

# Food Insecurity in the USA



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*Food Insecurity in the USA – Hungry in America*

## INTRODUCTION

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In today's world, humans have evolved as very unique species. Our society has developed different interests, activities, and cultures that vary greatly from one another. On an individual level, we are all very unique to one another. But as living and breathing human beings, we all unexceptionally have one thing in common, the need to nourish ourselves. Food and water are two very essential items to our survival, so it is important that they are provided in the utmost quality. There is no doubting the importance of nutrition for a healthy productive life. The prevalence of common chronic diseases such as obesity, type II diabetes, cardiovascular illness and cancer are associated with a lack of a proper diet and lifestyle (Cohn 2014). This notion can be dated back to the time of Hippocrates whose philosophy stated "Let food be thy medicine, and medicine be thy food" nearly 2,500 years ago. The inherently deep relationship humans have with food is very clear. Food, for the majority of Americans, is the deepest connection they have with Mother Nature.

In 1968, a CBS documentary named "Hunger in America" exposed the reality of food insecurity in the states. The anchor for the hour long broadcast introduced the subject by declaring "Food is the most basic of all human needs. Man can manage to live without shelter, clothing, even without love. But man can't remain alive without food." (*APATT*). 10 million Americans were food insecure during this time. In response, food stamps were scaled to the national level and several other programs were established. These included Elderly Feeding, WIC, and the National School Breakfast and Lunch programs. This public policy effort helped to relief the majority of hunger in America during the 1970's. Around the time of the Reagan Administration, food insecurity rates started to rise. Partly due to tax cuts and an increase in military spending. It may have also been from the special interests from the large food

corporations as well. In 1980 there were 200 food banks in the US. Currently, there are over 40,000 food banks, pantries, and soup kitchens. Despite the apparent abundance of charitable organizations for food, rate of food insecurity haven't been reduced. It's estimated that \$167 billion is spent on hunger and food insecurity costs. This figure is the culmination of federal food related programs and the health costs associated with malnutrition. 6 out of the top 10 chronic diseases are linked to malnutrition (Cohn 2014).

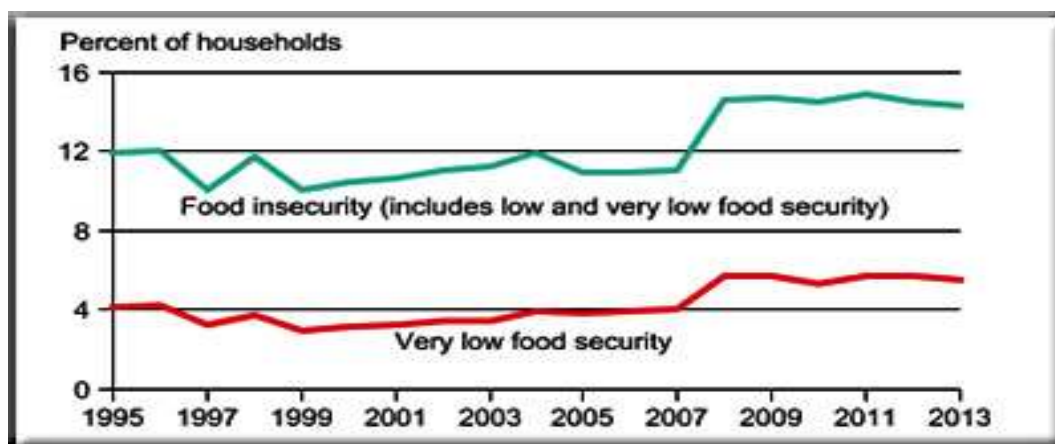
Ensuring food security is a very critical part of public health for the population to lead a healthy, happy and productive livelihood. The United States Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life." (Anderson 1990). A more holistic approach would also detail the quality of the food grown such as fruits, vegetables, and meat. Contrary to popular belief, food insecurity and hunger isn't only a problem in third world developing countries. The average American most likely pictures an underweight malnourished child in Africa when thinking about "hunger". But the reality is that our own neighbors may go through the year, unsure of where their next meal may come from. The United States of America is not absent of people going without food for extended periods of time. And it's not just the homeless population either, but often working families with children have the burden of being food insecure.

