

Hungry and Overweight: How is It Possible?

How can hungry children be overweight?

Imagine a caregiver who has limited resources for their family's monthly groceries. Their highest priority is to select foods that stretch food dollars and will keep their children full and satisfied. With this in mind, one's options are increasingly constricted. "Households with limited resources tend to spend less on food overall and, more specifically, less on healthy foods that are lower in energy but more costly (e.g., fruits and vegetables)."1 Typically the least expensive foods are those that are low in nutrients and high in calories.² The growing discussion surrounding a link between food insecurity and obesity is quite complex, and research studies have reported mix results. What researchers have determined though are the common factors related to those who experience food insecurity, and these factors can lead to increased weight or obesity:

- **Disrupted meal patterns** Individuals and families experiencing food insecurity often experience periods of time with full pantries, followed by periods without. When food is available, many children eat a healthy and steady diet, though some may overeat due to fear of lacking food in the future. When food is not available, children's diet's may be minimal or they may have to skip meals altogether. These wide swings in calorie consumption impacts metabolism and promotes fat storage.²
- Family stress Individuals and families experiencing food insecurity often face high levels of stress related to secure housing, food, employment, health care, finances, and unsafe neighborhoods. Families may be faced with the difficult choices on a regular basis of purchasing healthy food over paying monthly bills to heat the house or obtain needed prescriptions. Stress, anxiety, and depression can also lead to unhealthy eating behaviors and metabolic changes that promote weight gain.² In fact, in "households where adolescents were food insecure, the adolescent's likelihood of being obese increased from 35 percent when only one stressor was experienced to approximately 70 percent when three stressors were experienced."
- Lack of access Individuals and families experiencing food insecurity often have limited access to healthy

options, and transportation or close proximity to grocery stores offering a variety of healthy foods, beverages, and produce. Low-income neighborhoods are more likely to have access to fast food restaurants and convenience stores that sell inexpensive foods high in calories, fat, and added sugars. These options may satisfy hunger, but often lack key nutrients to support optimal growth and development.³

How does food insecurity affect children?

- **Health and developmental issues**^{1,4} Children who are food insecure are more likely to have iron deficiency, asthma, delayed cognitive development, increased stomachaches, headaches, and colds, and increased fatigue. Additionally, children are more likely to become overweight or obese which can lead to other chronic diseases including high blood pressure and diabetes.
- Poor academic performance Children who are food insecure tend to have lower math scores and have difficulty concentrating. They are also more likely to repeat a grade level.
- **Behavioral problems** Irritability, difficulty getting along with others and school suspensions are some of the problems related to behavior that children and teens that experience food insecurity are more likely to face. ⁵

How can I help reduce food insecurity in my community?⁶

- **School meals** Encourage families to apply for free or reduced school meals at www.applyforlunch.com.
- **Dinner programs** Encourage afterschool programs to adopt federally subsidized school dinner programs: http://www.fns.usda.gov/cnd/care/.
- **Summer food service programs** Find summer meal sites in your community. Call the National Hunger Hotline at 1-866-3-HUNGRY or 1-877-8-HAMBRE. Visit www. summerfood.usda.gov.
- Farm to school programs Help to initiate a Farm to School Program: http://www.fns.usda.gov/cnd/f2s/. Encourage schools to apply for a USDA Farm to School grant at http://www.fns.usda.gov/cnd/f2s/f2_grant_program.htm.

- **School and community gardens** Begin a school garden: http://healthymeals.nal.usda.gov/resource-library/school-gardens
- SNAP and WIC Encourage pediatricians, day care facilities, and school nurses to refer families to the local food bank and apply for supplemental food programs such as Women, Infants, and Children (WIC) and Supplemental Nutrition Assistance Program (SNAP, formerly food stamps).
- Retail collaborations Collaborate with the private sector and foundations to help small retailers and convenience stores offer healthier foods.

- Marketing for health Work with community groups, foundations, and public agencies to market healthy behaviors and increase opportunities for safe physical activity in food insecure neighborhoods.
- Food assistance programs Become involved in your local food bank, food pantry or soup kitchen. Is there an opportunity to initiate healthy eating classes or help organize a food drive? Assist in connecting local food retailers with the food bank for opportunities to distribute healthy foods to the food bank. Find out more about hunger in your community and get involved. www.feedingamerica.org

References:

- Food Insecurity and Risk for Obesity Among Children and Families: Is There are Relationship? Healthy Eating Research: Building evidence to prevent childhood obesity. Robert Wood Johnson Foundation. April 2010.
- Why Low Income and Food Insecure People are Vulnerable to Overweight and Obesity. Food Research and Action Center Web site. http://frac.org/initiatives/hunger-and-obesity/why-are-low-income-and-food-insecure-people-vulnerable-to-obesity/. Accessed September 13, 2012 and Hartline-Grafton, H. Food Insecurity and Obesity: Understanding the Connections. Food Research and Action Center Web site. http://frac.org/pdf/frac_brief_understanding_ the_connections.pdf. Spring 2012. Accessed September 13, 2012.
- 3. Dinour LM, Bergen D and Yeh M. The Food Insecurity-Obesity Paradox: A Review of the Literature and the Role Food Stamps May Play. J Am Diet Assoc., 2007: 107(11): 1952-1961.

- 4. Kirkpatrick SI, McIntyre L, Potestio M. Child Hunger and Long-term Adverse Consequences for Health. Arch Pediatr Adolesc Med, 2010: 176(8):754-762.
- 5. Cook J, Jeng K. Child Food Insecurity: The Economic Impact on Our Nation. Feeding America Web site. http://feedingamerica.org/our-network/the-studies/~/media/Files/research/child-insecurity-economic-impact.ashx?.pdf. Accessed September 13, 2012.
- 6. Making the Connection: Linking Policies that Prevent Hunger and Childhood Obesity. Leadership for Healthy Communities Web site. http://www.leadershipforhealthycommunities.org/images/stories/lhc_hunger_obesity_02.14.12.pdf. February 2012. Accessed September 13, 2012.

Content contributed by:





Weight
Management
a dietetic practice group of the
eart* Academy of Nutrition
right. and Dietetics



This document was developed with an educational grant from the National Dairy Council®.

Join: www.kidseatright.org/volunteer | Promote: www.kidseatright.org