

Paradoxically, food insecurity may be underlying contributor to overweight

October 1 2009

Both household food insecurity (HFInsec) and childhood overweight are significant problems in the United States. Paradoxically, being food-insecure may be an underlying contributor to being overweight. A study of almost 8,500 low-income children ages 1 month to 5 years, published in the October 2009 issue of the *Journal of the American Dietetic Association*, suggests an association between household food insecurity and overweight prevalence in this low-income population. However, sex and age appear to modify both the magnitude and direction of the association.

Food insecurity is defined as the lack of access to enough food for an active, healthy life, which results from limited or uncertain access to nutritionally adequate and safe foods in socially acceptable ways. In 2004, 11% of households in the United States reported household [food insecurity](#), and households with [children](#) younger than 6 years old and black and Hispanic households experienced higher rates of household food insecurity and hunger. Prevalence of household food insecurity and overweight has increased over time and are more prevalent in low-income families.

This cross-sectional study is based on demographic, anthropometric, food security and other health-related data collected from November 1998 through December 1999, on a sample of children and mothers from low income families participating in the Massachusetts Department of Public Health's WIC (Special Supplemental Nutrition Program for the Women, Infants, and Children) Program. Data on the children's age, sex,

parental/caretaker report of child race/ethnicity and maternal education were also collected.

Of the 8,493 children with complete data, 31% of the children were from food-insecure households (8.3% with hunger), and 18.4% of the sample was overweight. Prevalence of HFInsec did not differ significantly by age, sex or maternal education.

Because significant interactions were found between HFInsec and age-group and sex, the researchers separated the subjects into four groups, boys

Writing in the article, Elizabeth Metallinos-Katsaras, Associate Professor, Department of Nutrition, School for Health Sciences, Simmons College, Boston, states, "The findings of this study suggest that HFInsec is associated with overweight prevalence in low income ethnically and racially diverse girls. Age and sex, however, appear to modify both the magnitude and the directionality of the association. Future research should examine these associations using a longitudinal research design. Moreover, qualitative research is needed to establish the underlying behaviors that may affect the development of childhood overweight among families with uncertain and limited food availability and how these behaviors may vary by sex."

More information: The article is "Food Insecurity Is Associated with [Overweight](#) in Children [Journal of the American Dietetic Association](#), Volume 109 Issue 10 (October 2009), published by Elsevier.

Source: Elsevier

Citation: Paradoxically, food insecurity may be underlying contributor to overweight (2009,

October 1) retrieved 26 April 2024 from <https://medicalxpress.com/news/2009-10-paradoxically-food-insecurity-underlying-contributor.html>

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