

Breastfeeding Fights Obesity

Breastfeeding and the Kentucky Nutrition and Physical Activity State Action Plan

Childhood Overweight

In Kentucky, significant numbers of children younger than 6 years of age are overweight¹, and the number continues to increase². Without help, these children will enter their teens having already suffered from over a decade of poor health. They will face chronic problems that, until recently, were seen only in adults, such as weight-related diabetes and joint problems, high blood pressure, and high cholesterol³.

Weight control programs show little success among children, and as the years go by, these children are more and more likely to grow up to be obese adults³. To stem the epidemic of childhood overweight, prevention needs to begin long before children enter school or even preschool. Prevention can begin the day an infant is born.

Breastfeeding Reduces the Risk for Childhood Overweight

Breastfeeding has long been recognized as a proven disease prevention strategy. Among its other well-documented effects, breastfeeding also has recently been found to play a foundational role in preventing childhood overweight. A recent analysis, which included 61 studies and nearly 300,000 participants, showed that breastfeeding consistently reduced risks for overweight and obesity⁴. The greatest protection is seen when breastfeeding is exclusive (no formula or solid foods) and continues for more than 3 months^{5,6}.

The breastfeeding-obesity link is now recognized by key government agencies and professional groups, including the U.S. Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP). Experts at the CDC in Atlanta estimate that 15% to 20% of obesity could be prevented through breastfeeding⁷. The AAP recommends exclusive breastfeeding for the first 6 months and continued breastfeeding with the addition of appropriate foods up to at least 1 year of age.

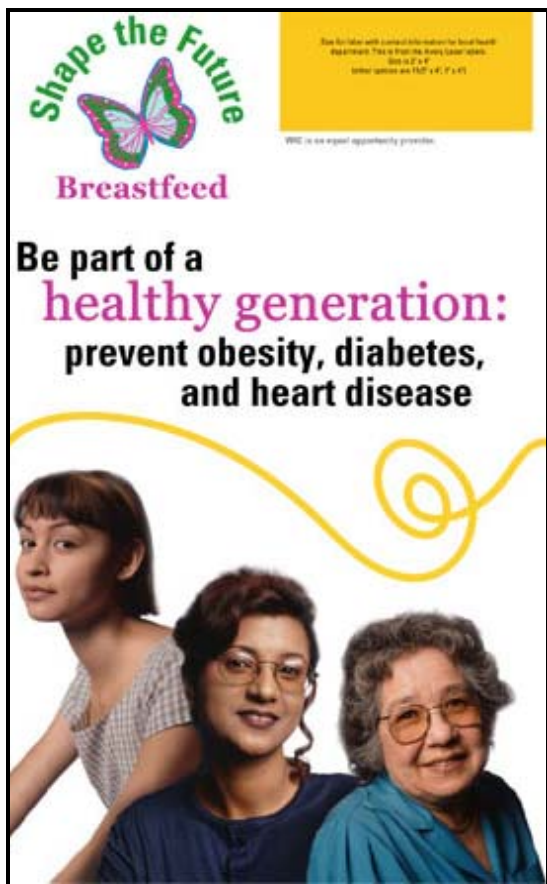
Researchers have identified several possible reasons for the protective effect of breastfeeding against obesity⁸.

- Breastfed infants may be better at self-regulating their intake. Mothers cannot see how much milk their child is drinking, so they must rely on their infant's behavior, not an empty bottle, to signal when their infant is full. Thus, breastfed babies might be better able to eat only as much as they need.
- Breastfed infants are more likely than formula-fed infants to try and accept new foods. Acceptance of new foods is important because a healthy diet should include a wide variety of foods, especially fruits and vegetables⁹. Because breast milk contains flavors from foods eaten by mothers, breastfed infants are exposed to a variety of tastes early in life. In contrast, artificial baby milk (formula) always tastes the same.
- Breastfeeding has different effects than formula feeding on infant's metabolism and hormones such as insulin, which tells the body to store fat. Formula-fed infants tend to be fatter than breastfed infants at 12 months of age⁸.



Barriers to Breastfeeding in Kentucky

During the past 10 years, overall breastfeeding rates have slowly and marginally increased. Rates of exclusive breastfeeding, which best protects against overweight, have remained flat or decreased. Only about half (52%) of Kentucky women begin breastfeeding their babies in the hospital¹⁰. Of those, only half are still breastfeeding after 2 weeks. Among WIC participants, the statewide average of any breastfeeding is approximately 25%¹¹. Some pockets of women, primarily recent immigrants, have higher initiation and durations rates, but not necessarily higher rates of exclusive breastfeeding. Rural, isolated, and medically-underserved counties have chronically low rates of initiation and duration¹¹.



Many women in Kentucky do not choose to breastfeed at all.

- They do not have family members with experience in breastfeeding nor community supports available.
- Their obstetric, pediatric, and hospital health care providers give minimal information on breastfeeding benefits, techniques and appropriate self-care to avoid problems.