## Method and Data Measurement of Food Security

The food security status of the US is examined annually through a series of systematic questions on a survey issued out by the Economic Research Service (ERS) of the USDA. The original representative data found on food security status was in 1995 by the Current Population Survey (CPS) and 11.9% of households at the time were food insecure (Hamilton 1995). Currently the CPS have a pool of about 54,000 households that represent the state and national

population. In December of 2013, 42, 147 households completed the food security supplement survey. From 2011-13, of the 121,303,000 households in America, 129,433 gave responses on the questionnaire distributed by the Census Bureau. So a slight margin of error dependent on the ratio of homes interviewed per state is implied. The status of whether or not a household is considered to be food secure or food insecure is contingent on the number of questions affirmed from the surveys. The questions are known as the Food Security Core Module. Generally, a minimum of three questions describing conditions of food insecurity have to be confirmed in order to be considered insecure of food. Conversely, households that answer affirmatively to none of the questions asked are considered to be food secure. There is also a middle ground for food security status known as being “marginally food secure”, which pertains to households who confirmed one or two questions (Coleman-Jensen 2010). An example of a question asked is “We worried our food would run out before we got money to buy more. Was that often, sometimes, or never true for you, within the past 12 months?” (Coleman-Jensen 2012)

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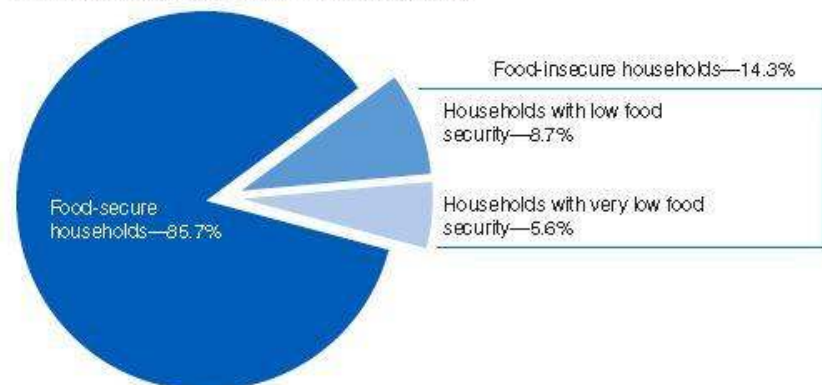
alternative method to monitor food security known as the Radimer/Cornell measures suggest any household that expresses any level of food insecurity to be considered food insecure (Radimer

1992). The framework is based off the testimony made from low-income women experiencing food insecurity. For example women with low income who went through food anxiety, the concern for a reliable food supply, were found to decline food consumption along with diet quality. The USDA acknowledges the challenges associated with accurately assessing food security. Requiring households to affirmatively respond to three questions may cause the reporting of food insecurity to be erroneously underestimated. This can therefore lead to homes in merited need of government assistance and food programs to be underserved. Federal food stamps difficult to qualify for, almost have to be starving. Something as simple as making \$2 over the income limit may disqualify a person from receiving even the most minimal food stamp assistance. An article from the Journal of Social Indicators Research by suggests a less restrictive standard for considering homes as food insecure (Coleman-Jensen 2010)

## Household food insecurity

Currently about 49 million Americans go without enough food to eat. According to the latest USDA data on food security, 85.7% of U.S households were food secure throughout 2013. This is almost a 3% decrease from the 88.2% of food secure homes in 1998. This leaves a remaining 14.3% or approximately 17.5 million households to be food insecure at one point or another during this year. Of this statistic 8.7% had “low food security” and 5.6% had “very-low food

Figure 1  
U.S. households by food security status, 2013



Source: Calculated by USDA, Economic Research Service using data from the December 2013 Current Pop Survey Food Security Supplement.

