

Understanding Nutrition:

Primer Module on Food Insecurity

Food insecurity is an economic and social indicator of household well-being. According to the U.S. Department of Agriculture (USDA),^a food insecurity is defined as “a household-level economic and social condition of limited or uncertain access to adequate food.”¹ Households can have low food security or very low food security.^b

Low food security occurs when individuals have “reduced quality, variety, or desirability of diet [with] little or no indication of reduced food intake.”²

Very low food insecurity is defined by the USDA as “an individual-level physiological condition that may result from food insecurity.”³ For households with very low food security, “normal eating patterns of one or more household members were disrupted and food intake was reduced at times during the year because they had insufficient money or other resources for food.”⁴

Low and very low food security have been associated with chronic health problems in adults, such as heart disease, diabetes, high blood pressure, obesity, and mental health issues, including major depression.^{5, 6}

Child hunger can have serious health consequences, including anemia, impaired cognitive development, and stunted growth, and can affect children’s behavioral, social, and educational development.⁷

This primer module provides an overview of food insecurity trends nationally and in California.

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Recommended Citation

^a The U.S. Department of Agriculture collects food security data based on a nationally representative survey of 50,000 households conducted by the U.S. Census Bureau as an annual supplement to the monthly Current Population Survey (CPS). The CPS provides data for monthly unemployment statistics and annual income and poverty rates.

^b In 2006, the USDA changed the definitions previously used for levels of food insecurity. “Food insecurity without hunger” is now known as “low food security.” “Food insecurity with hunger” is now known as “very low food security.” See: <http://www.ers.usda.gov/Briefing/FoodSecurity/labels.htm#labels>

Food Insecurity in the U.S.

In 2010, the USDA reported that 14.5% of U.S. households, comprising an estimated 48.8 million people (including 16.2 million children), were food insecure.⁸ Of the 48.8 million people, 11.2 million adults and 4.8 million children lived in households with very low food security.⁹

There was a 32.3% increase in food insecurity in U.S. households from 2007 to 2010. In 2007, 11.1% of households, or 13 million, were food insecure¹⁰ which rose to 17.2 million food insecure households in 2010.¹¹

The USDA estimates that the (statistically equivalent) 2009 and 2010 levels of food insecurity^a were the highest since 1995 when the first national food security survey found that 11.9% of U.S. households were classified as food insecure.¹²

In February 2011, according to a survey commissioned by the Food Research and Action Center (FRAC), 24.0% of respondents surveyed were worried about having enough money to put food on the table in the next year.¹³

Disproportionate Impacts

The USDA also found that some demographic groups in 2010 had greater food insecurity than the national average of 14.5%:¹⁴

- 40.2% of families with incomes below the federal poverty guidelines^b were food insecure in 2010.
- Of single-parent households, 35.1% headed by a single mother were food insecure in 2010, as were 25.4% of those headed by a single father.
- Over a quarter (26.2%) of Hispanic households were food insecure in 2010, as were 25.1% of African American households (26.2%).

^a According to the USDA, there was no statistically significant difference in the prevalence of food insecurity in the U.S. between 2009 (14.7%) and 2010 (14.5%). See: <http://www.ers.usda.gov/Publications/ERR125/ERR125.pdf> and <http://www.ers.usda.gov/Publications/Err108/>

^b Poverty guidelines are issued each year by the U.S. Department of Health and Human Services (HHS). Poverty guidelines are used for administrative purposes, such as determining eligibility for some federal programs. The 2011 HHS poverty level for a family of four is \$22,350 in the 48 contiguous states and Washington, D.C. The guidelines are higher for Hawaii (\$25,710) and Alaska (\$27,940).

Households with Very Low Food Security

In 2010, among U.S. households with very low food security surveyed, respondents reported:

- 99% worried their food would run out before they got the money to buy more.
- 96% reported that the food they purchased did not last and they had no money to get more.
- 96% reported that an adult reduced the size of meals or skipped meals due to lack of money for food.
- 94% could not afford to eat balanced meals.
- 66% had been hungry but did not eat because they could not afford enough food.
- 45% lost weight due to lack of money for food.
- 29% reported an adult did not eat for a whole day because there was not enough money for food.

