

Hungry & Overweight

How is it Possible?



Future of Food



Improving Food Security: Dietitians Bring Nutrition Expertise to the Table

POSTED ON JUNE 14, 2012







Ethan Bergman, President of the Academy of Nutrition and Dietetics, addresses the Future of Food Conference in Washington, D.C. Photo courtesy of Washington Post Live.

By Ethan A. Bergman, PhD, RD, FADA, CD President Academy of Nutrition and Dietetics



Future of Food Free Webinars

February: Hungry and Overweight: How is it

Possible?

March: Contributors and Effects of Food

Insecurity: Nutrition and Beyond

April: School Meals and Community Partnerships:

Creative Solutions against Food Insecurity

May: Point A to Point B: Improving Access to

Healthy Foods in Food Banks

June: A Flavorful Pairing: Nutrition Education in

Food Banks

July: Ready, Set, Go: Unveiling Access to Quality

Nutrition Education Resources

Register at

www.eatright.org/foundation/kidseatright



Learning Objectives

- 1. Name at least two reasons children can be hungry and overweight at the same time.
- 2. Describe three key ways food insecurity affects children.
- 3. Name at least two programs you can support in your community that address food insecurity.



Outline

Background

 How can hungry children be overweight?

 How does food insecurity affect children?

What can we do?





. . . A Message from the President



Ethan Bergman
President 2012-2013
Academy of Nutrition
and Dietetics
Foundation

Thank you for participating in this webinar. I hope you are able to use the information to make a positive difference in the lives of the children you reach. Kids Eat Right is a wonderful and wideranging program that does much to help children meet their nutrient, calorie and physical activity needs. The Academy's vision is to improve the health of Americans through food and nutrition; Kids Eat Right is an outstanding example of how the Academy and our Foundation are fulfilling this collective vision.





Jean H. Ragalie, RD President National Dairy Council®



The National Dairy Council is deeply concerned about the state of children's health. Finding a solution will take everyone working together. With that in mind, National Dairy Council® is proud to have joined forces with Feeding America and the Academy of Nutrition and Dietetics in the Future of Food partnership to help fight hunger and promote healthy food choices. Through this collaboration, we hope to raise awareness, educate thought leaders and the public about ways to integrate nutrition principles in feeding programs and increase access to healthy foods.

Today's Speakers



Meg Bruening, PhD, MPH, RD Representing:

Hunger and Environmental Nutrition (HEN) DPG

and

Future of Food

Working Group



Katie Harr, MPH
Representing:
Feeding America
and
Future of Food





Food Insecurity Definitions 1

Food security category	Term	Definition
Food secure	High food security (old label=Food security)	No reported indications of food-access problems or limitations
	Marginal food security (old label=Food security)	One or two reported indicationstypically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake
Food insecure	Low food security (old label=Food insecurity without hunger)	Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake
	Very low food security (old label=Food insecurity with hunger)	Reports of multiple indications of disrupted eating patterns and reduced food intake



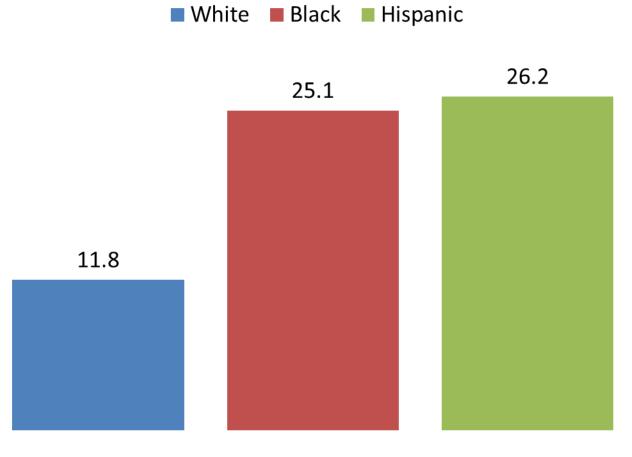
2011 Rates of Food Insecurity 2,3

- Very low food security (hunger) doubled since 2000
- 21.9% of children (16.1 million) lived in poverty
- 22.4% of children (16.6 million) lived in food insecure households



Disparities in Food Insecurity Rates

Percent of households with food insecurity 3

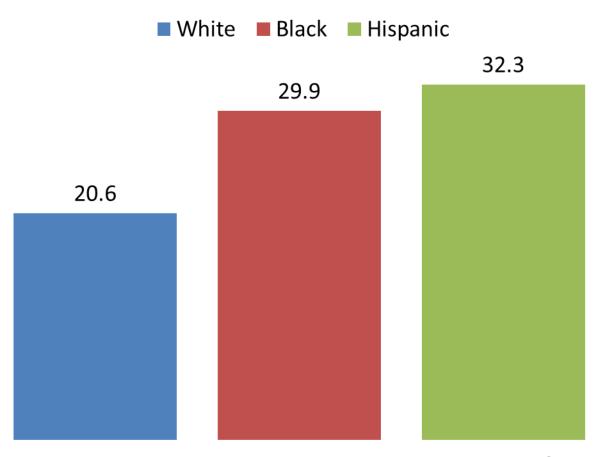


Source: ERS, 2012.