security” which is about 6.8 million homes. Very-low food security is defined by the severity and duration of food insecurity characteristics. For example households with very-low food insecurity more than often said to cut the size of a meal or skip it all together, ate less than they felt they should, felt hungry but did not eat, lose weight, and go entire days without eating. Rates of food insecurity seem to rise in households of which children are present. 80.5% of households in were food secure and 19.5% were insecure. And both children and adults of these homes experienced similar conditions of insecurity, including almost 1% of children who went through very-low food security. The majority of these homes often report to be food insecure more than half of the year and suffer from the conditions in a frequent or chronic manner, sometimes on a daily basis. The US ranks the worst among the International Monetary Fund’s (IMF) Advanced Economy countries on food insecurity (*APATT*).

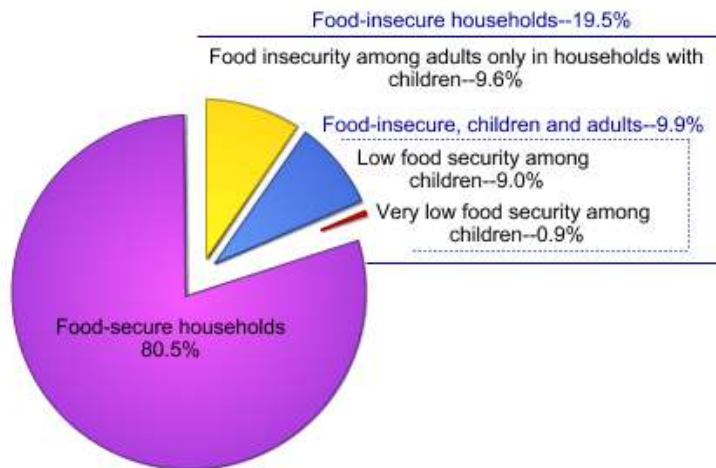
## Socioeconomic and Environmental Factors

Along with transportation and access, household income seems to be single-handedly the most significant characteristic associated with food insecurity. The Federal Poverty line in 2013 was \$23,624 for a family of two adults and children. 42.1% of households that fell under this line were food insecure, of which 34.8% fell 185 percent below the poverty line. This is a significant statistical difference when compared data from the 1995 CPS. 17% of households that fell half below the poverty line were food insecure and only 1.4% for those that fell below 185 percent (Hamilton 1997). It is logical to perceive poverty as a definite indicator food insecurity and even hunger. But an article from the Journal of Nutrition argues that a direct correlation between poverty and food insecurity do not exist. Factors such as household size, home ownership, and

ethnicity all play a role in food security status. In 1995, Hispanic households, larger households, or ones with a single parent with children were associated with food insecurity (Rose 1999).

Presently, it can be argued that a higher sense of financial security can translate into better food security.

#### U.S. households with children by food security status of adults and children, 2013



Source: Calculated by ERS using data from the December 2013 Current Population Survey Food Security Supplement.

In 2013, single mothers reported a higher rate of food insecurity at 34.4% as opposed to single fathers with 23.1%. This demographic is represented through one American awareness group known as *Witnesses to Hunger (APATT)*. As a team of single working mothers struggling

to feed their own children, they understand the hardships of food insecurity. Low wages and multiple expenses constantly force them to make the decision between paying for rent or the groceries, heating bill or dinner, diapers or breakfast and so on. About 10.8% of households with children and single women suffered from very-low food insecurity. Ethnicity wise, 26.1% of households headed by blacks were food insecure and 23.7% of Hispanic households were as well. The difference between the prevalence of food insecurity between whites and blacks is by over 100%. Non-Hispanic whites had 14.4% and blacks had 32.6% household food insecurity. Oddly, the white population in America seem to receive the most federal food assistance from what used to be known as the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps. SNAP offers nutrition assistance to low income



families in the US. Eligibility is determined by house size, income, and expenses.

Demographically 43% of SNAP participants are white, 33% are African-American, 19% are Hispanic, and 2% are either Asian or Native American (*APATT*). One study from the American Journal of Public Health showed that African Americans were much less likely to have a supermarket within their census residence as opposed to whites. And interestingly, the same study found that African-Americans were much more apt to consume fresh fruits and vegetables if available to them when compared to whites (Morland 2002).