Source: U.S. Department of Agriculture. (September 2011). *Household Food Security in the United States, 2010*. Available at <http://www.ers.usda.gov/Publications/err125/>

According to a survey conducted in 2009 by the national organization Feeding America, among households receiving emergency food from soup kitchens and food pantries, 70.0% had incomes below the federal poverty line – with an average monthly income of \$940.¹⁵

Food Insecurity in California

A recent USDA report found that in California, where 37.2 million¹⁶ people live in the nation's richest agricultural state, 15.9% of households (representing 12.9 million households) were food insecure during 2008-2010.^{17, a}

According to the most recent California Health Interview Survey (CHIS), 40.4% of California adults whose income was less than 200% of the federal poverty guidelines reported being food insecure in 2009:¹⁸

- 40.9% of low-income women and 39.9% of men were not able to buy enough food.
- 42.2% of low-income Latinos, 39.6 of African Americans, 38.6% of Asians, and 36.1 of whites were not able to buy enough food.

Other studies indicate:

- Before the economy took a sharp downturn in 2008,^b the percentage of California adults in food insecure households was already on the rise. In 2005, 30.0% of adults living in low-income households were food insecure,¹⁹ which increased to 34.8% in 2007.²⁰

The Role of Food Banks

Feeding America (formerly named "America's Second Harvest") is a nationwide network of 202 food banks that provide food and groceries to 33,500 food pantries, 4,500 soup kitchens, and 3,600 emergency shelters. In 2009, this network provided food to 37 million Americans (an increase of 46.0% from 2006), including 14 million children and 3 million seniors.

One in 8 Americans now depends on Feeding America for food and groceries. Of those served by Feeding America:

- Every week, an estimated 5.7 million people receive emergency food assistance, 1 million more per week than in 2006.
- The number of children served by the Feeding America network has increased by 50.0% since 2006.
- In 36.0% of the households served, at least one person is working.
- Over one-third of households must choose between food and other basic necessities, such as rent, utilities, and medical care.
- 24.0% of households do not have health insurance; nearly half of adult food bank participants have unpaid medical and hospital bills; and in 30.0% of households, at least one member is in poor health.

The 43 food banks that join together as the California Association of Food Banks (CAFB) not only provide low-income people with access to food, but also advocate for policies to increase access to healthier food, provide nutrition education, and increase access to CalFresh benefits (formerly Food Stamps).

CAFB and other organizations also work in partnership with the California Department of Public Health and the California Department of Social Services through the *Network for a Healthy California* to provide nutrition education and CalFresh outreach.

Source: Feeding America. (2010). *Hunger Study 2010*. Available at <http://feedingamerica.org/hunger-in-america/hunger-studies/hunger-study-2010.aspx>

^a The U.S. Department of Agriculture combines three years of data to provide more reliable statistics at the state level.

^b According to the National Bureau of Economic Research, a private, nonprofit, nonpartisan research organization, the recession began in December 2007. See <http://www.nber.org/cycles/sept2010.html#navDiv=6>

- According to Feeding America, between 2006 and 2008, approximately 1.7 million children under 18 living in California were food insecure, representing 18.6% of all children in the state (falling just below the national average of 18.9%) and ranking the state 23rd out of the 50 states and Washington, DC.^{21, a}

Research also provides information on food insecurity for specific populations:

Youth. In 2008, according to the California Teen Eating, Exercise and Nutrition Survey (CalTEENS), 6.6% of adolescents ages 12-17 reported going hungry in the last 12 months, including 10.6% of African American, 7.8% Asian/Other, 6.7% Latino, and 5.2% of white youth.²²

Results from the same study also indicated that 18.8% of youth reported that they or someone in their household received assistance from CalFresh (food stamps), and 11.3% reported that they or someone in their household received assistance from the Women, Infants and Children (WIC) nutrition program.

