



Food Insecurity in Older Americans: What it is and why we should care about it?

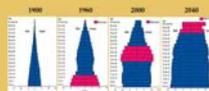
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Outline

- What is “food insecurity”?
- Why we care about food insecurity?
- What are barriers to achieve food security?
- What are the consequences of food insecurity?
- How to measure food insecurity?
- How many older Americans are food insecure?
- How to improve food security of older Americans?



Population Aging and Food Insecurity in the U.S.



- **Older population is rapidly growing in the U.S.**
 - Implications on programs and policies in food assistance, public health, and healthcare
- **Food insecurity is a hidden and unique problem in older adults**
 - Others report prevalence: 6.5 - 30.0%
 - Caused by economic, health, physical limitation, social support, and other problems
 - Resulted in deleterious consequences on nutrition, physical and mental health, and quality of life

U.S. Census Bureau 2008; Lee JS et al, 2010, Ziliak JP et al, 2008, 2009

What is “Food Insecurity”?

USDA definition of food insecurity:

“Limited or uncertain availability of nutritionally adequate and safe foods or limited, or uncertain ability to acquire acceptable foods in socially acceptable ways”

- Access
- Availability
- Food safety
- Social meaning of food



Anderson SA. J Nutr 1990;120:1559-1600.

Why Care about “Food Insecurity”?

- **Adequate Food is a Human Right!**
- The right to food is integral to the overall right to a minimum standard of living
- Cost burdens of food insecurity are very big to an individual, families, and the nation
- Food insecurity is an urgent public health problem
- The existence of widespread food insecurity in the U.S. is morally reprehensible

Kent G. Freedom from want: the human right to adequate food.
George Town University Press, Washington, D.C., 2005
Brown J et al. The economic cost of domestic hunger, 2007.
The Sodexo Foundation

2006 Amendments to the Older Americans Act P.L. 109-365

Nutrition Services

- Reduce hunger and food insecurity
- Promote socialization
- Promote health and well-being



http://aoa.gov/OAA2006/Main_Site/index.aspx, OAA power point presentation

Components of the Experience of Food Insecurity in Older Adults

- **Quantitative**
 - ↘ Food depletion
 - ↘ Having to eat less food than usual
 - ↘ One or more days without food, actual "hunger"
- **Psychological**
 - ↘ Knowledge and perception of food situation
 - ↘ Uncertain food situation and not right foods for health
 - ↘ Lack of choice and need to make compromises
- **Qualitative**
 - ↘ Having to buy and eat less preferred foods
 - ↘ Having to eat a nutritionally inadequate diet
 - ↘ Not able to eat the right food and meals for health
- **Social**
 - ↘ Accessing food in socially unacceptable ways
 - ↘ Socially or culturally less normative patterns of eating

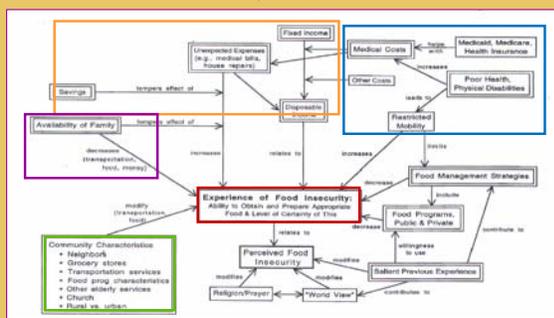
Wolfe W et al. J Nutr 133:2762-2769, 2003

What are barriers to achieve food insecurity in older adults?

- Low income, low education, and minority status
- The ability to prepare, gain access to, and eat the food available
 - Functional impairment
 - Social isolation
 - Health problems
 - Reduced ability to regulate energy intake
- Community characteristics

Lee JS et al. J Nutr Elder, 29(2):116-149, 2010
Lee JS, Frongillo EA. J Gerontol: SOCIAL SCIENCES, 56B(2): S94-S99, 2001

What are the causes of food insecurity in older adults?



Wolfe W et al. J Nutr Educ 28:92-100, 1996

What are the consequences of food insecurity in older adults?

- Poor intakes of energy, protein, carbohydrate, niacin, riboflavin, vitamins B₆ and B₁₂, Mg, Fe, and Zn
- Poor overall health status and compromised ability to resist
- Deteriorating mental and physical health
- Greater incidence of hospitalizations and extended hospital stays
- Increasing care-giving demands and national health care expenditures

Lee JS et al. J Nutr Elder, 29(2):116-149, 2010
Lee JS and Frongillo EA. J Nutr 131:1503-1509, 2001
Ziliak JP et al. The causes, consequences, and future of senior hunger in America, 2008

How to measure food insecurity?

- **Urban Institute Measures**
 - Have there been days when you had no food in the house and no money or food stamps to buy food?
 - Have you had to choose between
 - buying food and buying medication?
 - buying food and paying rent, or utility bills?
 - Have you skipped meals because you had no food in the house and no money or food stamps to buy food?
- **US Household Food Security Survey Module (HFSSM)**
 - 6 to 18 questions
 - Implemented in the national surveys since 1995 including CPS and NHANES
- **Nutrition Screening Initiative**
 - "I don't always have enough money to buy the food I need."

