

BREASTFEEDING

Policy Statement Oklahoma State Board of Health

Background:

Breastfeeding is unequalled as a way of providing food for the health, growth, and development of infants. Human milk is uniquely superior for infant feeding and is species specific. Breastfeeding and the use of human milk for infant feeding offers distinct advantages to infants, mothers, families and society. The nutritional and immunologic components of human milk and the physiological, psychosocial, hygienic and economic benefits of breastfeeding make it the optimal way to nurture infants (1,2).

Human milk contains the ideal balance and form of nutrients for infants, and breastfeeding affords a unique occasion for mother-infant interaction and bonding (3).

Human milk feeding decreases the incidence and/or severity of diarrhea, (4-8) lower respiratory infections, (9-12) otitis media, (6,13-17) urinary tract infection (18) and necrotizing enterocolitis (19,20). Positive protective effects of human milk feeding have been demonstrated in relation to sudden infant death syndrome, (21,22) insulin-dependent diabetes mellitus, (23-25) Crohn's disease, (26,27) ulcerative colitis, (27) lymphoma, (28,29) allergic diseases, (30-32) and other chronic digestive disorders. Breastfeeding has also been related to possible enhancement of cognitive development. (33,34)

Breastfeeding can enhance a mother's self-esteem (35) and facilitate her physiologic return to the pre-pregnant state by increasing levels of oxytocin, resulting in less post-partum bleeding and more rapid uterine involution.(36). Recent research demonstrates that lactating women have an earlier return to pre-pregnant weight (37), improved post-partum bone remineralization (38) with reduction in hip fractures in the post-menopausal period, (39) reduced risk of ovarian cancer (40) and pre-menopausal breast cancer(41). Although not considered a form of birth control, exclusive breastfeeding results in delayed resumption of ovulation with increased child spacing (42-44).

Beyond these positive health benefits, breastfeeding offers social and economic benefits to families, society and the nation. Use of human milk decreases infant formula expenditures, minimizes health care costs by improving health and decreasing morbidity in the pediatric population, and reduces employee absenteeism for care attributable to child illness (45-47).

Problem:

Numerous barriers to breastfeeding have been identified: (48-57):

- Lack of awareness and acceptance of the benefits of breastfeeding among health care professionals and the population in general.
- Lack of consistent and accurate information about breastfeeding.
- Hospital practices which are oriented toward bottle feeding.
- Lack of a support network during the critical postpartum period.
- Psychosocial barriers including misconceptions, negative attitudes, low self-esteem, and lack of flexibility in the work place.
- Cultural barriers including sexual connotations associated with the breast and/or lack of role models or family support.
- Formula advertising and the display and distribution of infant formula by health professionals and in hospitals and public health programs.

Despite these and other barriers to breastfeeding, the incidence and duration of breastfeeding can be increased by enhancing factors that encourage breastfeeding.

Many major professional organizations including the American Academy of Pediatrics, the American Dietetic Association, the American College of Obstetrics and Gynecology, and the National Association of Pediatric Nurse Associates and Practitioners etc.,(48,58-62) acknowledge breastfeeding as the preferred method of infant feeding. The United States Department of Health and Human Services has identified breastfeeding as one of the goals of Healthy People 2000. The target is to increase to at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50% the proportion who continue breastfeeding until their babies are 5 to 6 months old (63). To work toward these goals, it is recommended that the Oklahoma State Board of Health serve as an advocate for breastfeeding. The State Board of Health's support will help ensure that women have the ability to make informed decisions about infant feeding.

Policy Statement:

The Oklahoma State Board of Health identifies breastfeeding as the ideal method of feeding and nurturing infants and recognizes breastfeeding as fundamental in achieving optimal infant and child health, growth, and development. Therefore, the Oklahoma State Board of Health encourages activities that promote, protect and support breastfeeding and the health of all Oklahoma children.