Farmworkers. In 2009, among agricultural workers surveyed in the Salinas Valley, which is often considered to be the “salad bowl” of the United States, 53.0% had low food security, and an additional 13.0% had very low food security. Over one-third (39.0%) had used food stamps^b in the past year and of those with children under 5 years of age, 78% participated in WIC.²³

CalFresh Recipients. According to a California Budget Project study, higher percentages of California households that received food stamp benefits^b in 2007 had children, lived in poverty, and included noncitizens than households nationally. Conversely, California households receiving food stamps were much less likely to include people ages 60 and older than U.S. households (see Table 1).²⁴

Table 1. Percent of Households Receiving Food Stamp Program (FSP) Benefits in Federal Fiscal Year 2007, California and U.S.

FSP households that:	California	U.S.
Have children	76.1	51.3
In poverty	93.4	87.4
Include noncitizens	12.5	5.7
Include people ages 60+	3.9	17.9

Source: California Budget Project. (December 2009). *Food Within Reach: Strategies for Increasing Participation in the Food Stamp Program in California.* Available at http://www.cbp.org/pdfs/2009/091221_Food_Stamps.pdf

^a Estimates were derived from the Current Population Survey Food Security Supplement for 2006-2008, obtained through computer-assisted, telephone interviewing (CATI) and computer-assisted personal interviewing (CAPI).

^b Food Stamps is now known as the Supplemental Nutrition Assistance Program, or SNAP, at the federal level. Due to 2008 legislation, the Food Stamps Program in California is now called CalFresh.

Food Insecurity and Obesity

The coexistence of food insecurity along with obesity is a seeming paradox. According to the Food Research and Action Center (FRAC), research shows positive associations between food insecurity and obesity in some groups: The “strongest and most consistent evidence is for a higher risk of overweight/obesity among food insecure women,” with compelling, though not quite as consistent, data also suggesting a similar risk for children.²⁵

- A 2010 study of 810 low-income, pregnant women in North Carolina found that living in a food insecure household was positively associated with being severely obese before pregnancy and with greater weight gain during pregnancy.²⁶
- A 2006 study using national data found that women with intermediate levels of food insecurity were more likely to be obese and more likely to have gained five pounds in the previous year than food secure women.²⁷
- A 2006 study using a national sample of 7,000 children found a positive relationship between childhood food insecurity and overweight, even after controlling for age, race, gender, and family poverty level.²⁸
- A 2003 California study found obesity to be more prevalent in women who were food insecure (31.0%) compared to those who were food secure (16.2%).²⁹
- A 2002 study of over 5,000 women nationally found that women living in food insecure households had higher rates of overweight than women in food secure households (58% vs. 47%).³⁰
- Other studies have found a higher risk for obesity among food insecure mothers whose own poor diet may reflect their choice to protect their children from hunger by eating a poorer quality diet themselves and providing the better food to their children.³¹

While the question of causality is unresolved, low-income and food-insecure people often face special challenges in developing healthy behaviors, including:³²

- Limited resources in low-income neighborhoods and lack of access to healthy, affordable foods;³³
- The greater availability in low-income neighborhoods of fast food restaurants offering cheap, less nutritious food;³⁴
- Fewer opportunities for physical activity due to poor infrastructure in low-income neighborhoods and possible safety issues;³⁵
- Cycles of food deprivation, including eating less, skipping meals to stretch food budgets, and overeating when food is available;³⁶
- High stress levels due to the financial and emotional pressures of food insecurity and low-wage work;³⁷
- Disproportionate exposure to marketing and advertising for high fat and sugar products that provide excess calories which contribute to obesity;³⁸ and
- Limited access to basic quality health care, resulting in lack of diagnosis and treatment of conditions of health conditions like obesity.³⁹

END NOTES

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FOR MORE INFORMATION

This module on food insecurity is one component of *Understanding Nutrition: A Primer on Programs and Policies in California*. Go to www.ccrwf.org to access additional primer modules.

Diane F. Reed, a long-time consultant with CCRWF, took the lead in researching and writing this module.

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