

# ***Breastfeeding: The First Defense Against Obesity***

*Preventing obesity should start as early as the day a child is born.*



**I**N California more than 425,000 children younger than six years of age are overweight,<sup>1</sup> and the number continues to climb at a staggering rate.<sup>2</sup> Without help, these children will enter their teens already having suffered from more than 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 cholesterol.<sup>3</sup>

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 adults.<sup>3</sup> To stem the epidemic of childhood overweight, prevention needs to begin long before children enter school—or even preschool.

**A POLICY BRIEF ON PREVENTING OBESITY IN EARLY CHILDHOOD**

Produced by the California WIC Association and the UC Davis Human Lactation Center

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## BREASTFEEDING REDUCES THE RISK FOR CHILDHOOD OVERWEIGHT

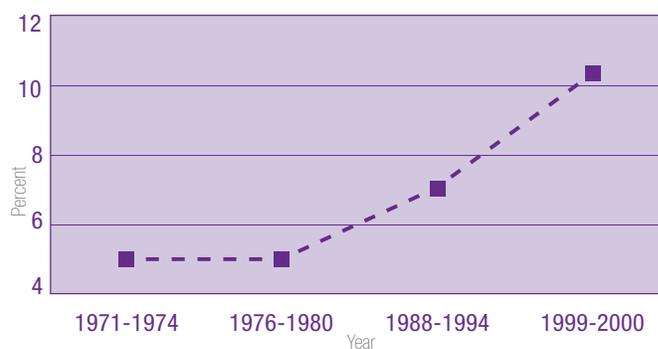
Breastfeeding has long been recognized as a proven disease-prevention strategy. Among its other well-documented effects, breastfeeding also has recently been found to play a foundational role in preventing childhood overweight. A recent analysis, which included 61 studies and nearly 300,000 participants, showed that breastfeeding consistently reduced risks for overweight and obesity.<sup>4</sup> The greatest protection is seen when breastfeeding is exclusive (no formula or solid foods) and continues for more than three months.<sup>5,6</sup>

The breastfeeding-obesity link is now recognized by key government agencies and professional groups, from the Centers for Disease Control and Prevention (CDC) to the American Academy of Pediatrics (AAP). Experts at the CDC in Atlanta estimate that 15% to 20% of obesity could be prevented through breastfeeding.<sup>7</sup> The AAP recommends exclusive breastfeeding for the first six months and continued breastfeeding, with the addition of appropriate foods, up to at least one year of age. Increasing breastfeeding in California could mean between 36,000 and 48,000 fewer overweight children and adolescents.

Researchers have identified several possible reasons for the protective effect of breastfeeding against obesity:<sup>8</sup>

- Breastfed infants may be better at self-regulating their intake. Mothers can't 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 to accept new foods. Acceptance of new foods is important because a healthy diet should include a wide variety of foods, especially fruits and vegetables.<sup>9</sup> Because breast milk contains flavors from foods eaten by the mother, breastfed infants are exposed to a variety of tastes very early in life. In contrast, infant formula always tastes the same.
- Breastfeeding has different effects than formula feeding on infants' metabolism and on 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 age.<sup>8</sup>

## Overweight in the United States for Children 2 to 5 Years of Age [all races]



Data Source: National Health and Nutrition Examination Survey; CDC

## BARRIERS TO BREASTFEEDING IN CALIFORNIA

Over the last 10 years, overall breastfeeding rates have increased in California. But rates of exclusive breastfeeding, which best protects against overweight, have remained flat.<sup>10</sup> More than 80% of women in California begin breastfeeding their babies in the hospital, but only 43% of mothers leave the hospital breastfeeding exclusively. Many more women quit breastfeeding after only a few weeks.<sup>16</sup> Clearly, most women in California want to breastfeed, but numerous barriers prevent them from doing so.