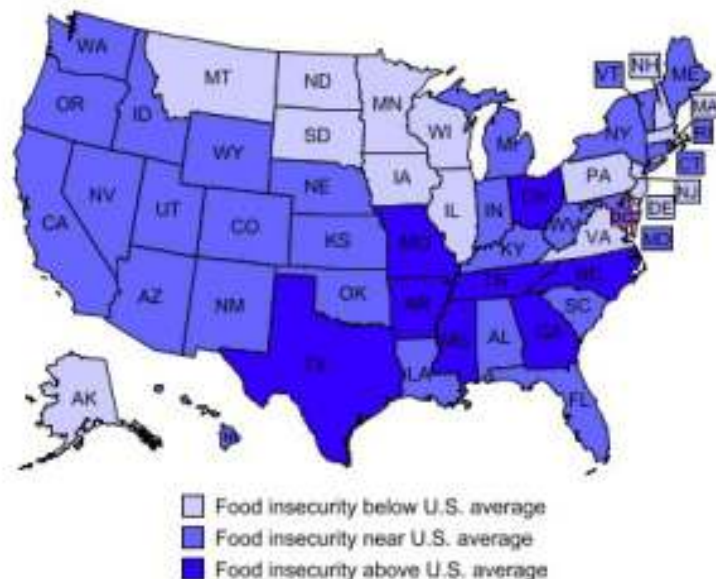
Food security status varied on a state-by-state basis and so the geographic location of the household was a contributing factor. Regionally, the prevalence of food insecurity was highest in the South (15.7%), about middle in the Midwest (13.6%) and West (14.1%), and lowest in the Northeast (12.4%). Next to North Dakota that saw 8.7% rate of insecurity, Virginia was the 2<sup>nd</sup> top state for lowest level of food insecurity at 9.5%, well below the national average. On the opposite end of the spectrum, Arkansas and Mississippi had the highest rates of food insecurity at 21.2% and 21.1%, respectively. These state are also known to have high rates of obesity. The prevalence of food insecurity were significantly higher than the national average in 8 states (AR, GA, MO, MS, NC, OH, TN, TX) and lower than the national average in 14 States (AK, DE, IA, IL, MA, MN, MT, ND, NH,

NJ, PA, SD, VA, WI)

(Coleman-Jensen 2014).

Similarities and differences are also marked at the local level, comparing rural and urban areas. The largest cities within

**Prevalence of food insecurity, average 2011-13**



Source: Calculated by ERS based on Current Population Survey Food Security Supplement data.



the metropolitan area seemed to report the highest rates of food insecurity at 16.7% and 15.1% for those in less populous rural areas. The lowest rates were found in the suburbs and metropolitan areas outside of the principal cities at 12.1% (Coleman-Jensen 2014).

## Risks to Human Health

Several factors including your race, culture, age, education, and environment naturally affect an individual. But food insecurity is directly related to malnutrition. A family or individual not having a sufficient amount of food are less likely to consume a diet that meets their recommended daily intake of certain nutrients. One study showed that insufficient amounts of food was strongly associated with low intakes of 8 nutrients including calories, protein and vitamins A, E, C and B-6 (Rose and Oliviera 1997). A study from the American Public Health Association showed that lasting consequences for children who experience food insecurity, especially those from immigrant mothers who have the higher risk (Chilton 2009). Another from the Journal of Nutrition showed food insufficiency to be related with a poor disordered diet and obesity in California women, especially non-white minorities (Adams 2003).

As a result of insufficient food, malnutrition occurs which affects their cognitive development and immune system functioning. Young children without adequate nutrition also have the inability to concentrate in educational environments. One study showed food insecurity negatively impacted elementary children's academic performance, weight management, and social skills (Jyoti 2005). The sensation of a growling stomach is much too overwhelming to focus on school work. It isn't uncommon for students in public schools to rely on cafeteria served food as the majority of their dietary intake for the day. The fact that such a minimal amount of the federal budget is spent towards school lunches doesn't help either. This causes

children to eat nutritionally depleted and unbalanced meals that carve a road for a line of chronic diseases. Childhood obesity rates have seemingly increased over the years. And what was once known as “adult-onset type II diabetes” is being diagnosed in younger generations including adolescents (Cunningham 2014).