Disparities in Food Insecurity Rates

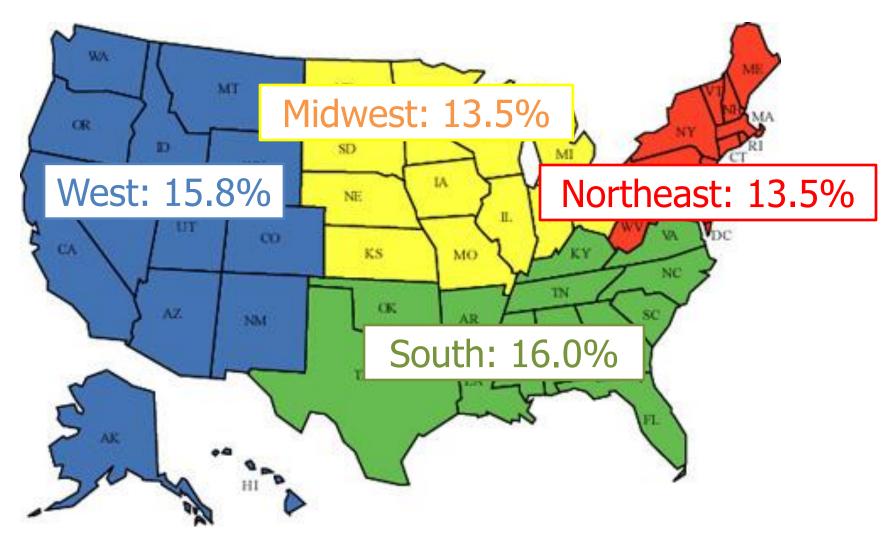
Percent of households with children experiencing food insecurity 3



Source: ERS, 2012.

Regional Disparities 3





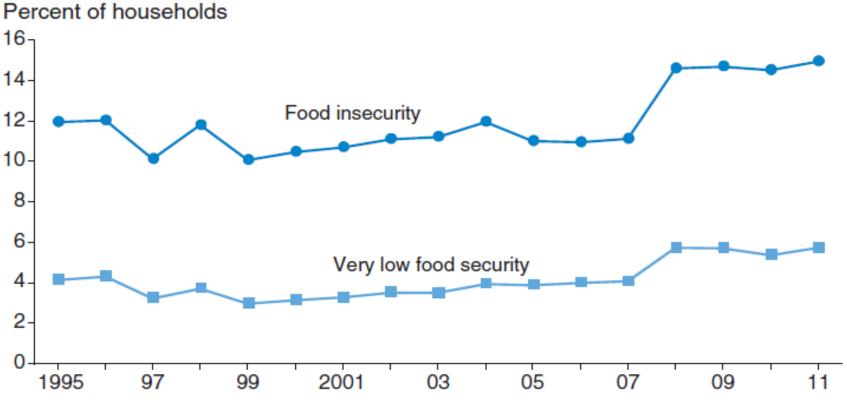
Source: ERS, 2012.





Trends in the prevalence of food insecurity and very low food security

in U.S. households, 1995-20111





Definition: The concurrent prevalence of obesity and food insecurity.



How can hungry children be overweight?







- Limited availability of healthy foods
 - Thrifty Food Plan doesn't meet families' needs
 - High exposure to unhealthy foods
 - Home food environment





Disrupted Meal Patterns 7

- Inconsistent access to food may result in overeating
 - Parental modeling/normalization of overeating behavior
 - Swing in caloric intake → fat storage



Family Stress 8,9

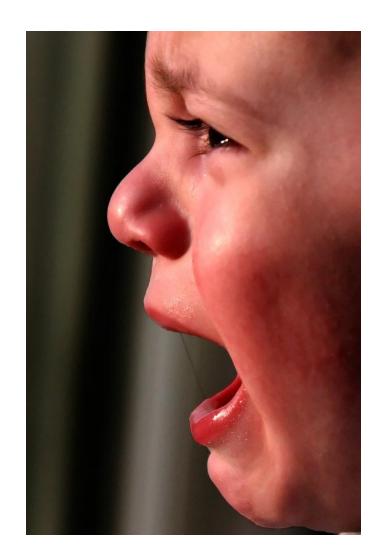




- Food
- Secure housing/utilities
- Employment
- Health care
- Finances
- Unsafe neighborhoods
- Stigma



How does food insecurity and obesity affect children?





