

Hunger and Health

The correlation between hunger and poor health outcomes is well established.¹⁻⁴ In recent years, a significant body of research has emerged that indicates the relationship between food insecurity and health—including physical, mental, and behavioral health—is in fact bidirectional.



Research Findings

The relationship between health and hunger is a complex one that has become an important consideration over the past few years. In their October 2014 report, “Childhood Food Insecurity in the U.S.: Trends, Causes, and Policy Options,” Gunderson and Kreider illustrated calculations from the U.S. Census Bureau’s 2012 Current Population Survey, Core Food Security Module, showing that even at incomes three times the federal poverty level, **approximately 5 percent of children and more than 10 percent of households with children experienced food insecurity, indicating other factors besides poverty may contribute to hunger.** A number of recent studies were summarized suggesting that **the health of adult caregivers is one important factor that may affect children’s food security.**⁵

Among these studies was one by Balistreri, based on an analysis of multi-year data from the Current Population Survey Food Security Supplement, which found that **children living with a disabled adult were nearly three times as likely as those living in a household without a disabled adult to be severely food insecure.**⁶ Another, by Powers, based on an analysis of multiple panels of the U.S. Census Bureau’s Survey of Income and Program Participation, found **evidence that maternal mental health problems may negatively impact household food security.**⁷ Based on data from the National Center for Education Statistics’ Early Childhood Longitudinal Study—Birth Cohort (ECLS-B), a nationally representative sample of approximately 14,000 children born in the U.S. in 2001, Noonan and colleagues found that the **odds of a household experiencing food insecurity increased by 50 to 80 percent if a mother had moderate to severe depression.**⁸ Jackowitz and Morrissey also used the ECLS-B to determine factors that trigger children’s entry into or exit from food insecurity between birth and age five. They found that **declines in child and maternal health are associated with entry into food insecurity,** while improvements in child and maternal health have the opposite effect.⁹ An analysis of data from the U.S. Centers for Disease Control and Prevention’s National Health and Nutrition Examination Survey by Anderson and colleagues found, among other disparities, that **in households below 300 percent of the federal poverty level with very low food secure children, 24 percent of adults reported suffering from depression** vs. just 9 percent of adults in households below 300 percent of the federal poverty level with children overall.¹⁰ **Research suggests that health status may contribute to adults’ food security as well.** In their August 2013 Journal of Nutrition article,

“Chronic physical and mental health conditions among adults may increase vulnerability to household food insecurity,” Tarasuk and colleagues cited several prior studies, and reported on their analysis of data on 77,053 adults aged 18–64 from the 2007–2008 Canadian Community Health Survey. They found that **those with most chronic conditions had higher odds of being food insecure** than those with no chronic condition, and those with two or three concurrent chronic conditions had increasing likelihood of food insecurity.¹¹

Need for Further Study

Additional research is needed to further understand the intersection between poor health and food insecurity, and to determine effective interventions.

Motivated by this need, the McSilver Institute for Poverty Policy and Research and New York University Silver School of Social Work initiated the Family and Food Matters! study last year. The study includes 100 food pantry participants in New York City and Dutchess County, NY, who completed quantitative surveys and/or qualitative interviews to identify the coping strategies and experiences of food insecurity among families participating in food pantries. Findings from this study have broader implications for better understanding the barriers that families face in accessing food. The data, which are now being analyzed, will inform the development and implementation of a curriculum designed to strengthen family functioning in families experiencing food insecurity and adverse life events, including poor physical and behavioral health.

¹ Gundersen, C. & Kreider, B. (2009). Bounding the Effects of Food Insecurity on Children's Health Outcomes. *Journal of Health Economics*, 28(5):971–983.

² Cook, J.T., Frank, D.A. & Levenson, S.M., et al. (2006). Child food insecurity increases risks posed by household food insecurity to young children's health. *Journal of Nutrition*, 136(4):1073–1076.

³ Seligman, H.K. & Schillinger, D. (2010). Hunger and socioeconomic disparities in chronic disease. *N Engl J Med* 363(1):6–9.

⁴ Siefert, K., Heflin, C.M., Corcoran, M.E. & Williams, D.R. (2001). Food insufficiency and the physical and mental health of low-income women. *Women & Health*, 32(1–2):159–177.

⁵ Gundersen, C. & Ziliak, J. “Childhood Food Insecurity in the U.S.: Trends, Causes, and Policy Options.” *Future of Children*. October 2014.

⁶ Balistreri, K. (2012). “Family Structure, Work Patterns, and Time Allocations: Potential Mechanisms of Food Insecurity among Children,” University of Kentucky Center for Poverty Research Discussion Paper Series. Retrieved from: http://uknowledge.uky.edu/ukcpr_papers/33/

⁷ Powers, E. (2013). “The Influence of Parental Aspirations, Attitudes, and Engagement on Children's Very Low Food Security.” University of Kentucky Center for Poverty Research Discussion Paper Series. Retrieved from: http://uknowledge.uky.edu/ukcpr_papers/15/

⁸ Noonan, K., Corman, H. & Reichman, N.E. (2014). “Effects of Maternal Depression on Family Food Insecurity,” University of Kentucky Center for Poverty Research Discussion Paper Series. Retrieved from: http://uknowledge.uky.edu/ukcpr_papers/3/

⁹ Jacknowitz, A. & Morrissey, T.W. (2012). “Food Insecurity across the First Five Years: Triggers of Onset and Exit,” University of Kentucky Center for Poverty Discussion Paper Series. http://uknowledge.uky.edu/ukcpr_papers/34/

¹⁰ Anderson, P.M., Butcher, K., et al. (2014). “Beyond Income: What Else Predicts Very Low Food Security among Children?” University of Kentucky Center for Poverty Research Discussion Paper Series http://uknowledge.uky.edu/ukcpr_papers/7/

¹¹ Tarasuk, V., Mitchell, A., McLaren, L. & McIntyre, L. (2013). Chronic physical and mental health conditions among adults may increase vulnerability to household food insecurity. *Journal of Nutrition*, 143(11): 1785–93.