

Fact Sheet

Gender and Food Insecurity: The Burden on Poor Women

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Introduction

This fact sheet intends to be a comprehensive resource for information on women and food insecurity. It presents a review of the key concepts, current data and policies of food insecurity, as well as addresses in detail the specific gendered outcomes of food insecurity and the burden of food insecurity that falls on poor women. In addition, a bibliography of current research and resources is provided.

Definition of Terms

There are important conceptual differences between the definitions of food insecurity and hunger. Food insecurity is a social and economic concept, usually measured at the household level, whereas hunger is an individual physiological factor. Food insecurity, as defined by the USDA, is the limited access to sufficient amounts of nutritious food (Coleman-Jensen et al 2011). Hunger refers to the discomfort, illness, weakness or pain an individual experiences as result of prolonged and involuntary lack of food (National Research Council 2006). It is a possible, but not necessary outcome of food insecurity (NRC 2006). Whether or not household members experience hunger is a result of the severity and duration of food insecurity. In the United States, households experience food insecurity in short episodes, and if a household experiences one instance of food insecurity, it is likely to have recurring experiences (Coleman-Jensen et al 2011).

There are four categories of food insecurity, as defined by the United States Department of Agriculture. A household may have high food security, marginal food security, low food security or very low food security (Nord and Coleman-Jensen 2011). A household with high food security has dependable access to sufficient amounts of food (Nord and Coleman-Jensen 2011). A household with marginal food insecurity reports some anxiety over food sufficiency in the home, but this anxiety almost never manifests to any real changes in food intake (Nord and Coleman-Jensen 2011). In a household with low food security, there is also very rarely a reduction in food intake, but the diets of household members are reduced in quality and variety (Nord and Coleman-Jensen 2011). Finally, in a household with very low food security, household members report both disrupted eating patterns as well as reductions in food intake (Nord and Coleman-Jensen 2011). A household is also considered food insecure when there is not a reliable source for future food and when food is acquired through socially unacceptable means, such as theft (NRC 2006).

Current Data: Food Insecurity in the United States

To interpret the USDA statistics on food insecurity in the United States, it is important to remember that these numbers present a slightly inflated picture of the actual state of affairs. Food insecurity in the United States is recurrent and episodic. That is, a household is likely to experience short periods of food insecurity that repeat periodically. However, as measured by the USDA, a household is considered food insecure if it meets the standards of food insecurity – at any level – at least once during the year. This method of measurement results in a national average rate of food insecurity that is higher than the actual number of households experiencing food insecurity on any given day.

Poor, single women with children are the most disadvantaged group, with the highest rates above the national average for household food insecurity, food insecure children and very low household food security. Single men with children, Black, Hispanic, low income households and households in urban centers all have higher food insecurity rates as well, according to the most recent USDA data. Table 1 presents a summary of the percentage of food insecure households in the United States, highlighting the categories of households with the rates highest above the national averages.

Table 1: Summary of Food Insecure Households in the United States

category	percentage of households
Food Secure	
National Average	85.5%
Households with Children	79.8%
Food Insecure	
National Average	14.5%
Low food security	9.1%
Very low food security	5.4%
Single women with children	35.1%
Single men with children	25.4%
Black households	25.1%
Hispanic households	26.2%
Low income households	33.8%
Households in urban centers	17.0%
Households in the South	16.0%
Food Insecure Households with Children	
Only food insecure adults	10.4%
Food insecure adults and children	9.8%

Note: all numbers cited from the USDA 2010 report: Coleman-Jensen, Alisha, Mark Nord, Margaret Andrews, and Steven Carlson. *Household Food Security in the United States in 2010*. ERR-125, U.S. Dept. of Agriculture, Econ. Res. Serv. September 2011.

Gendered Causes and Risk Factors of Food Insecurity

Poor women are particularly vulnerable to food insecurity. Often, they experience many of the key risk factors for food insecurity simultaneously. For example, poor women are more likely to live in neighborhoods with restricted access to food, as well as have high risk family structures, such as being single parents.

Neighborhood Effects and Food Deserts

There is a body of literature establishing the presence of food deserts in urban neighborhoods in The US. A food desert is an area, usually in a poor urban neighborhood, characterized by a lack of supermarkets, grocery stores and fresh, healthy food. Food deserts exist in rural areas, as well. There are areas of concentrated retail food outlets and areas with very few food options (Sharkey 2009). This variety in accessibility to food outlets is associated with increased transportation and food costs for consumers, as well as lower quality and variety of food (Sharkey 2009). Moreover, this restricted access to supermarkets is associated with worse health and higher rates of obesity (Larson et al 2009). Women living in areas likely to be food deserts are living at a crossroads of disadvantage, as they are more likely to be women of color, and living in poverty.

