

Food Insecurity in the US and at SFGH

Hilary Seligman MD MAS
Assistant Professor of Medicine
Center for Vulnerable Populations
Division of General Internal Medicine

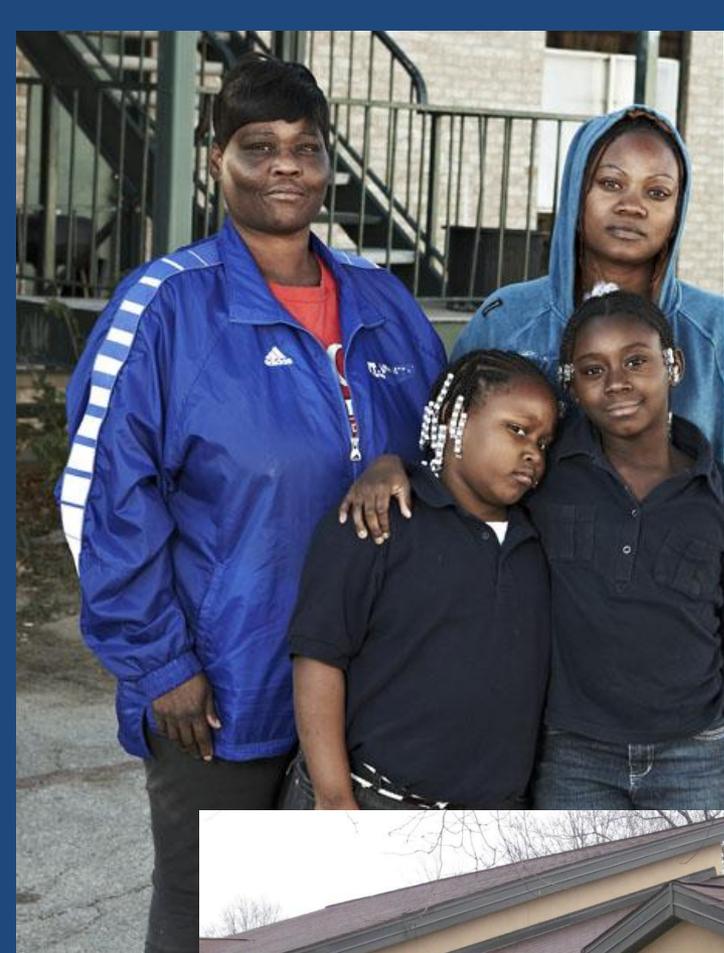
July 23, 2013



The Myth Of Starving Americans

By Warren Kozak

According to the Census Bureau, 96% of parents classified as poor said their children were never hungry.



Hunger

- The uneasy or painful sensation caused by a lack of food, or the recurrent and involuntary lack of access to food. (LSRO)



Food Insecurity

- The limited or uncertain
 - availability of nutritionally adequate and safe foods or
 - ability to acquire acceptable foods in socially acceptable ways