Health and Development Issues 10

Food insecurity

- Iron deficiency
- Asthma
- Delayed cognitive development
- Stomach aches, headaches, and colds
- Increased fatigue
- Psychosocial issues and stigma





Health and Development Issues 11-22

- Childhood obesity
 - Type II diabetes
 - High blood pressure
 - Asthma
 - Some cancers
 - Stigma
 - Adult obesity





Poor Academic Performance 23

- Food insecure youth have poorer
 - Brain/cognitive development
 - School readiness
 - Learning, academic performance and educational attainment





- Irritability and anxiety
- Difficulty getting along with others
- Fights and school suspensions







- Hunger and overweight is prevalent among our youth
- Causality still being studied
- Adverse nutrition, health, and psychosocial effects where RDs can make an impact





Fight Hunger and Promote Health

Katie Harr, MPH Manager, Nutrition Feeding America



I. The Feeding America Network

- Who we are, how we work and our impact
- Nutrition Banking

II. Fighting Hunger In Your Community

- Federal Nutrition Programs
- Hunger in your Community (Map the Meal Gap)
- Find your local food bank
- Ways to get involved and give



Feeding America is the nation's leading domestic hunger-relief charity.

Our **mission** is to feed America's hungry through a nationwide network of member food banks and engage our country in the fight to end hunger.



Feeding America: How We Work



202 COMMUNITY FOOD BANKS

61,000 AGENCIES

37,000,000 AMERICANS SERVED



Feeding America: Our Impact





37 MILLION AMERICANS

served annually, including 14 million children and 3 million seniors.



8 MEALS

supplied for each dollar donated.



3 BILLION MEALS

distributed annually.



549 MILLION POUNDS

of fresh produce sourced by our network in FY12.



202 FOOD BANKS

in our network.



650,000 VOLUNTEERS

help carry out our vision for a hunger-free America.



Feeding America: How We Work



- Traditional "Emergency" Food Distribution: Food pantries, soup kitchens, shelters
- Targeted Programs: Mobile Pantries, Kids Cafes, BackPack Program, Summer Feeding Programs, Senior Programs
- SNAP & Benefit Outreach
- Nutrition Initiatives and Community Food Projects
- Advocacy & Policy: Hunger Action Center, Hunger Action Month
- Research: Hunger In America, Map the Meal Gap



Nutrition Banking





Food Banks are much more than food warehouses!

Did you know...

Over 80% of food banks provide nutrition education

More food banks are implementing nutrition policies

Many food banks have RD's on staff, and some support Community Food Projects such as:

- Community farms and gardens
- Farmers Markets
- Plant-A-Row
- CSAs







Protect the Safety Net!

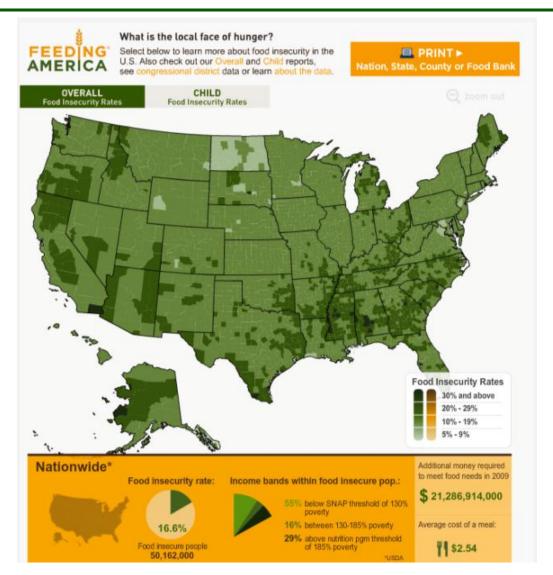
SNAP
School Meals
SFSP (Summer Food)
CACFP (Child and Adult Food)
WIC
TEFAP



