

# HUNGER AS A SOCIAL DETERMINANT OF HEALTH:

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# The Impact of Social Determinants on Health

Figure 1  
Impact of Different Factors on Risk of Premature Death

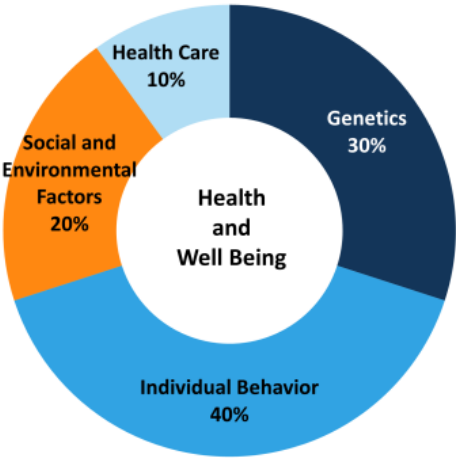


Figure 2  
Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training	Discrimination	Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

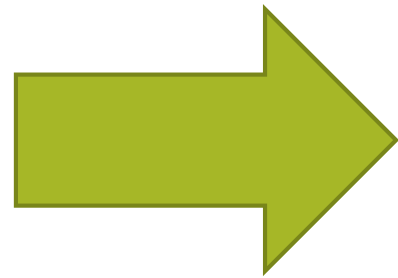
**Health Outcomes**  
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

SOURCE: Schroeder, SA. (2007). We Can Do Better — Improving the Health of the American People. *NEJM*. 357:1221-8.



Food Banks started this journey over a decade ago with a seemingly simple question....

**Hunger**



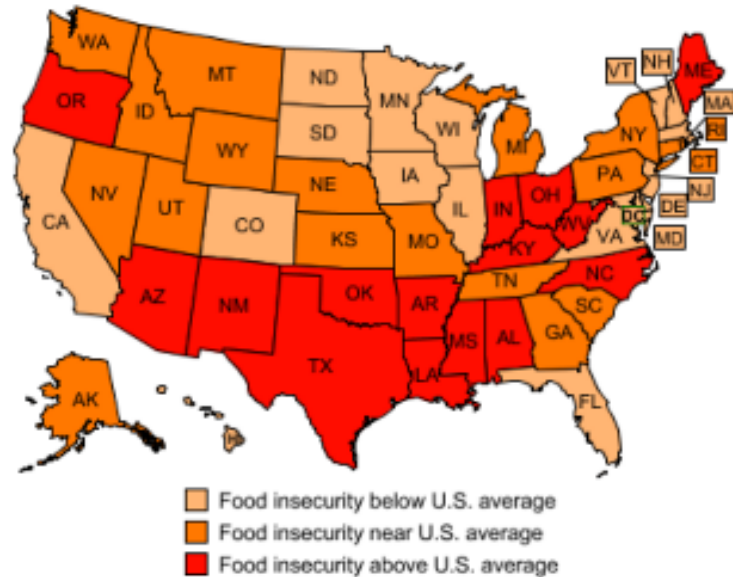
**Obesity?**

Or as we used to say...

“What is the hunger-obesity paradox?”

*Food Insecurity and Obesity rates side by side*

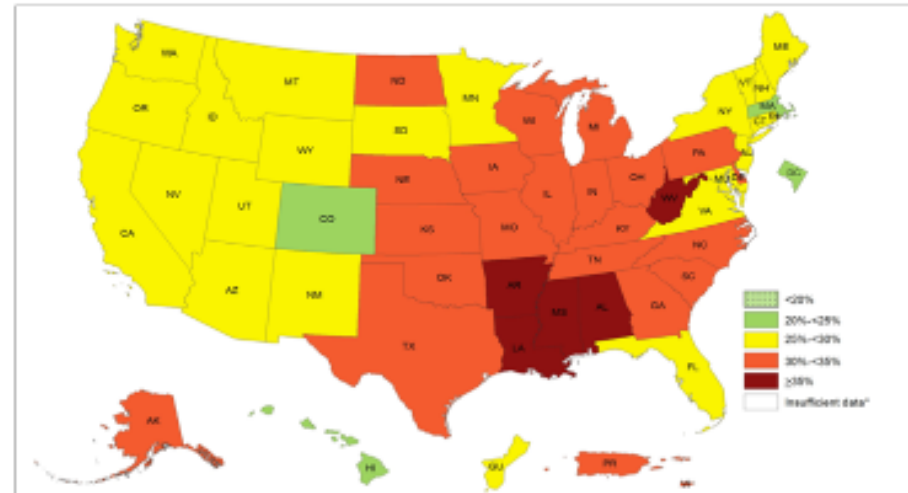
Prevalence of food insecurity, average 2014-16



Source: USDA, Economic Research Service, using data from the December 2014, 2015, and 2016 Current Population Survey Food Security Supplements.