- They receive marketing information from formula companies, including free samples, through their obstetric, pediatric, and hospital health care providers.
- They must return to work or school shortly after the baby is born and do not know how to maintain their milk supply or request accommodations.
- They have heard that breastfeeding is painful.
- They are concerned about the sexual perceptions of breasts and fear harassment and ostracism from family and community.

Of those women choosing to breastfeed, they note many obstacles:

- Lack of consistent, evidence-based information across all sectors of the health care system with which they interact.
- Limited prenatal education on breastfeeding and infant behavior; limited inpatient assistance with learning breastfeeding.
- Lack of accessible and skilled help with breastfeeding problems post-discharge.
- Lack of family and community support for breastfeeding in the early weeks.
- Limited support from employers and co-workers to support breastfeeding or milk expression at the worksite.

Promising Strategies

Since 1990, the Kentucky WIC Program has taken the lead in protecting, promoting and supporting breastfeeding. With the assistance of Federal WIC monies directly earmarked to breastfeeding promotion and support, the WIC program has strengthened staff understanding and techniques, provided manual and electric breast pumps, and established breastfeeding incidence and duration data collection systems. Regional breastfeeding 'grantees' coordinate awareness building in 10 areas. Breastfeeding Peer Counselor programs have begun in 8 health agencies across the state.



Breastfeeding coalitions have also taken part in breastfeeding promotion. The Kentuckiana Lactation Improvement Coalition (KLIC) was founded in 1992 by International Board Certified Lactation Consultants to foster increased collaboration between public health and hospital efforts to promote and protect breastfeeding. The Western Kentucky Breastfeeding Coalition began in the late 1990's, providing similar services in the western parts of the Commonwealth. Smaller coalitions have begun in Elizabethtown, Ashland, Paducah, and Owensboro.

In March 2006, a coalition of citizens and health professionals were successful in having SB 106 signed into law, protecting a mother's right to breastfeed or express milk anywhere she is authorized to be. KRS 211.755 went into effect in July 2006. A second bill, excusing breastfeeding women from jury duty service, was signed into law in March 2007.



Despite these advances, there are clearly further steps to be taken to increase breastfeeding overall in Kentucky as well as rates of exclusive breastfeeding. Effective strategies for improving breastfeeding have been well described by the CDC¹². Substantial and evidence-based prenatal teaching about breastfeeding techniques and managing new parenthood remove the mystery and prepare parents for what to expect. Clear hospital policies more supportive of breastfeeding result in increased breastfeeding at hospital discharge. Well-designed workplace programs increase breastfeeding rates and reduce health care costs for businesses. Using these well-documented and effective strategies, we can remove the barriers to exclusive breastfeeding and thus help reduce childhood overweight in Kentucky.

Action Plan Recommendations

The Kentucky Nutrition and Physical Activity State Action Plan has over 24 strategies that can help to improve breastfeeding initiation, exclusivity and duration in the Commonwealth. These include:

- Promote breastfeeding friendly policies and 'breastfeeding rooms' in workplaces (WS 1.18, 1.19)
- Provide pre-service and continuing education on evidence-based breastfeeding practices for various health professionals (HB 1.1, 1.2)
- Promote Baby Friendly Hospitals by promoting and implementing the World Health Organization's "Ten Steps to Successful Breastfeeding" (HB1.4)
- Increase the number of IBCLCs by 30 health professionals statewide (HB 1.5)

Various regions in the Commonwealth have identified further strategies, including:

- Implementing K-12 curricula on breastfeeding in public schools
- Strengthening local coalitions to support breastfeeding.



Breastfeeding!

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Written by Doraine Bailey, MA, IBCLC, June 2007. Adapted from Heinig MJ, et al. Breastfeeding: The First Defense Against Obesity. California WIC Association, Policy Brief #1, March 2006.

References

- ¹ Infants and toddlers are considered to be overweight if they are greater than or equal to 95th percentile for weight-height. Infants and toddlers are considered at risk for overweight if they are greater than or equal to 85th percentile for weight-height. Children aged 2-5 are said to be overweight if their Body Mass Index (BMI) is greater than 95th percentile for their age (Centers for Disease Control and Prevention, Atlanta, GA).
- ² Kentucky Department for Public Health. *Kentucky Nutrition and Physical Activity State Action Plan*. Frankfort, KY 2005.
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- ⁹ Menella JA. Mother's milk: A medium for early flavor experiences. *J Hum Lact* 1995;11:39-45.
- ¹⁰ Li R, et al. Breastfeeding rates in the United States by characteristics of the child, mother, or family: the 2002 National Immunization Survey. *Pediatrics*. 2005;115(1):e31-7.
- ¹¹ Kentucky WIC Program, unpublished data.
- ¹² Centers for Disease Control and Prevention. *The CDC Guide to Breastfeeding Interventions*, 2004. <http://www.cdc.gov/breastfeeding/resources/guide.htm>.



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