Hunger in your Community







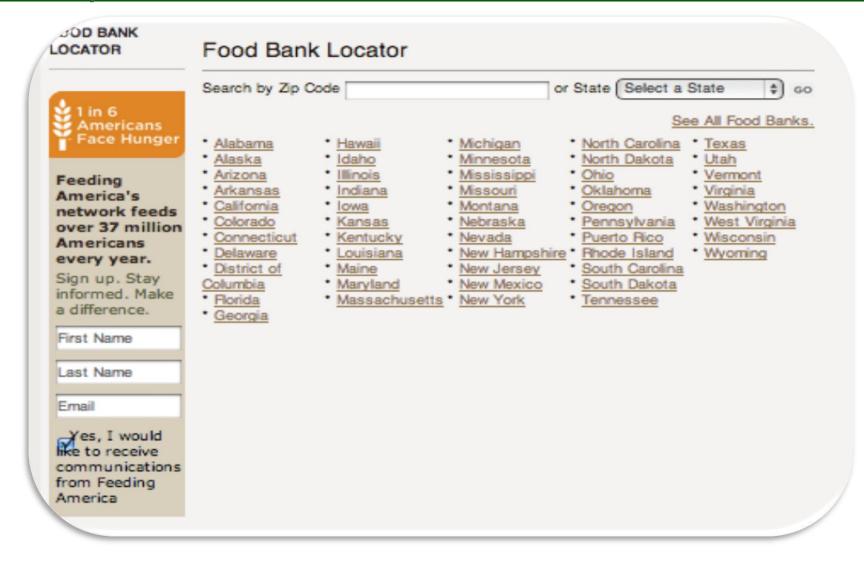
http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx





Find your Local Food Bank

Academy of Nutrition and Dietetics
Academy of Nutrition and Dietetics Foundation





Be an Advocate



TAKE **ACTION**

Take Action

🖄 f 🕒



Act On Our Current Issues

Legislative Victories

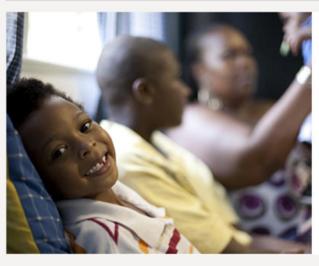
Read & Share Your Stories

SIGN IN TO MY ACCOUNT



Special thanks to TYSON FOODS

for being a lead supporter of Feeding America's Advocacy program.



Tell Congress to Protect Anti-hunger Programs!

As Congress considers how to pass a new Farm Bill and address the deficit, we must urge our leaders in Washington to protect the programs that help put food on the table for Americans struggling with hunger.

Take Action Now

Call Congress!



You do so much, but you can do more. Make your voice heard by calling your Members of Congress!

Demonstrate Your Values



If you believe that no one should go hungry in America, join the Hunger Action Center.

Email Address

JOIN NOW



Academy of Nutrition and Dietetics Academy of Nutrition and Dietetics Foundation

Spread the Word- Ways to Give





Feeding America Links



Take action: Stay informed and take action on current legislation http://help.feedingamerica.org/site/PageServer?pagename=advocacy_Take_A_ction&s_subsrc=Map%2520the%2520Meal%2520Gap%252C%2520Food%2520Insecurity%2520in%2520your%2520County

Map the Meal Gap: Local Food Insecurity Rates

http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx

Food Bank Locator: Find a food bank near you

http://feedingamerica.org/Home/foodbank-results.aspx

Ways to Give: Donate, volunteer

http://feedingamerica.org/ways-to-give.aspx



Kids Eat Right Toolkits



Healthy Breakfast. Everywhere You Go.

Presentations for elementary, middle, high school students and adults

Healthy Snacking. In a Nutshell.

Presentations for adults, adult athletes, parents, teachers/schools, coaches, elementary students, teens, teen athletes, and worksites

Family Champions. One Change at a Time.

Three interactive parent workshops including cooking activities. Available in English and Spanish!

Family Meals. Anytime. Anyplace.

Presentations for teens and adults

Myth Busters. For Parents.

Presentation for parents

Join: Kidseatright.org/volunteer

Promote: Kidseatright.org

Looking for more?



Share Our Strength Programs www.nokidhungry.org

Shopping Matters

http://join.strength.org/site/PageNavigator/SO

S/SOS of shoppingmatters home

Cooking Matters www.cookingmatters.org



Questions?

Thank you!

Hunger and Environmental Nutrition

a dietetic practice group of the

Academy of Nutrition

right. and Dietetics



References



- 1. Food Security Categories:
- http://www.ers.usda.gov/topics/food-nutritionassistance/food-security-in-the-us/definitions-of-foodsecurity.aspx
- 2. Townsend MS, Peerson J, Love B, Achterberg C, Murphy SP. Food insecurity is positively related to overweight in women. *J Nutr.* 2001;131(6):1738---1745.
- 3. USDA Economic Research Service Report: http://www.ers.usda.gov/media/884525/err141.pdf
- 4. Dietz WH. Does hunger cause obesity? *Pediatrics*. 1995 May;95(5):766-7.
- 5. Crawford PB, Webb KL. Unraveling the paradox of concurrent food insecurity and obesity. *Am J Prev Med*. 2011;40(2):274-275.