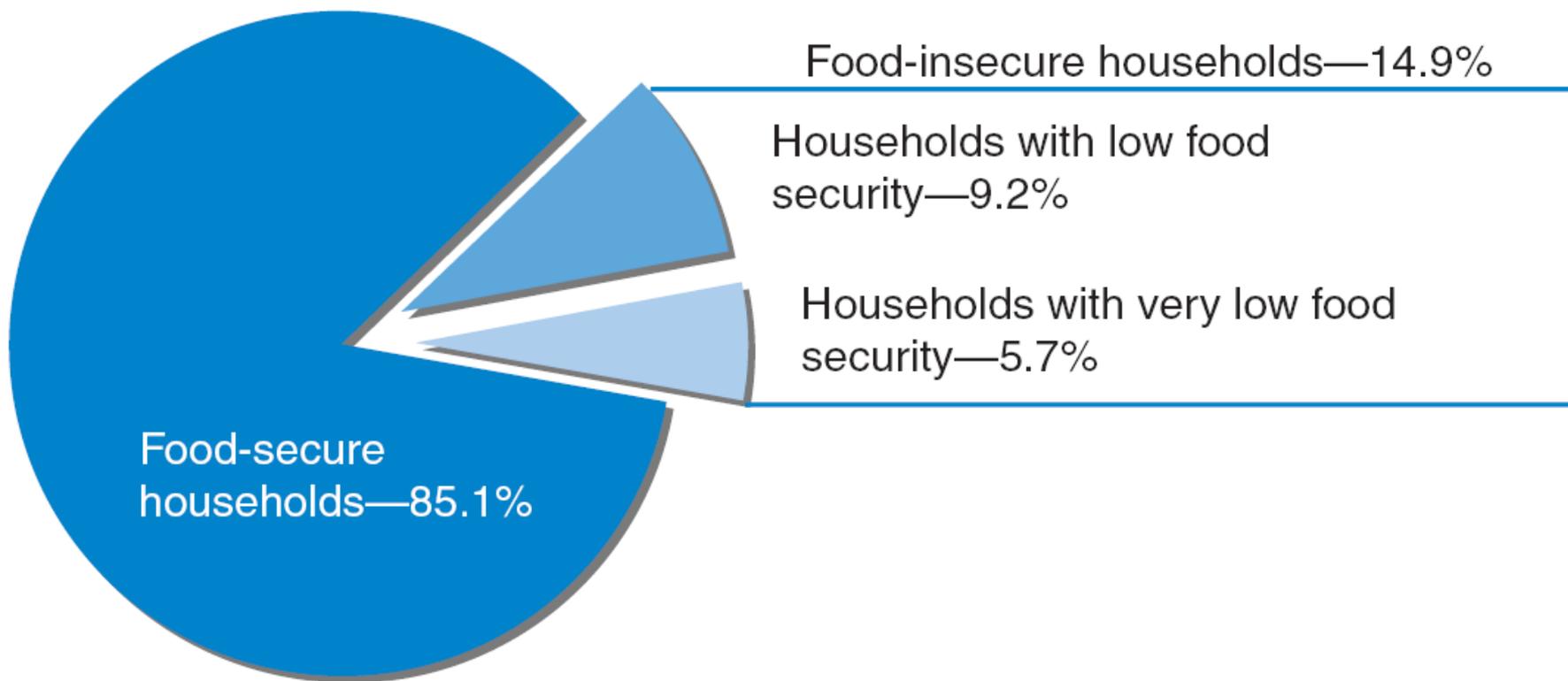
Coping Strategies to *Avoid* Hunger

- *Eating low-cost foods*
- *Eating highly filling foods*
- *Small variety of foods*
- *Skipping meals*
- *Avoiding food waste*
- Eating less at each meal
- Skipping meals
- Shopping in bulk/generic brands/coupons
- Locking fridge/pantry
- Eating with relatives/friends/church
- Food pantries or soup kitchens
- Federal nutrition programs (SNAP, WIC)
- Putting off other expenses/staggering bills
- Petty crime for a jail meal
- In SF: ED or PES



Malnutrition, hunger, weight loss

U.S. households by food security status, 2011



Source: Calculated by USDA, Economic Research Service using data from the December 2011 Current Population Survey Food Security Supplement.

50 million people lived in food-insecure households

12 million adults lived in households with very low food security

8.6 million children lived in households with very low food security

Risk Factors

- Children (21%)
 - Children under age 6 (22%)
 - Children with single mother (37%)
 - Children with single father (25%)
- Income <185% FPL (35%)
- Black (25%) or Latino (26%)
- *Smoker in the household*

Nearly 50% of US children and **90% of Black children** will use Food Stamps at some point during their childhood.

Obesity-Hunger Paradox

- *Food affordability*
- Episodic food availability

Relation between the energy density of selected foods and energy costs (¢/MJ)