Prevalence<sup>1</sup> of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2016

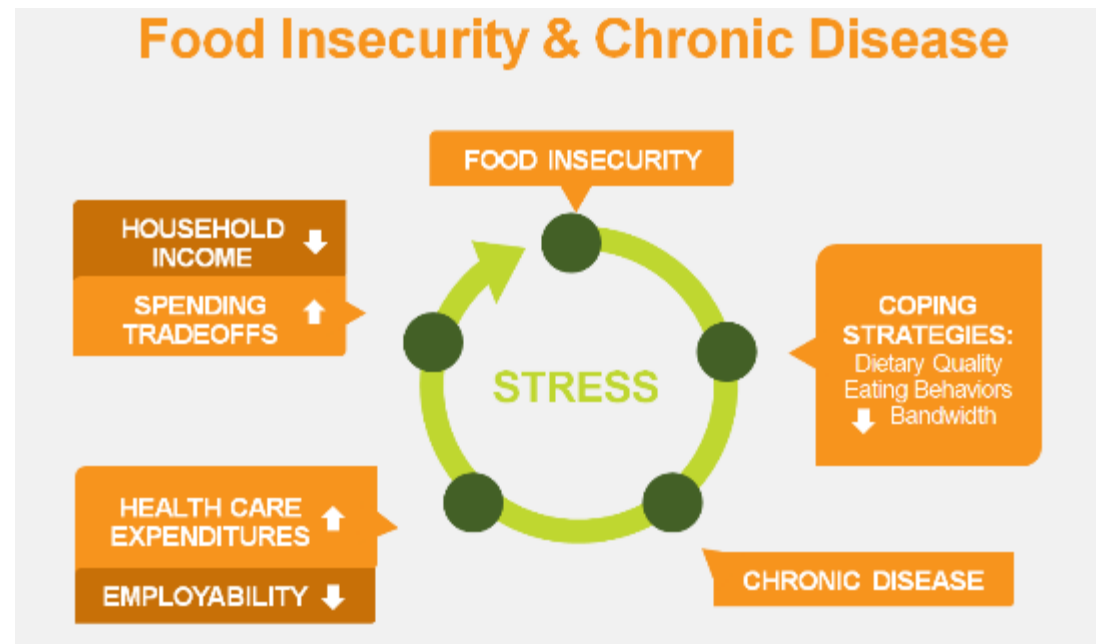
<sup>1</sup> Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



\*Sample size <50 or the relative standard error (dividing the standard error by the prevalence)  $\geq$  30%.