Low income neighborhoods and minority neighborhoods are most likely to have restricted access to food, as well as have increased access to sources of unhealthy food, such as fast food restaurants and convenience stores (Alwitt and Donley 1999; Block, Scribner and DeSalvo 2004; Galvez et al 2007; Larson et al 2009; Moore and Roux 2006; Morland et al 2002; Powell et al 2005; Zenk et al 2005). Low income neighborhoods have fewer large, chain supermarkets, but often have more small and local grocery stores (Alwitt and Donley 1997; Moore and Roux 2006; Morland et al 2002; Powell et al 2005). There is also an effect of race on access to grocery stores and fast food restaurants. African Americans and other minorities are more likely to live in poor neighborhoods, but Galvez and colleagues (2007) found that after controlling for income and population density,

Black neighborhoods in Harlem remain less likely to have supermarkets or grocery stores. Additionally, Block and colleagues (2004) find that race is a stronger predictor than wealth of a higher density of fast food restaurants in a study of New Orleans neighborhoods.

However, there have been recent studies contradicting both of these findings. Recent findings suggest that food deserts are not that common (An and Sturm 2012; Kolata 2012), and not associated with the health of neighborhood residents (Kolata 2012; Lee 2012). An and Sturm (2012) find no association between the accessibility of supermarkets, fast food restaurants or convenience stores and patterns of consumption or health of young people in California. Lee (2012) finds that although children in disadvantaged neighborhoods have greater accessibility to fast food restaurants, they also have greater access to supermarkets and grocery stores, as well as restaurants, than do children in wealthier neighborhoods.

These recent findings question the literature that had previously established the neighborhood effect on food access and health. However, they by no means disprove it, and the women living in these poor at risk neighborhoods are still more likely to experience food insecurity than are women living in wealthier areas.

Family Structure

Certain family structures are more likely to experience bouts of food insecurity than others. Low-income families, families with children and single mother households are more likely to be food insecure (Coleman-Jensen et al 2011). However, adults in the household are more likely to be food insecure than are the children. This supports a buffering hypothesis, in which the adults in the household shield the children from hunger by reducing their own food intake so that the children's food intake is uninterrupted (Hadley et al 2008). Since women are typically responsible for managing the food in a household, they are more likely to suffer the negative consequences of food insecurity as they limit their own intake in order to shield their children (Olson 2005). Recent research demonstrates that children in low income households experience less food insecurity when the household resources are managed by a mother rather than a father (Kenney 2008). These findings suggest that household structure and allocation of resources has a significant influence on the food security of the household members, including children, and that women play a significant role in mediating these processes. When high risk family structures coincide with structural neighborhood characteristics, these women and children are particularly vulnerable to experiencing food insecurity and the associated outcomes.

Gendered Consequences of Food Insecurity:

Women's Physical Health

Food insecurity has poor health effects for men and women, although evidence suggests that women bear the brunt of the consequences. Food insecure adults are more likely to self-report poor or fair health (Stuff et al 2004), citing hypertension as one health issue (Seligman, Laraia and Kushel 2010). Additionally, food insecure adults score low on objective health assessments (Stuff et al 2004) and have higher incidences of laboratory evidence of hypertension and diabetes (Seligman, Laraia and Kushel 2010).

Food insecurity is associated with cardiovascular risk factors for all adults (Seligman, Laraia and Kushel 2010), but the risk of obesity is confined to women. Townsend and colleagues (2001) find that food insecurity status is related to overweight status, but only for women. Women in food insecure households are 30% more likely to be overweight than are women in food secure households. Several other studies corroborate the findings that women in food insecure households are more likely to be overweight than women in food secure households. Olson (1999) finds food insecurity is significantly correlated with women's higher body mass index, or BMI. Women in food insecure households were approximately 2 BMI units heavier than women in food secure households (Olson 1999). However, BMI as a measure of obesity is limited by the fact that it may overestimate body fat in some populations, such as the elderly and athletes (NHLBI 2012).

Another study by Adams and colleagues (2003) found that the risk of obesity associated with food insecurity is highest for non-whites. The association between obesity and food insecurity is well established, but the mechanisms driving the relationship still require further study. Food insecurity clearly causes a poor diet, particularly for adults in the household. Food insecurity can contribute to increased consumption of low cost but high calorie foods (Adams, Grummer-Strawn and Gilbert-Chavez 2003). Some theories further suggest that food insecurity creates disordered eating, and this contributes to obesity (Adams, Grummer-Strawn and Gilbert-Chavez 2003; Olson 1999). Previous experiences of food deprivation can lead to over eating once

the period of deprivation is past (Adams, Grummer-Strawn and Gilbert-Chavez 2003). As such, food insecurity is an important factor in predicting obesity, although certainly not the only relevant factor.

Women's Mental Health

Food insecurity influences women's mental health as well as physical (Siefert et al 2004; Wu and Schimmele 2005). There are many key sociological factors that predict women's mental health, including poverty (National Institute of Mental Health 2011), family structure and marital status (Barrett and Turner, 2005; Brown, 2004; Carlson and Corcoran, 2001; Osborne and McLanahan, 2007; Page and Stevens, 2004; Thomson et al, 1994) and neighborhood effects (Hill, Ross and Angel 2005). However, food insecurity has a unique influence (Siefert et al 2004; Wu and Schimmele 2005).