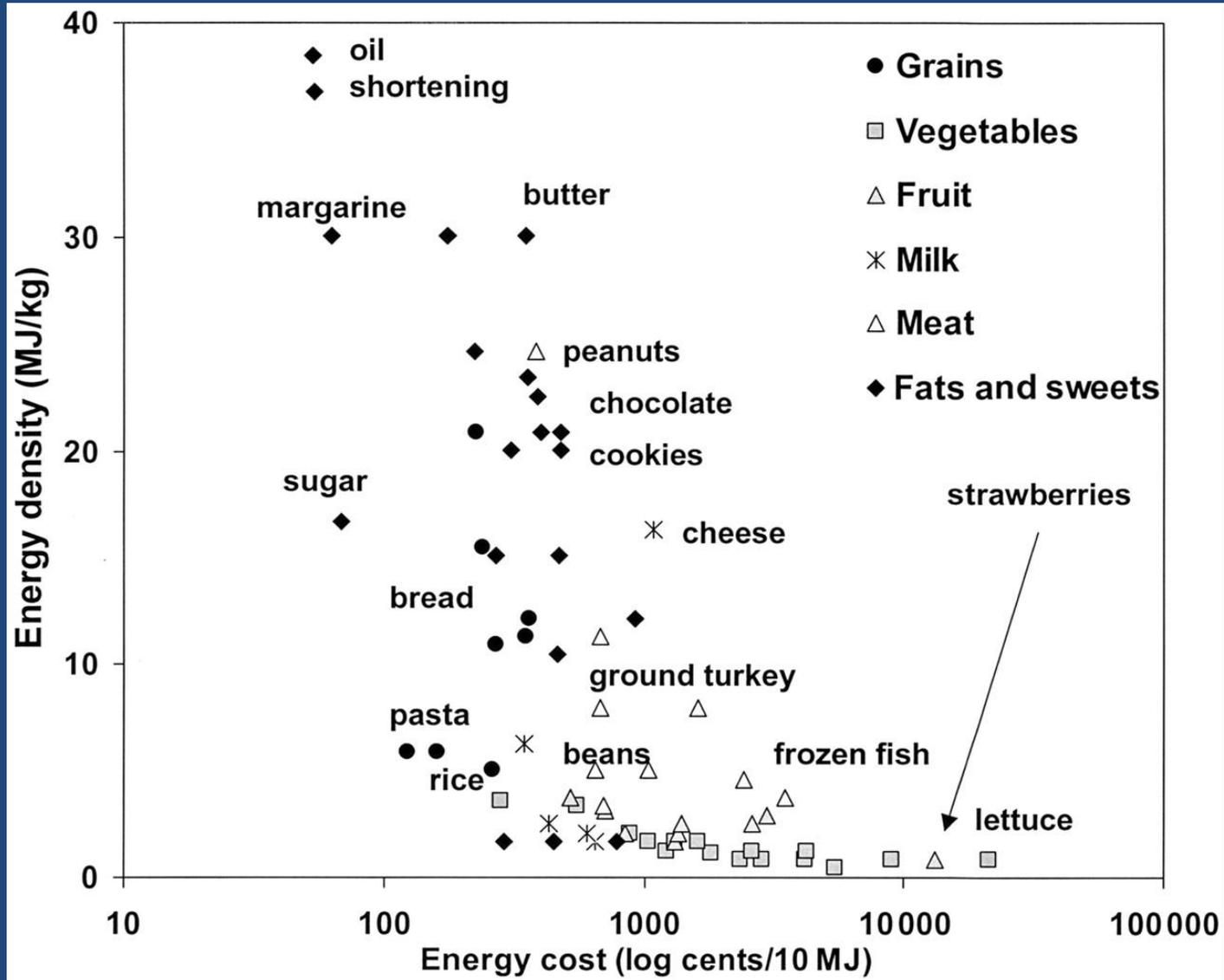
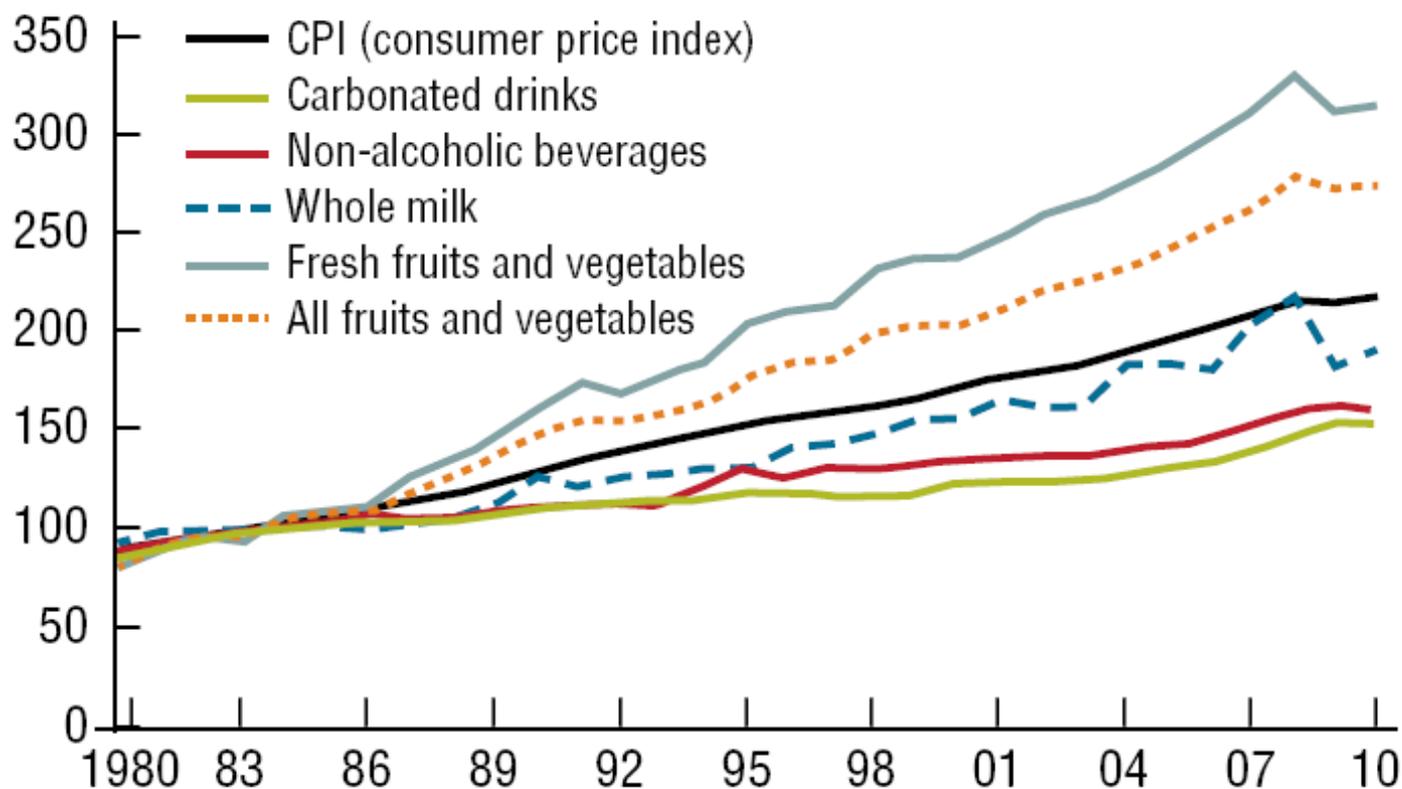