Studies have shown that formula marketing strategies, which target both pregnant women and new mothers, can affect breastfeeding duration. In one study, women receiving infant feeding information packs provided by formula companies were nearly six times as likely to stop breastfeeding before hospital discharge as those receiving non-commercial packs. It is important, therefore, that women have access to balanced information about infant feeding options in order to make fully informed decisions.<sup>12</sup>

Many mothers, particularly those with low incomes, quit breastfeeding early because they have no one to turn to for help when they experience difficulties. Moreover, many must return to work or school early and believe that they have nowhere to go to feed their babies or pump their milk.<sup>13</sup>

In 2001, the California Lactation Accommodation Law (AB 1025, Frommer) was passed, requiring employers to make a minimum effort to assist breastfeeding employees. Although this is an important first step, additional efforts are needed to support working women, particularly those in low-wage positions.



*Research has shown several ways that breastfeeding may protect against obesity.*

**BREASTFED INFANT**

**Better Able to Control Intake  
Better Able to Self-Regulate  
More Accepting of a Variety of Foods  
Metabolic and Hormonal Differences**

**LOWER RISK FOR OBESITY**

In the last decade, researchers and health care providers have learned a great deal about what steps are needed to increase exclusive breastfeeding rates. Effective strategies were laid out in a plan published by the California Department of Health Services, “Breastfeeding: Investing in California’s Future,”<sup>14</sup> and more recently outlined by the CDC.<sup>15</sup>

- Clear hospital policies more supportive of breastfeeding result in increased breastfeeding at hospital discharge.
- Community-based peer counseling programs increase breastfeeding rates among low-income women.
- Well-designed workplace programs increase breastfeeding rates and reduce health care costs for businesses.

### **FAST FACTS**

- More than 20% of children aged two to five are overweight or at risk for overweight.
- Breastfeeding reduces risk for childhood overweight and obesity. Longer and more exclusive breastfeeding is associated with the lowest risk.
- Breastfed infants are more likely to be able to stop eating when they are full.

### **RECOMMENDATIONS**

Based on the well-documented and effective strategies outlined above, barriers to exclusive breastfeeding can be removed and childhood overweight reduced. **California hospitals and policymakers must implement the following recommendations:**

- Ensure that all mothers have access to balanced information about infant feeding before the baby is born and in the hospital.
- Establish incentives for adherence to hospital policies that promote and support optimal infant care.
- Ensure that all breastfeeding mothers – especially low-income mothers – have access to skilled professional support as needed.
- Provide health plan benefits that cover supplies and services that support breastfeeding.
- Institute educational standards for training health professionals working with women, infants, and children about breastfeeding guidelines.
- Integrate age-appropriate breastfeeding education in public school curricula.
- Establish “breastfeeding rooms” in public places for mothers who wish to feed their children in private when away from home.
- Increase funding for breastfeeding promotion and support programs within public health programs and agencies.
- Expand and refine current protections for breastfeeding women in the workplace, including expanded maternity leave, education, and flexible schedules.
- Require that childcare providers receive training in appropriate infant feeding practices.

- Breastfed infants are more likely to try a variety of foods.
- Formula-fed infants tend to be fatter than breastfed infants at 12 months of age.
- Although more than 80% of California mothers start breastfeeding in the hospital, many stop in the first few weeks.

**TO BREASTFEED  
LONGER AND MORE  
EXCLUSIVELY,  
MOTHERS NEED:**



**balanced information**  
to make feeding decisions

**professional guidance**  
in the hospital and at home



**employer's support**  
to pump breastmilk at work



**supportive childcare**

**public acceptance**  
for breastfeeding anywhere



“Breast milk is already acknowledged as the best food for infants. The increased initiation and duration of breastfeeding may also provide a low-cost, readily available strategy to help prevent childhood and adolescent obesity.”

William Dietz, MD, PhD, Director, Division of Nutrition and Physical Activity, Centers for Disease Control and Prevention, Atlanta, Georgia

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