

Research Policy Brief Number 1

Family Economics Research Coordinating Committee (NCCC052)

Food Insecurity, Stress, and Obesity among US children

The issue. Approximately 1 in 6 children in the U.S. are obese and another 1 in 6 are overweight with rates of each much higher for children in low-income households. Childhood obesity has negative physical, psychological, and social consequences that have important current and future implications, making addressing childhood obesity a central concern of policymakers. On the other end of the nutrition spectrum, 1 out of 5 children in the United States live in a food insecure household (i.e. a household that does not have the financial means to access enough food to sustain active and healthy living for all members). Like with childhood obesity, food insecurity has been associated with numerous negative health outcomes.

Besides the high levels of overweight and food insecurity, children in low-income families experience a myriad of adverse psychosocial conditions that result in high levels of stress. The stressors experienced by low-income families may originate from within individuals, family members, neighborhoods, and/or communities. Using data from the 1999-2002 National Health and Nutrition Examination Survey, the authors examine the direct association between maternal stress (stress emanating from the child's mother) and childhood obesity, between food insecurity and childhood obesity, and the interactive association of maternal stress and food insecurity with childhood obesity.

According to our research. In most specifications, there was no direct association between food insecurity or maternal stressors and overweight for children of any age. Among 3- to 10-year olds, the interaction of food insecurity and maternal stressors was significantly linked to the probability of being overweight; more specifically, an increase in maternal stressors amplified a food secure child's probability of being overweight or obese. This result is robust to alternative specifications of maternal stressors.

Policy conclusions. There have been numerous recent policy and programmatic recommendations that address childhood obesity. Our research demonstrates that policies and programs which reduce maternal stress may also help reduce childhood obesity, especially for children between the ages of 3 and 10 years.

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This policy brief is based on published research: Gundersen, C., Lohman, B., Garasky S., Stewart S., and Eisenmann J. (2008). Food Security, Maternal Stressors, and Overweight among Low-Income US Children: Results from the National Health and Nutrition Examination Survey (1999-2002). *Pediatrics*, 122(3), e529–e540.

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The NCCC052 committee, functioning under the National Agricultural Experiment Station System, facilitates collaboration among family economics researchers nationally and internationally. The committee provides a forum to examine research methodology and family economic issues in depth from a multidisciplinary perspective. The committee fosters development of research related to the economic well-being of individuals and families that is of interest to multiple institutions across the nation. For more information, see <http://nimss.umd.edu/homepages/home.cfm?trackID=7036>.