Figure 2.7 **Price Indexes for Selected Foods and Beverages, 1980-2010**

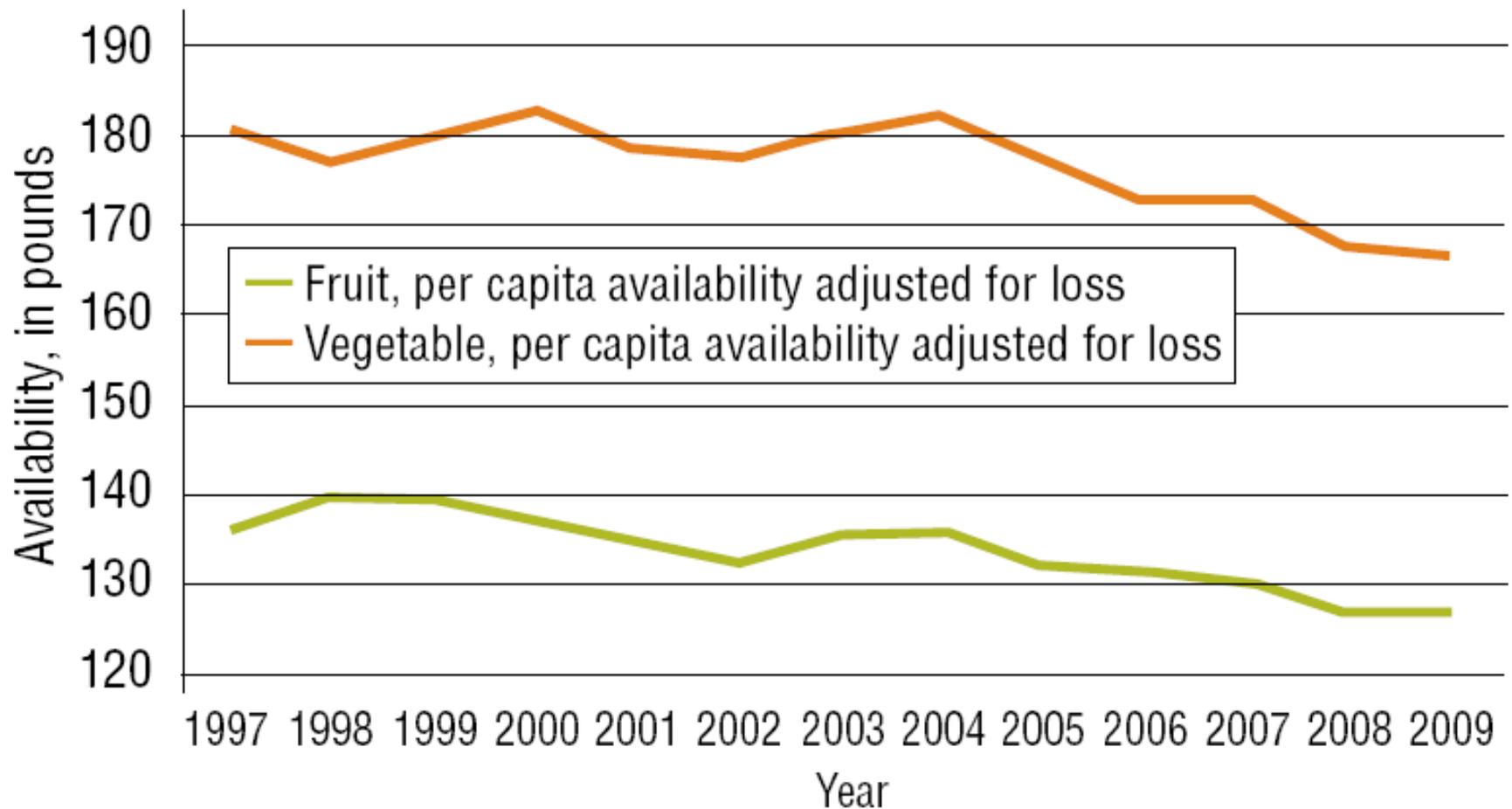
Price Index (1982-1984=100)



Notes: Prices for each group are annual average prices for all urban consumers. All fruits and vegetables include fresh, canned, and frozen. Base period 1982-84=100.

Source: National Health and Nutrition Examination Survey data, 2003-2006.

Figure 1.8 **Per Capita Annual Availability of Fruit and Vegetables Has Been Declining**



Source: USDA, Economic Research Service.