White et al, JADA, 1991; Lee JS et al, 2010, Urban Institute, 1993

Six-item U.S. Household Food Security Survey Module

During the past 12 months	
1. How often was this statement true: The food that we bought just didn't last, and we didn't have money to get more.	1) Often , 2) Sometimes 3) Never
2. How often was this statement true: We couldn't afford to eat balanced meals.	1) Often , 2) Sometimes 3) Never
3. Did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?	1) Yes 2) No
4. How often did this happen?	1) Almost every month 2) Some months but not every month 3) Only 1-2 months
5. Did you ever eat less than you felt you should because there wasn't enough money to buy food?	1) Yes 2) No
6. Were you ever hungry but didn't eat because you couldn't afford enough food?	1) Yes 2) No

Blumberg SJ et al. Am J public Health, 89(8), 1231-1234

Measurement of Food Insecurity

	HFSSM scoring	Conditions in household
Food security	High food security	No reported indications of food-access problems or limitations
	Marginal food security	One or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake
Food insecurity	Low food security	Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake
	Very low food security	Reports of multiple indications of disrupted eating patterns and reduced food intake

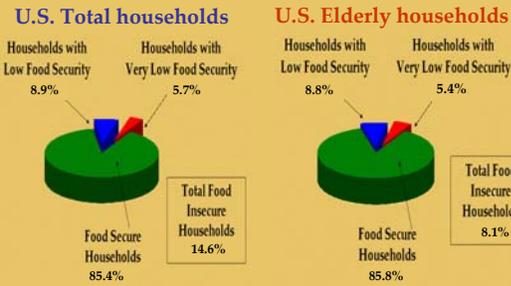
USDA, ERS, <http://www.ers.usda.gov/Briefing/FoodSecurity/labels.htm>

Prevalence of Food Insecurity in Older Americans

%	HFSSM scoring	US USDA, HFSSM, 2008, 12 mo	US Ziliak et al., HFSSM, 2001-07, 12 mo	GA Ziliak et al., HFSSM, 2001-07, 12 mo	GA Senior Center, HFSSM, 2007, 30 days	GA Senior Center, NSI, 2007, 30 days	GA CM, HDM, HFSSM, 2008, 30 days
Food security	High food security	91.9	83.0	76.6	70.6	81.8	32.9
	Marginal food security		11.4	14.8	9.6		15.1
Food insecurity	Low food security	5.0	3.9	6.9	15.7	18.2	33.3
	Very low food security	3.1	1.8	1.7	4.0		18.8

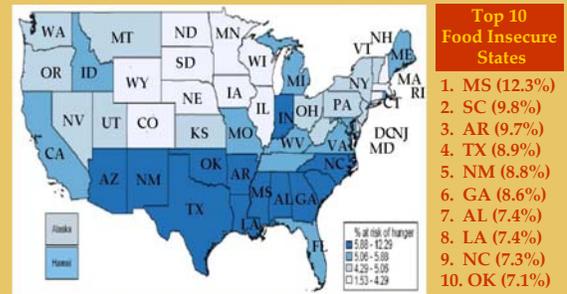
Lee JS et al., J Nutr Elder, 2010; Nord, USDA, ERS, 2009; Ziliak et al., 2008, 2009; Catlett, 2008; Brewer et al, 2010

U.S. Household Food Security, 2008



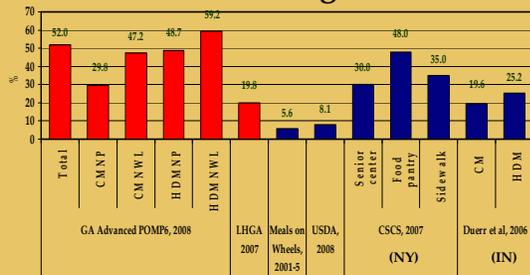
Nord M et al. Household food security in the U.S., 2008. USDA ERS

Prevalence of Food Insecurity in Older Americans by State, CPS, 2001-2007



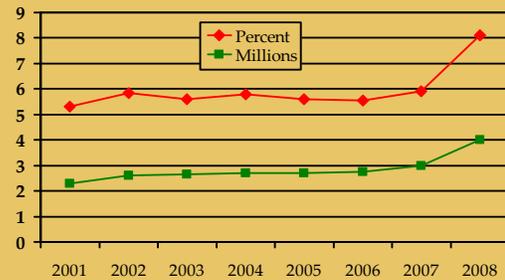
Ziliak and Gundersen, Senior Hunger in the US, Page 20, 2009
<http://www.mowaa.org/Document.Doc?id=193>

Prevalence of Food Insecurity in Older Georgians



MOWAA: Meals on Wheels Association of America
CSCC: Council of Senior Centers and Service of New York city
Duerr L. J Nutr Elder. 25(3/4):26(1/2), 2006
Ziliak JP et al (2008). The causes, consequences, and future of senior hunger in America. [http://216.235.203.153/Document.Doc?id=13]

Food insecurity in older Americans is INCREASING!



Ziliak and Gundersen, Senior Hunger in the US, page 15, 2009
Nord M et al. Household food security in the U.S., 2008

“Food Insecurity” in Older Americans

- **Food insecurity is prevalent:**
 - Up to 59% in vulnerable subgroups
 - Linked to medication, health, and obesity problems
- **Poverty and access:**
 - Transportation
 - Mobility, shop, cook, eat
 - Food assistance (complex!)
- **How can we help?**
 - Providers of food assistance
 - Aging services network, AAAs, senior centers
 - Cooperative Extension Service
 - Research partnerships: local, state, university



How to Improve Food Security of Older Americans?

- **Measure and monitor** food insecurity
- **Improve** food & nutrition assistance
 - Capacity
 - Coordination
 - Delivery
 - Access
 - Participation
- **Reduce poverty** and improve economic security
 - Root causes of food insecurity

