourage adequate, routine insurance coverage for necessary breastfeeding services and supplies, including the time required by pediatricians and other licensed health care professionals to assess and manage breastfeeding and the cost for the rental of breast pumps.
- Develop and maintain effective communication and coordination with other health care professionals to ensure optimal breastfeeding education, support, and counseling. AAP and WIC breastfeeding coordinators can facilitate collaborative relationships and develop programs in the community and in professional organizations for support of breastfeeding.
- Advise mothers to continue their breast self-examinations on a monthly basis throughout lactation and to continue to have annual clinical breast examinations by their physicians.

#### Society

- Encourage the media to portray breastfeeding as positive and normative.

- Encourage employers to provide appropriate facilities and adequate time in the workplace for breastfeeding and/or milk expression.
- Encourage child care providers to support breastfeeding and the use of expressed human milk provided by the parent.
- Support the efforts of parents and the courts to ensure continuation of breastfeeding in separation and custody proceedings.
- Provide counsel to adoptive mothers who decide to breastfeed through induced lactation, a process requiring professional support and encouragement.
- Encourage development and approval of governmental policies and legislation that are supportive of a mother's choice to breastfeed.

#### Research

- Promote continued basic and clinical research in the field of breastfeeding. Encourage investigators and funding agencies to pursue studies that further delineate the scientific understandings of lactation and breastfeeding that lead to improved clinical practice in this medical field.<sup>216</sup>

### CONCLUSIONS

Although economic, cultural, and political pressures often confound decisions about infant feeding, the AAP firmly adheres to the position that breastfeeding ensures the best possible health as well as the best developmental and psychosocial outcomes for the infant. Enthusiastic support and involvement of pediatricians in the promotion and practice of breastfeeding is essential to the achievement of optimal infant and child health, growth, and development.

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