Food Affordability & Cost

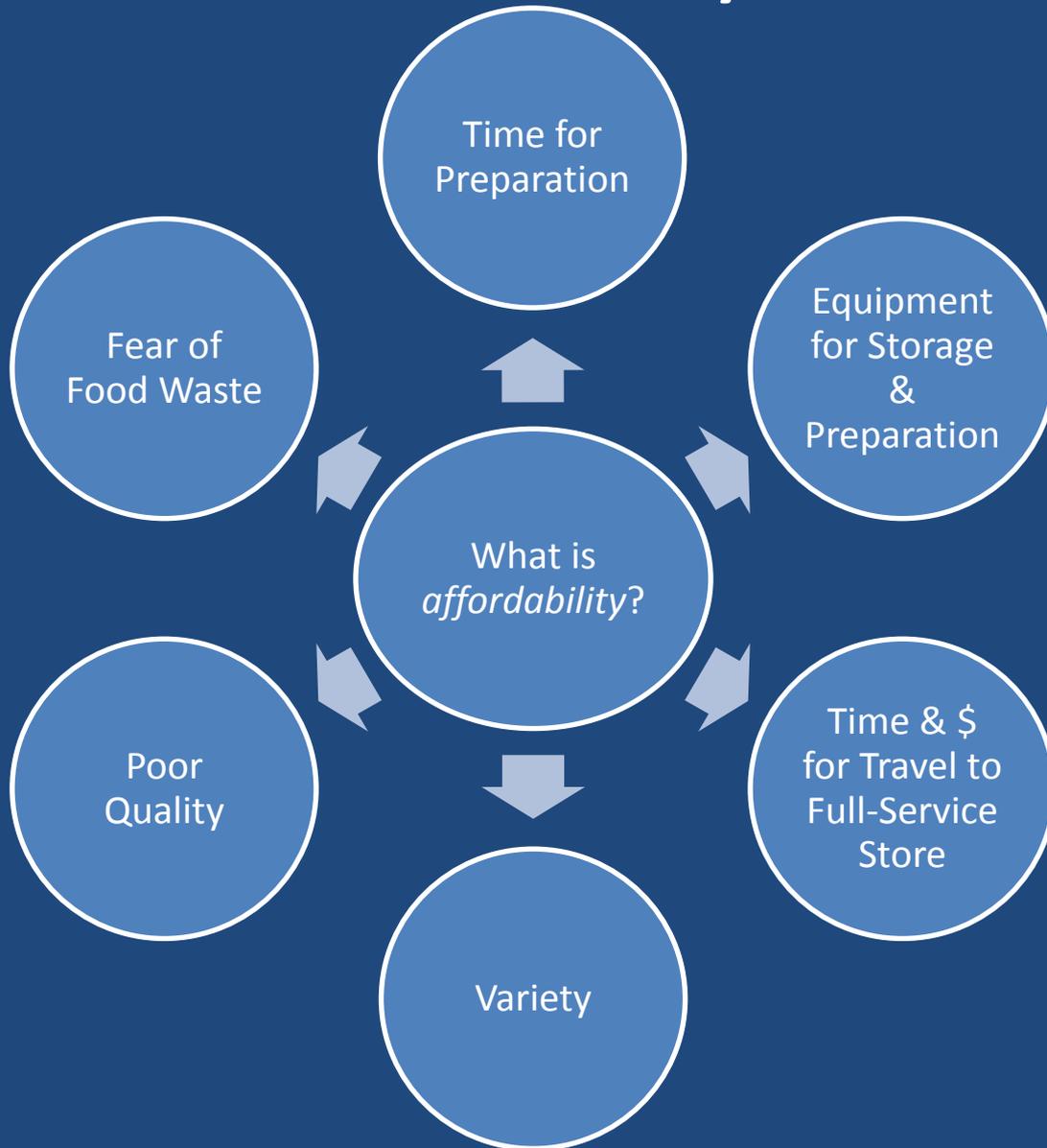
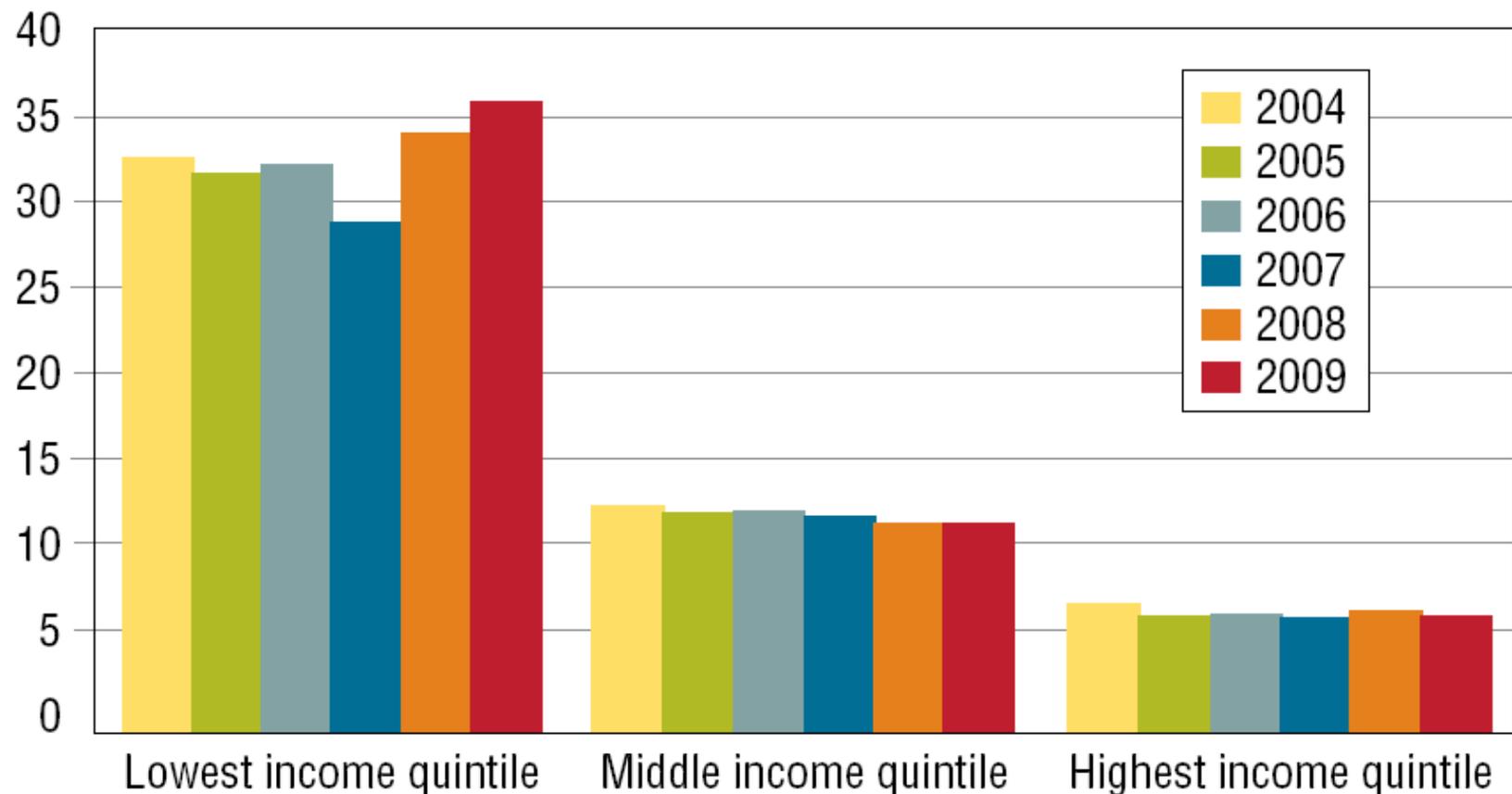