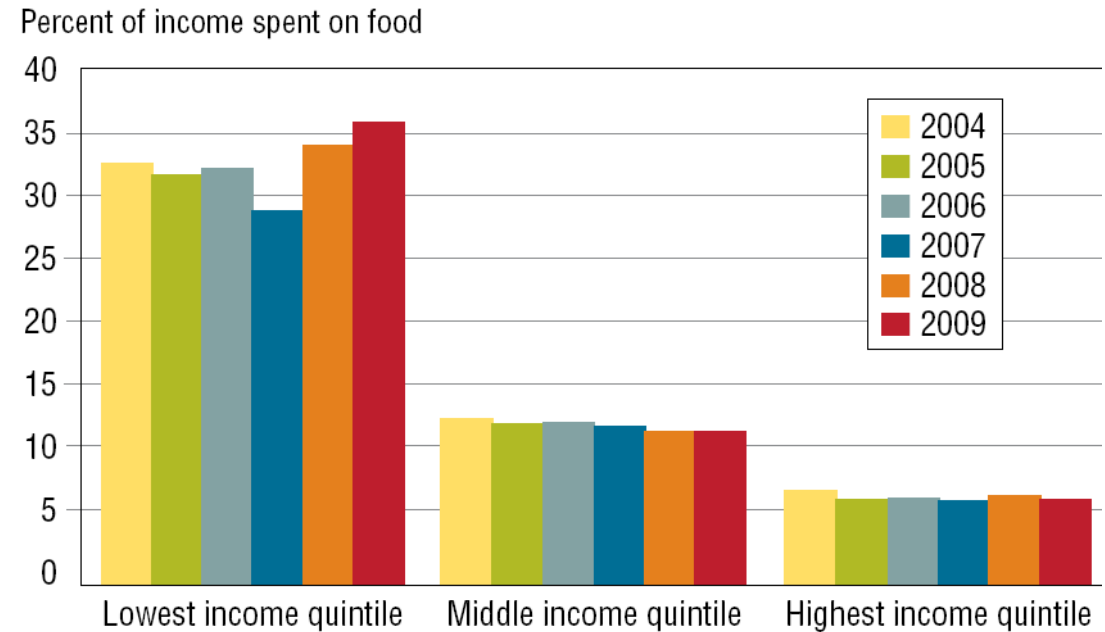


For a long time, we thought we had to choose a side.  
Team Hunger or Team Obesity?  
*Until* we began to explore how food insecurity could be  
connected to nutrition and health



Low income households spend the greatest portion of their income on food, and this has big implications for dietary choices

Figure 1.2 **Low-Income Households Spend the Greatest Portion of Income on Food**

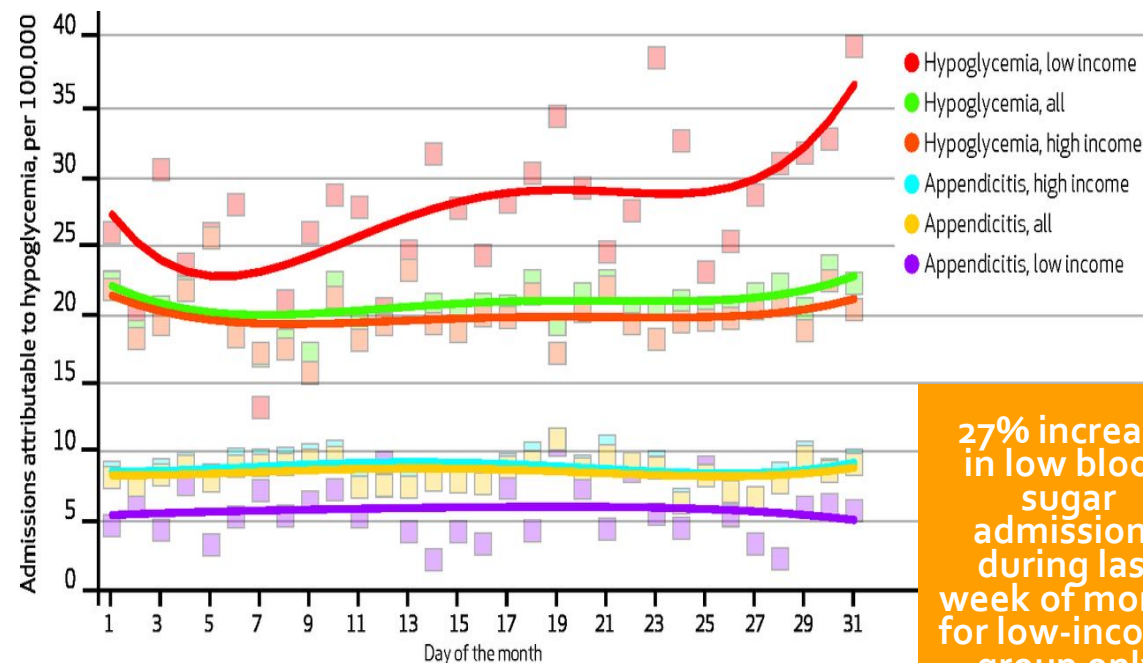


Note: Average annual incomes for the quintiles in 2009 were \$9,846 for the lowest, \$46,012 for the middle, and \$157,631 for the highest.

Source: U.S. Bureau of Labor Statistics.

# The episodic nature of food insecurity has a profound impact on disease management

*"In the beginning of the month I eat more meats, salads and fruits...At month's end I have to eat whatever is in the cupboard...."*



27% increase in low blood sugar admissions during last week of month for low-income group only

Source: Seligman et al. 2014. Exhaustion Of Food Budgets At Month's End And Hospital Admissions For Hypoglycemia. *Health Affairs*, 33(1), 116-123.