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## WIC Not Linked to Overweight in Children

One of the most worrisome aspects of the growing tide of obesity in the U.S. is the high rate of overweight among children. Overweight children face both current and long-term health problems, and their numbers have grown in the past two decades.

The number of preschoolers whose families participated in USDA's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) also grew—from 1.7 million in 1988 to 4.3 million in 2008. Are these increases connected? Does WIC participation contribute to the problem of overweight among U.S. preschoolers? Although causes of the increase in childhood overweight and obesity are complex, the answer to both questions appears to be "No."

Overweight in children is defined as a function of weight and height, factoring in age and gender. Children are at risk of being overweight if their Body Mass Index (BMI) is the same as or higher than that of 85 percent of the boys or girls their age in the United States. The percentage of young boys ages 2-5 at risk of being overweight rose from 15.2 to 22.5 percent between 1988-94 and 1999-2006. Over the same period, the percentage of overweight young girls increased from 16.1 to 20.6 percent.

ERS researchers used data from the National Health and Nutrition Examination Survey (NHANES) for 1988-94 and 1999-2006 to determine if a relationship exists between WIC participation and body weight for children ages 2-5, and if the relationship has been consistent as the number of children participating in WIC has increased. The researchers compared the body weights of children

receiving WIC benefits with those of three other groups: children in families who were income-eligible but did not receive benefits (family income less than or equal to 185 percent of Federal poverty guidelines);



Young children were more at risk of being overweight in 1999-2006

Percent at risk of being overweight

25
20
1988-1994
1999-2006

15
10
Boys
Ages 2-5

Ages 2-5

Ages 2-5

Source: USDA, Economic Research Service analysis using National Health and Nutrition Examination Survey data.

children in families of moderate incomes (family income between 185 and 300 percent of the poverty level); and children in families with incomes above 300 percent of the poverty level. The researchers compared boys and girls separately and controlled for race, ethnicity, and age.

The ERS results show no relationship between WIC and body weight for young children, with one exception. In 1988-94, girls from moderate-income families were more likely to be at risk of overweight than WIC participants. This difference was no longer evident in 1999-2006.

USDA and State WIC agencies are making changes to the types and quantities of foods that can be purchased through WIC. The new WIC food package for children age 2 and older eliminates whole milk in favor of lower fat milk, reduces the amount of juice and eggs, adds whole grains, and includes a voucher for \$6 per month to buy fruit and vegetables. The revisions to the food package also encourage breastfeeding by providing a more generous food package to mothers who exclusively breastfeed. Infant formula is eliminated from the food package for fully breastfed infants, and the amount of formula provided for partially breastfed infants is reduced. W

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This finding is drawn from . . .

WIC and the Battle Against Childhood Overweight, by Michele Ver Ploeg, EB-13, USDA, Economic Research Service, April 2009, available at: www.ers.usda.gov/publications/eb13/