It is the policy of the Oklahoma State Board of Health that:

- Breastfeeding be integrated into the spectrum of health care.
- Parents be provided complete current information on the benefits of breastfeeding which allows them to make an informed choice regarding a method of infant feeding.
- All pregnant women be encouraged to breastfeed unless contraindicated for medical reasons.
- Breastfeeding be recommended for at least 12 months and thereafter for as long as desired.

- Exclusive breastfeeding be encouraged for approximately the first 6 months after birth and iron enriched solid foods complement breast milk during the second half of the first year.
- Health care professionals receive adequate basic and continuing theoretical and practical training in breastfeeding.
- Public health professionals identify and reduce barriers to breastfeeding that may exist within communities.
- Health care settings and public health clinics strive to create a positive, supportive environment to encourage breastfeeding as the preferred method of infant feeding.

References

1. Report of the Surgeon General's Workshop on Breastfeeding and Human Lactation, Department of Health and Human Services, 1997.
2. Lawrence, Ruth A. Breastfeeding: A Guide for the Medical Profession. The C.V. Mosby Company: St. Louis, 1997.
3. Williams, Sue R., Worthington-Roberts, Bonnie, Nutrition Throughout The Life Cycle. Times Mirror/Mosby College Publishing, 1992.
4. Dewey, K.G., Henig, M.J., Nommsen-Rivers, L.A. Differences in morbidity between breast-fed and formula-fed infants. *Pediatr.* 1995; 126:696-702.
5. Howie, P.W., Forsyth, J.S., Ogston, S.A., et al. Protective effect of breastfeeding against infection. *Br Med J.* 1990;300:11-16.
6. Kovar, M.G., Serdula, M.K., Marks, J.S., et al. Review of the epidemiologic evidence for an association between infant feeding and infant health. *Pediatrics.* 1984;74:615-S638.
7. Popkin, B.M., Adair, L., Akin, J.S., et al. Breastfeeding and diarrheal morbidity. *Pediatrics.* 1989;86:874-882.
8. Beaudry, M. Dufour, R., Marcoux, S. Relation between infant feeding and infections during the first six months of life. *J Pediatr.* 1995;126:191-197.
9. Frank, A.L., Taber, L.H., Blezen, W.P., et al. Breastfeeding and respiratory virus infection. *Pediatrics.* 1982;70:239-245.
10. Wright, A.I., Holberg, C.J., Martinez, F.D., et al. Breastfeeding and lower respiratory tract illness in the first year of life. *Br Ned H,* 1989;299:945-949.
11. Chen, Y. Synergistic effect of passive smoking and artificial smoking and artificial feeding on hospitalization for respiratory illness in early childhood. *Chest.* 1989;95:1004-1007.
12. Wright, A.L., Holberg, C.J., Taussig, L.M., et al. Relationship of infant feeding to recurrent wheezing at age 6 years. *Arch Pediatr Adolesc Med.* 1995;149:758-763.
13. Saarinen, U.M. Prolonged breastfeeding as prophylaxis for recurrent otitis media. *Acta Pediatr Scand.* 1982;71:567-571.
14. Duncan, B., Ey, J., Holberg, D.J., et al. Exclusive breastfeeding for a least 4 months protects against otitis media. *Pediatrics.* 1993;91:867-872.
15. Owen, J.J., Baldwin, C.D., Swank, P.R., et al. Relation of infant feeding practices cigarette smoke exposure, and group child care to the onset and duration of otitis media with effusion in the first two years of life. *J. Pediatr.* 1993;123:702-711.
16. Paradise, J.L., Elster, B.A., Tank L. Evidence in infants with cleft palate that breast milk protects against otitis media. *Pediatrics.* 1994;94:853-860.
17. Aniansson, G, Alm, B., Andersson, B., et al. A prospective cohort study on breastfeeding and otitis media in Swedish infants. *Pediatr Infect Dis J.* 1994;13:183-188.
18. Pisacane, A., Graziano, L., Mazzarella, G., et al. Breastfeeding and urinary tract infection. *J. Pediatr.* 1992;120:87-89.
19. Lucas, A., Cole, T.J., Breast milk and neonatal necrotising enterocolitis. *Lancet.* 1990;336:1519-1523.
20. Covert, R.F., Barman, N., Domanico, R.S., et al. Prior enteral nutrition with human milk protects against intestinal perforation in infants who develop necrotizing enterocolitis. *Pediatr Res.* 1995;37:305A. Abstract.
21. Ford, R.P.K., Taylor, B.J., Mitchell, E.A., et al. Breastfeeding and the risk of sudden infant death syndrome. *Int J Epidemiol.* 1993;22:885-890.