Figure 1.2 **Low-Income Households Spend the Greatest Portion of Income on Food**

Percent of income spent 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.

Food Costs & Dietary Intake

- Diet recommended by USDA requires low-income family spend 43-70% of their food budget on F&V's
- Increasing potassium consumption to meet 2010 USDA requirements would require average consumer to increase food costs by \$380 per year

Food Costs, Dietary Intake, & Weight Gain

	Weight Gain/ Obesity
Decreased dietary variety	?
Increased consumption of calorically-dense foods (refined grains, added sugars/fats)	X
Reduced intake of fruits & vegetables	X
Reduced micronutrient intake	?

Bhattacharya, 2004; Kendall, 1996; Olson, 1999; Tarasuk, 2001; Tarasuk, 1999; Dixon, 2001; Lee, 2001

Obesity-Hunger Paradox

- Food affordability
- *Episodic food availability*

Cycles of Consumption

- Food insecurity is cyclical & episodic
 - Monthly SNAP (“The Food Stamp Cycle”) or pay checks
 - Seasonal variation
 - Periodic, unforeseen expenditures
- Food insecure households are food insecure during 7 months of the year on average
- Month-to-month variability in intake is seen most acutely among mothers

Food Stamp Cycle

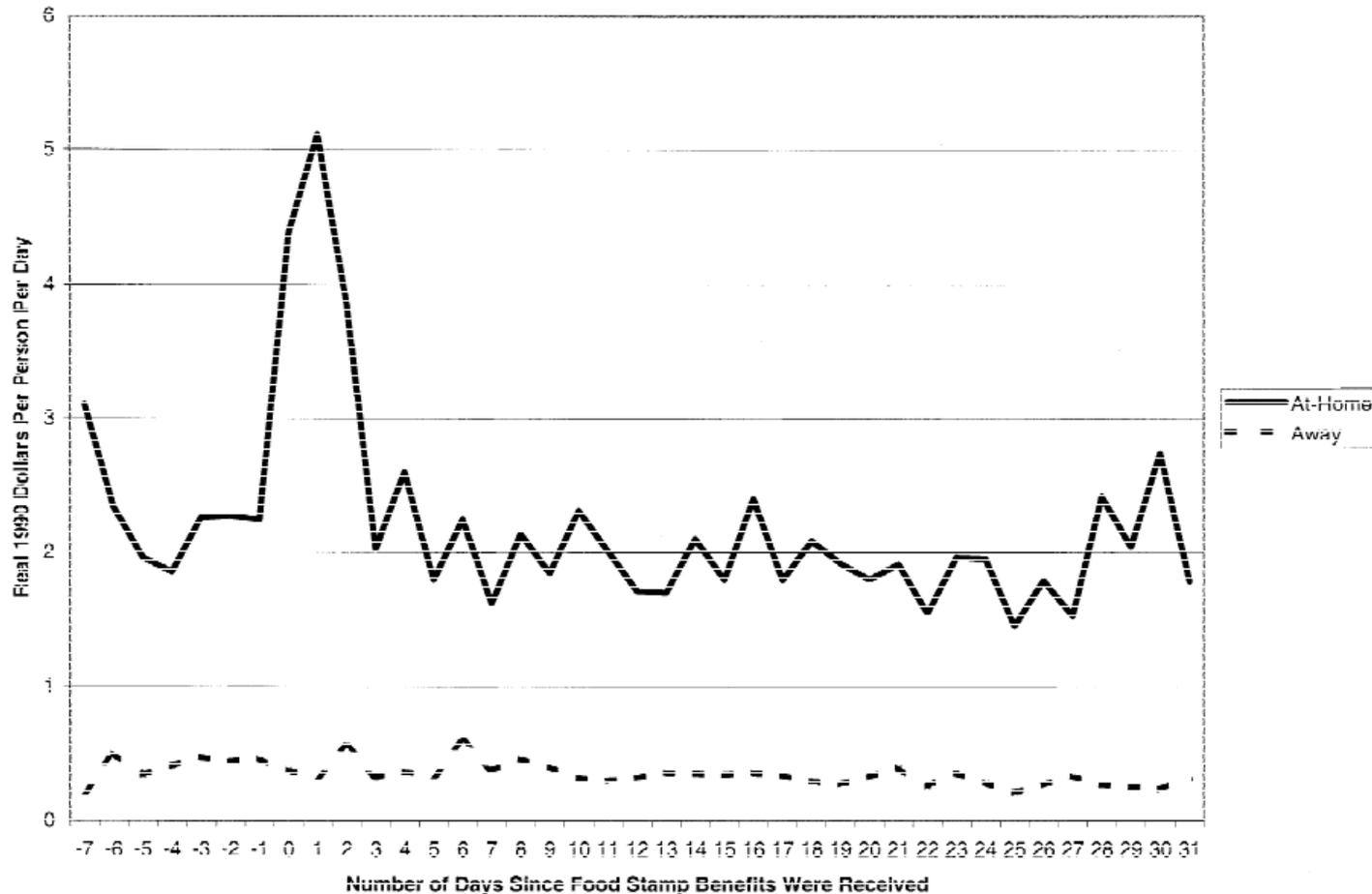


Figure 1. Food expenditure by consumer units, at-home and away-from-home
source: *Diary Consumer Expenditure Survey*, U.S. Department of Labor, Bureau of Labor Statistics

Income Shocks

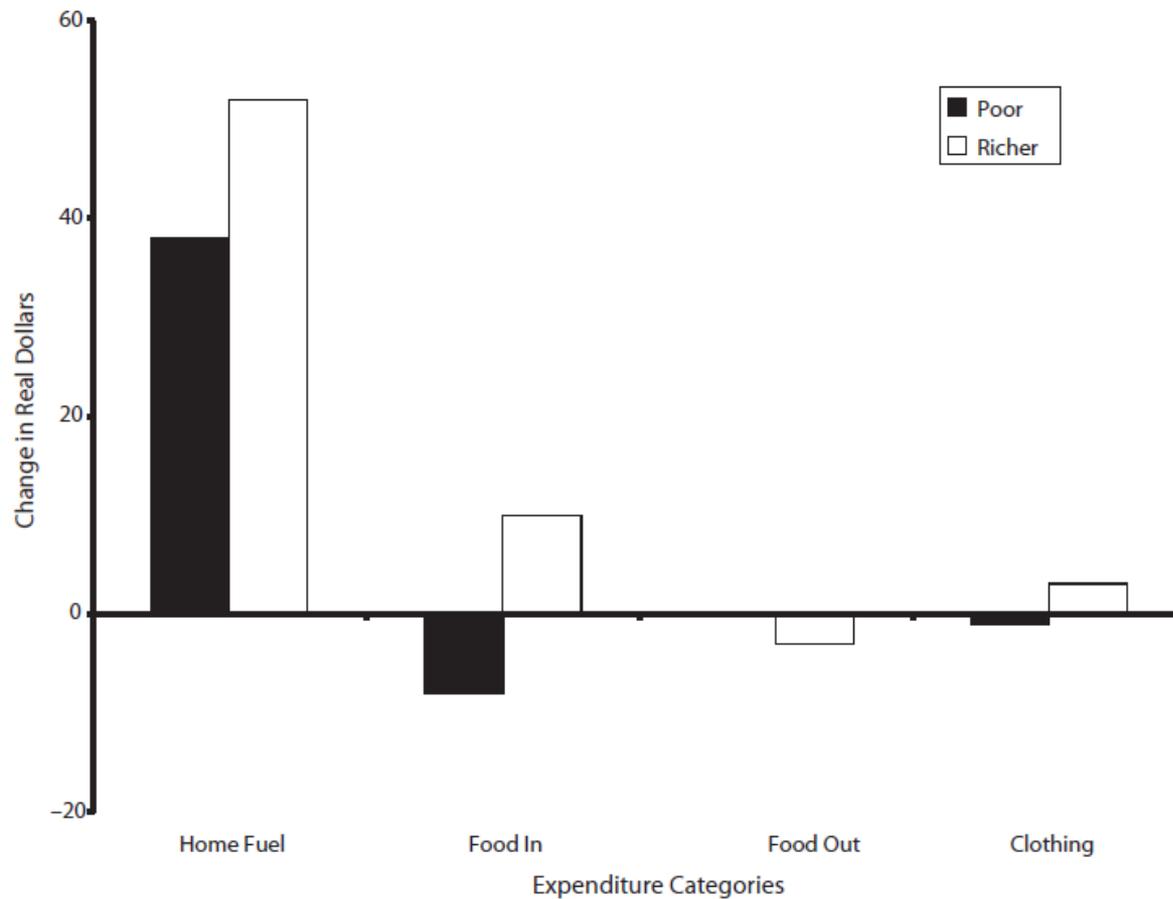


FIGURE 1—Changes in expenditures by category and by income in response to an unseasonable 10°F drop in temperature.

Cycles of Demand

- Food banks & soup kitchens
- Big-box retailers (Walmart, Target, etc.)
 - Inventory and staffing
- Grocery store scanning receipts
- Dietary intake among women
 - Decreasing calorie, carb, vitamin, fruit and vegetable intake over course of month

“The last week of each month, it is an internal panic.”