- 6. Bruening M, MacLehose R, Loth K, Story M, Neumark-Sztainer D. Feeding a family in a recession: Food insecurity among Minnesota parents. *American Journal of Public Health*. 2012; 102(3):520-526.
- 7. Dammann KW, Smith C. Factors affecting low income women's food choices and the perceived impact of dietary intake and socioeconomic status on their health and weight. *J Nutr Educ Behav.* 2009;41(4):242-253.
- 8. Lohman BJ, Stewart S, Gundersen C, et al. Adolescent Overweight and Obesity: Links to Food Insecurity and Individual, Maternal, and Family Stressors. *Journal of Adolescent Health*, 45(3): 230–237, 2009.
- 9. Witness for Hunger:

http://www.centerforhungerfreecommunities.org/ourprojects/witnesses-hunger



- 10. Kirkpatrick SI, McIntyre L, Potestio M. Child Hunger and Long-term Adverse Consequences for Health. *Arch Pediatr Adolesc Med*, 2010: 176(8):754-762.
- 11. Franks PW, Hanson RL, Knowler WC, et al. Childhood obesity, other cardiovascular risk factors, and premature death. *N Engl J Med.* Feb 11 2010;362(6):485-493.
- 12. Van Cleave J, Gortmaker SL, Perrin JM. Dynamics of obesity and chronic health conditions among children and youth. *JAMA*. Feb 17 2010;303(7):623-630.
- 13. Shultz SP, Sitler MR, Tierney RT, et al. Effects of pediatric obesity on joint kinematics and kinetics during 2 walking cadences. *Arch Phys Med Rehabil.* Dec 2009;90(12):2146-2154.



- 14. Kaechele V, Wabitsch M, Thiere D, et al. Prevalence of gallbladder stone disease in obese children and adolescents: influence of the degree of obesity, sex, and pubertal development. *J Pediatr Gastroenterol Nutr.* Jan 2006;42(1):66-70.
- 15. MacKenzie NR. Childhood obesity: strategies for prevention. *Pediatr Nurs.* Sep-Oct 2000;26(5):527-530.
- 16. Baer HJ, Colditz GA, Willett WC, et al. Body fatness at young ages and incidence of premenopausal breast cancer. *Am J Epidemiol.* Jun 1 2004;159(11):S104-S104.
- 17. Baer HJ, Tworoger SS, Hankinson SE, et al. Body Fatness at Young Ages and Risk of Breast Cancer Throughout Life. *Am J Epidemiol.* Jun 1 2010;171(11):1183-1194.



- 18. Lin YC, Chang PF, Yeh SJ, et al. Risk Factors for Liver Steatosis in Obese Children and Adolescents. *Pediatrics* and *Neonatology*. Jun 2010;51(3):149-154.
- 19. A-Kader HH. Nonalcoholic fatty liver disease in children living in the obeseogenic society. *World Journal of Pediatrics*. Nov 2009;5(4):245-254.
- 20. Kaur S, Kapil U. Impaired Glucose Tolerance and Diabetes Mellitus in Obese Children. *Indian Pediatrics*. Apr 2010;47(4):362-363.
- 21. Fagot-Campagna A. Emergence of type 2 diabetes mellitus in children: epidemiological evidence. *J Pediatr Endocrinol Metab.* 2000;13 Suppl 6:1395-1402.
- 22. Must A, Anderson SE. Effects of obesity on morbidity in children and adolescents. *Nutr Clin Care.* Jan-Apr 2003;6(1):4-12.



- 23. Cook JT, Frank DA, Casey PH, Rose-Jacobs R, Black MM, Chilton M, Ettinger de Cuba S, Appugliese D, Coleman S, Heeren T, Berkowitz C, Cutts DB. A brief indicator of household energy security: associations with food security, child health, and child development in US infants and toddlers. Pediatrics. 2008 Oct; 122(4):e867-7. 24. Weinreb L, Wehler C, Perloff J, Scott R, Hosmer D, Sagor L, Gundersen C. Hunger: its impact on children's health and mental health. *Pediatrics*. 2002 Oct;110(4):e41.
- 25. Kleinman RE, Murphy JM, Little M, Pagano M, Wehler CA, Regal K, Jellinek MS. Hunger in children in the United States: potential behavioral and emotional correlates. *Pediatrics*. 1998 Jan;101(1):E3.