22. Mitchell, E.A., Taylor, B.J., Ford, R.P.K., et al. Four modifiable and other major risk factors for cot death: the New Zealand study. *J Paediatr Child Health*. 1992;28:S3-S8.
23. Mayer, E.J., Hamman, R.F., Gay, E.C., et al. Reduced risk of IDDM among breastfed children. *Diabetes*. 1988;37:1625-1632.
24. Virtanen, S.M., Rasanen, L., Aro, A., et al. Infant feeding in Finnish children <7 yr of age with newly diagnosed IDDM. *Diabetes Care*. 1991;14:415-417.
25. Gerstein, H.C. Cow's milk exposure and type 1 diabetes mellitus. *Diabetes Care*. 1994;17:13-19.
26. Koletzko, S., Sherman, P., Corey, M. et al. Role of infant feeding practices in development of Crohn's disease in childhood. *Br Med J*. 1989;298:1617-1618.
27. Rigas, A., Rigas, B., Glassman, M., et al. Breastfeeding and maternal smoking in the etiology of Crohn's disease and ulcerative colitis in childhood. *Ann Epidemiol*. 1993;3:387-392.
28. Davis, M.K., Savitz, D.A., Graubard, B.I. Infant feeding and childhood cancer. *Lancet*. 1988;2:365-368.
29. Shu X-O, Clemens, J., Zheng, W., et al. Infant breastfeeding and the risk of childhood lymphoma and leukemia. *Int J Epidemiol*.
30. Lucas, A., Brooke, O.G., Morley, R., et al. Early diet of preterm infants and development of allergic or atopic disease: randomized prospective study. *Br Med J*. 1990;300:837-840.
31. Halken, S., Host, A., Hansen, L.G., et al. Effect of an allergy prevention programme on incidence of atopic symptoms in infancy. *Ann Allergy*. 1992;47:545-553.
32. Saarinen, U.M., Kajosaari, M. Breastfeeding as prophylaxis against atopic disease: prospective follow-up study until 17 years old. *Lancet*. 1995;346:1065-1069.
33. Morrow-Tlucak, M., Haude, R.H., Ernhart, C.B. Breastfeeding and cognitive development in the first 2 years of life. *Soc S Med*. 1988;26:635-639.
34. Wang, Y.S., Wu S.Y., The effect of exclusive breastfeeding on development and incidence of infection in infants. *J Hum Lactation*. 1996;12:27-30.
35. Bryant, C. et al. Best Start: Breastfeeding Promotion in the Southeast - A Program Brief of the Southeast Regional Breastfeeding Promotion Project, Lexington-Fayette County Health Department, Lexington, KY (unpublished), 1989.
36. Chua, S., Arulkumaran, S., Lim, I., et al. Influence of breastfeeding and nipple stimulation on postpartum uterine activity. *Obstet Gynaecol*. 1994;101:804-805.
37. Dewey, K.G., Heinig, M.J., Nommsen, L.A. Maternal weight-loss patterns during prolonged lactation. *Am J Clin Nutr*. 1993;58:162-166.
38. Melton, L.J., Bryant, S.C., Wahner, H.W., et al. Influence of breastfeeding and other reproductive factors on bone mass later life. *Osteoporos Int*. 1993;3:76-83.
39. Cumming, R.G., Klineberg, R.J. Breastfeeding and other reproductive factors and the risk of hip fractures in elderly woman. *Int J Epidemiol*. 1993;22:684-691.
40. Rosenblatt, K.A., Thomas, D.B. WHO Collaborative Study of Neoplasia and Steroid Contraceptives. *Int J Epidemiol*. 1993;22:192-197.
41. Newcomb, P.A., Storer, B.E., Longnecker, M.P., et al. Lactation and a reduced risk of premenopausal breast cancer. *N Engl J Med*. 1994;330:81-87.
42. Kennedy, K.I., Visness, C.M. Contraceptive efficacy of lactational amenorrhoea. *Lancet*. 1992;339:227-230.
43. Gray, R.H., Campbell, O.M., Apelo, R., et al. Risk of ovulation during lactation. *Lancet*. 1990;335:25-29.
44. Labbock, M.H., Colie C. Puerperium and breastfeeding. *Curr Opin Obstet Gynecol*. 1992;4:818-825.