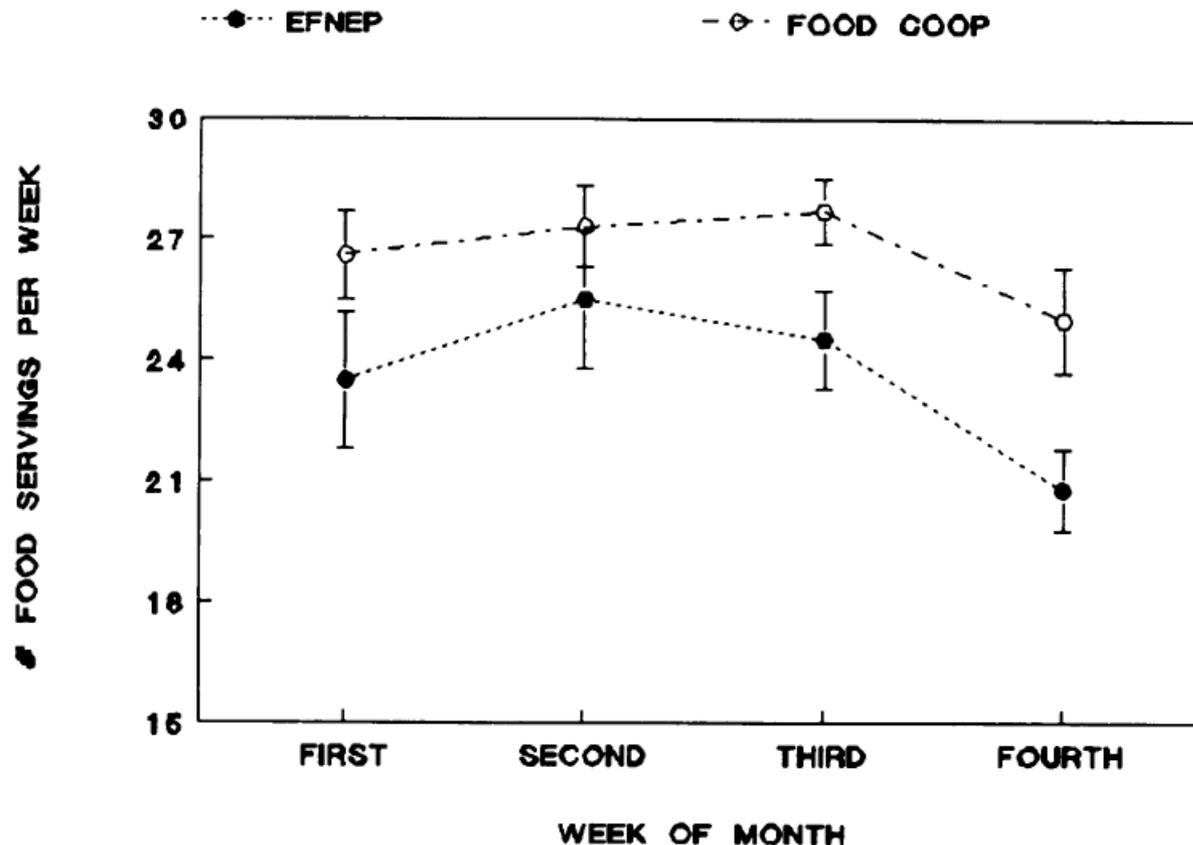


FIGURE 1—Number of Food Servings per Week in Low Income Families (Values represent the adjusted means for the number of servings per week; the vertical bars represent ± 1 standard error.)

Food Predictability



San Francisco, CA
Mission District
July, 2011

World War II Study of Food Restriction

“...subjects became increasingly focused on food; they collected recipes, hung pinup pictures of food, and changed career plans to food-related activities such as becoming a chef. They also grew increasingly upset and irritable, fighting with each other and their girlfriends. The men appeared apathetic and lethargic and seemed to lose interest in sex (replacing pictures of women with their food pinups!) In some respects, the most striking change occurred during the semistarvation period and after weight was restored to normal and the study had ended: When the men were subsequently allowed to eat as much as they wanted, these previously normal, healthy eaters began to gorge themselves when attractive foods were available. Moreover, they reported feeling out of control of their eating and obsessed with food; some even stole food or gum. Food restriction actually appeared to produce binge eating in previously normal eaters.” (Polivy, 1996)

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Disordered Eating Practices

- Binge eating
- Hoarding
- Food obsessions
- Extreme avoidance of food waste
- Strong preferences for highly filling foods

Chronic Stress

“I was so scared that my son would be taken away.”

“I hear my kids ask me, 'Mommy what's for dinner?' And I sit there at times, I sit there and kind of just pace back and forth thinking to myself, 'Oh my gosh, what is for dinner?’”

“A diabetic is supposed to eat three meals a day and something before going to bed but sometimes I don't have the three meals and that makes me worry.”

SFGH

	Study n	Food Insecure
US General Population		15%
SFGH one-day inpatient survey	40	47%
Oncology clinic	84	45%
Citywide clinic, severe mental illness	111	70%
GMC, Latinos with diabetes	473	59%