Studies find evidence that women in food insecure households have an increased risk of depression and anxiety disorders (Casey et al 2004; Heflin, Siefert and Williams 2005; Whitaker, Phillips and Orzol 2006; Wu and Schimmele 2005). Some evidence suggests that the effect of food insecurity on depression is stronger for women than for men (Wu and Schimmele 2005). In addition, a reduction or loss of public food assistance is associated with depression, although the causal direction of this relationship is undetermined (Casey et al 2004; Heflin, Siefert and Williams 2005). One interesting study suggests that the level of food insecurity influences the likelihood of mothers experiencing mental health problems (Whitaker, Phillips and Orzol 2006). As household food insecurity increases in severity, there are higher percentages of mothers experiencing depression and anxiety (Whitaker, Phillips and Orzol 2006). The incidence of children exhibiting problem behavior also increases with the severity of household food insecurity (Whitaker, Phillips and Orzol 2006).

Social Programs and Policies

Governmental Services: SNAP and WIC

The Supplemental Nutrition Assistance Program, or SNAP, and its sub-program for Women, Infants and Children, or WIC, are of the four two primary federal food assistance programs administered by the USDA's Food and Nutrition Service, or FNS (USDA 2012). The USDA also offers free or reduced-price school lunches and breakfast for children (USDA 2012). SNAP benefits are available to all Americans, with household incomes below 130% of the federal poverty standards (USDA 2012). Households with children receive a majority of SNAP benefits, and 47% of SNAP recipients are under the age of 18 (USDA 2012). Approximately 16% of SNAP households have an elderly member (USDA 2012). Benefits are provided via an electronic debit card, which increases the households ability to purchase healthy food. In 2011, almost 45 million individuals used SNAP services (USDA 2012). WIC benefits are more focused, and are available only to pregnant, postpartum and nursing women, infants and children under the age of five (USDA 2011). In order to be eligible, the women's income must be below 185% of the federal poverty standards (USDA 2011). In 2010, approximately 9.17 million women and children received WIC services (USDA 2011). Most women using WIC benefits are young, have a lower than average amount of education, and are Black or Hispanic /Latino (Geller et al et al 2012). There is some overlap between the programs. Many women (53%) on WIC also receive SNAP benefits (Geller et al et al 2012). Only 13% of families receiving SNAP benefits do not also receive benefits from WIC or the reduced-price school breakfast and lunch programs.

A recent meta-analysis of the effectiveness of WIC finds that WIC participation has a positive effect on children's birth weights for prenatal participants, infant feeding practices and children's diets (Colman et al 2012). However, the associations between WIC service utilization and children's physical developmental outcomes, such as height, weight and BMI, are less conclusive (Colman et al 2012).

As a food security promoting program, the SNAP is fairly effective. A 2010 study found that receiving SNAP benefits reduces the likelihood of being food insecure by 30% (Ratcliffe and McKernan 2010). However, a study emphasizing the nutritional role of SNAP found less positive results. SNAP participation alone was found to have little effect on the amount of iron, potassium and fiber intake of children, whereas WIC increases intake of these nutrients (Yen 2010). That is, SNAP has very little effect on its own, and no additional effect when utilized in combination with WIC (Yen 2010). Another examination of SNAP efficacy finds that when there are more local stores available for individuals to patronize, people are more likely to participate in SNAP. That is, SNAP is more effective when there are local convenience stores that can be accessed without a car, as well as when there are larger stores with a wider selection of low-priced food items, such as Walmart, nearby (Bonanno and Ghosh 2010).

Recommended Resources

USDA Economic Research Service: Food Insecurity <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx>

USDA Household Food Security in the United States in 2010: ERS Report
<http://www.ers.usda.gov/publications/err-economic-research-report/err125.aspx>

USDA Food Security
http://www.usda.gov/wps/portal/usda/usdahome?navid=FOOD_SECURITY

Feeding America
<http://feedingamerica.org/>

USDA: SNAP – Building a Healthy America
<http://www.fns.usda.gov/ORR/menu/Published/SNAP/FILES/Other/BuildingHealthyAmerica.pdf>

USDA: WIC Program Data
<http://www.fns.usda.gov/pd/wicmain.htm>

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Resources

Food Crisis – The World Bank	http://www.worldbank.org/foodcrisis/
Feed the Future	http://www.feedthefuture.gov/
Feeding America	http://feedingamerica.org/
International Food Policy Research Institute	http://www.ifpri.org/
Food Security Portal, Facilitated by the IFPRI	http://www.foodsecurityportal.org/
Food And Agriculture Organization of the United Nations	http://www.fao.org/
The World Food Programme	http://www.wfp.org/hunger
The Hunger Project	http://www.thp.org/
USDA Economic Research Service: Food Insecurity	http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx
USDA Food Security	http://www.usda.gov/wps/portal/usda/usdahome?navid=FOOD_SECURITY