45. Analysis of the Potential Cost Savings of Breastfeeding - Medical Literature Review and Assessment - Renewable Technologies, Inc. (RTI), June 1988.
46. Hoey, C., Ware, J.L., "Economic Advantages of Breastfeeding in an HMO Setting: A Pilot Study," *The American Journal of Managed Care* 3(6): 861-865, June 1997.
47. Montgomery, D.L., Splett, P.L., "Economic Benefits of Breastfeeding Infants Enrolled in WIC," *Journal of the American Dietetic Association* 97(4): 379-385, April 1997.
48. World Health Organization, *Protecting, Promoting and Supporting Breast-Feeding: The Special role of Maternity Services*. Geneva, Switzerland: WHO;1989:13-18.
49. Powers, N.G., Naylor, A.J., Wester, R.A. Hospital policies: crucial to breastfeeding success. *Semin Perinatal*. 1994;18:517-524.
50. Braveman, P., Egerter, S., Pearl, M., et al. Problems associated with early discharge of newborn infants. *Pediatrics*. 1995;96:716-726/
51. Williams, L.R., Cooper, M.K. Nurse-managed postpartum home care. *J Obstet Gynecol Neonatal Nurs*. 1993; 22:25-31.
52. Gielen, A.C., Faden, R.R., O'Campo, P., et al. Maternal employment during the early postpartum period: effects on initiation and continuation of breastfeeding. *Pediatrics*. 1991;87:298-305.
53. Frederick, I.B., Auerback, K.G. Maternal-infant separation and breastfeeding: the return to work or school. *J Reprod Med*. 1985;30:523-526.
54. Spisak, S., Gross, S.S. Second Followup Report: The Surgeon General's Workshop on Breastfeeding and Human Lactation. Washington, DC: National Center for Education in Maternal and Child Health; 1991.
55. World Health Assembly, *Internal Code of Marketing of Breast-milk Substitutes*. Resolution of the 34th World Health Assembly. No. 34.22, Geneva, Switzerland: WHO; 1981.
56. Howard, C.R., Howard, F.M., Weitzman, M.L. Infant formula distribution and advertising in pregnancy: a hospital survey. *Birth*. 1994;21:14-19.
57. Howard, F.M., Howard, C.R., Weitzman, M.L. The physician as advertiser: the unintentional discouragement of breastfeeding. *Obstet Gynecol*. 1993;81:1048-1051.
58. American Academy of Pediatrics, "Breastfeeding and the Use of Human Milk," *Pediatrics* 100(6): 1035-1039, 1997.
59. American Dietetics Association. "Position of the American Dietetic Association: Promotion of Breastfeeding." *Journal of American Dietetic Association* 97(6): 662-666, June 1997.
60. American College of Obstetricians and Gynecologists and American Academy of Pediatrics, *Guidelines for Perinatal Care*, 1988.
61. National Association of Pediatric Nurse Associates and Practitioners, *Position Statement of Breastfeeding*, April 1993.
62. Oklahoma State Medical Association, "Resolution 11: Support of Breastfeeding," *The Journal of Oklahoma State Medical Association* 90(6): 274, July August 1997.
63. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: Government Printing Office; 1990:379-380. US Dept. of Health and Human Services publication PHS 91-50212