Overnutrition is a form of malnourishment caused by an excess in caloric consumption without sufficient nutrient intake. This is commonly found in the standard American diet that consists of ‘empty calories’ and nutrient deficient food. This usually leads to a person becoming overweight and eventually obese if not treated with proper lifestyle management. Obesity increases the risk for a whole host of other chronic diseases such as type II diabetes, hypertension, heart attack or stroke, gastrointestinal disorders and cancer (Field 2001). One article from the Journal of Internal Medicine correlates food insecurity directly to the risk of developing diabetes mellitus (Seligman 2007). American experiencing food insecurity are trapped in a vicious cycle as poverty leads to the consumption of insufficient, unhealthy food which is directly linked to diet-related disease. This in turn causes less than optimal day to day functioning which negatively affects educational and career potential which links back to poverty.

## Analysis & Conclusion

Clearly food insecurity is huge public health crisis in the United States. Federal food assistance such as SNAP, WIC, NSLP and

Map 1: Percent Lacking Convenient Access to a Supermarket or Supercenter in U.S. Counties, 2000



other charitable organizations just aren't making the cut to solve this issue. These national programs fail to recognize the importance in the quality of the diet. Having a sufficient amount of food is not beneficial unless it is mostly composed of whole foods such as fruits and vegetables. There are areas known as "food deserts" due to the lack of fresh produce availability and overall variety in food options. The USDA defines a food desert as "urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food." (USDA ERS). Currently about 23.5 million Americans live in these food deserts around the country, 75% of which are in urban areas (*APATT*). Ironically, it's the areas largely known to depend on farming for their economy that suffer from a lack of real food. Food as a basic human right, should be accessible to all people of the world, including the USA.

The root of the problem may lie in the large agribusiness special interests that conflict with the health and well-being of the public. In 2011, \$124.7 million was spent in lobbying the food industry through Congress (*APATT*). Their agenda has influenced the government on what the USDA decided to subsidize. Unfortunately the majority of the subsidies spent on agriculture go towards the crops used as the main ingredients of processed foods. A majority of which are genetically modified crops such as corn, soybeans, and canola. Virtually no taxpayer dollars or government funds go towards fruit and vegetable agriculture. This is shocking considering that the USDA has spent a quarter of a trillion dollars on farm subsidies since 1995 (*APATT*).

Due to these policies, many Americans simply do not have the convenient and reliable access to nutritious, wholesome food. Those living within these food deserts are forced to drive or take public transportation over long distances and hours of time to access fresh produce and minimally processed goods. The USDA recognizes these food-absent area exists in all 50 states, some just more severe than others (Cohn 2014). The multiple small family farm operations that

used to feed people on a more local level transitioned into fewer, more concentrated large scale monocultures. This caused a dramatic effect in the market by skyrocketing fresh produce costs and cutting prices for processed foods that increased company profits. This makes low-income families much more likely to purchase the cheaper, highly processed food instead of the healthier option. The voluminous nature and caloric density of processed foods also seem more satisfying.

It will take corporate responsibility and government accountability with the cooperation of food-deserted communities to start turning the issue around. Plenty of non-governmental hunger relief organizations have already been established to fight the cause. These include Feeding America, a network of 201 food banks across the country and the End Hunger Network founded by Jeff Bridges, an Oscar-winning actor. Feeding America declares four components to ensuring food security: availability, access, stability, and utilization. The integration of the private and public sectors coupled with the proper funding is key. Amendments to the farm bill and food policies have clearly not helped to be the sole solution. The idea of food sovereignty or food justice is starting to take action. To take the democratic and economic right to demand the food a community wants helps the social justice issue. This sort of empowerment would encourage and incentivize the younger generations to start careers as farmers would also help meet the growing demand for healthy, wholesome, nutritious, and live food in America.



**References**

Anderson, S.A. (ed.). 1990. "Core Indicators of Nutritional State for Difficult-To-Sample Populations," *Journal of Nutrition* 120(11S):1557-1600. Report by the Life Sciences Research Office, Federation of American Societies for Experimental Biology, for the American Institute of Nutrition.

Coleman-jensen, A. (2010). U.S. food insecurity status: Toward a refined definition. *Social Indicators Research*, 95(2), 215-230. doi:http://dx.doi.org/10.1007/s11205-009-9455-4

*A Place at the Table*. Dir. Kristi Jacobson and Lori Silverbush, Prod. Tom Colicchio, Participant Media. Magnolia Pictures, 2012. Released theatrically March 1, 2013

Hamilton, W. L., Cook, J. T., Thompson, W. W., Buron, L. F., Frongillo, E. A., Jr., Olson, C. M., et al. (1997a). Household food security in the United States in 1995: Summary report of the food security measurement project. USDA, Food and Consumer Service, and Office of Analysis and Evaluation

Nord, M., Andrews, M., & Carlson, S. (2008). Household food security in the United States, 2007. Economic Research Report Number 66, U.S. Department of Agriculture, Economic Research Service.

Radimer, K. L., Olson, C. M., Greene, J. C., Campbell, C. C., & Habicht, J. P. (1992). Understanding hunger and developing indicators to assess it in women and children. *Journal of Nutrition Education*, 24, 36S–45S.

Coleman-Jensen, A., Gregory, C., Singh, A. (2013). *Household food security in the united states in 2013*. Economic Research Service Report 173; USDA

Adams, E. J., Grummer-Strawn, L., & Chavez, G. (2003). Food insecurity is associated with increased risk of obesity in California women. *The Journal of Nutrition*, 133(4), 1070-4.

Jyoti, D. F., Frongillo, E. A., & Jones, S. J. (2005). Food insecurity affects school children's academic performance, weight gain, and social skills. *The Journal of Nutrition*, 135(12), 2831-9.

Seligman, H. K., Bindman, A. B., Vittinghoff, E., Kanaya, A. M., & Kushel, M. B. (2007). Food insecurity is associated with diabetes mellitus: Results from the national health examination and nutrition examination survey (NHANES) 1999-2002. *Journal of General Internal Medicine*, 22(7), 1018-23.

Cunningham, S. A., PhD., Kramer, M. R., PhD., & Narayan, K. V. (2014). Incidence of childhood obesity in the United States. *The New England Journal of Medicine*, 370(5), 403-11.

Rose, D. (1999). Economic determinants and dietary consequences of food insecurity in the United States. *The Journal of Nutrition*, 129(2), 517S-520S.

Morland, K., Wing, S., & Ana, D. R. (2002). The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. *American Journal of Public Health*, 92(11), 1761-7.

Hamilton, W., Cook, J., Thompson, W., Buron, L., Frongillo, E., Olson, C. & Wehler, C. (1997). Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project. FCS/USDA, Washington, DC.

Rose, D. & Oliveira, V. (1997a) Nutrient intakes of individuals from food-- insufficient households in the United States. *Am. J. Public Health* 87: 1956-1961.

Chilton, Mariana, PhD., M.P.H., Black, M. M., PhD., Berkowitz, C., M.D., Casey, P. H., M.D., Cook, J., PhD., Cutts, D., M.D., . . . Frank, D. A., M.D. (2009). Food insecurity and risk of poor health among US-born children of immigrants. *American Journal of Public Health*, 99(3), 556-62.

Cohn, C. (2014). *The influence of feeding america food banks for food desert communities throughout the united states* (Order No. 1571971). Available from ProQuest Dissertations & Theses Global. (1649161382).

Field AE, Coakley EH, Must A, Spadano JL, Laird N, Dietz WH, Rimm E, Colditz GA. Impact of overweight on the risk of developing common chronic diseases during a 10-year period. *Arch Intern Med.* 2001;161:1581-1586