

NRC RESEARCH: FOOD INSECURITY & HUNGER

Background

The U.S. Department of Agriculture defines “food insecurity” to include resource constraints leading to serious problems such as the family suffering hunger, or being unable to purchase a balanced diet or enough food for their children, or the parents skipping meals so the children can eat.

The Native American community suffers from a much higher rate of food insecurity and hunger than the general population. The rates of food insecurity and hunger among Native Americans are twice the already too high rates for the general U.S. population, and three times higher than the rates for White Americans.

Food insecurity and hunger takes a serious toll on the health and well being of the Native American community. (Excerpt from Food Research and Action Centerⁱ and 2000 WIC Summary Report.) The U.S. Department of Agriculture found that 22.2 percent of Native American households were food insecure over the 1995 to 1997 period, meaning that they did not have access to enough food to meet their basic needs. (USDA three-year data set on food insecurity and hunger, 1995 to 1997.)

Children -- Implications of Hunger

Illnesses - Higher incidence of infections; weakening immune system. Research shows that children from food insecure families are 90% more likely to be in fair or poor health and have 30% higher rates of hospitalization compared to food secure children.ⁱⁱ

Increased school absences, impeding readiness for school - Research has shown that food insecurity was associated with grade repetition, absenteeism, tardiness, anxiety, aggression, poor mathematics scores, psychosocial dysfunction and difficulty with social interaction among children 6 to 12 years old.ⁱⁱⁱ

Early Childhood Caries – Prevalence of caries or cavities in children 3-4 years old:^{iv}

- White 11%
- African American 22%
- Hispanic 24%
- Native American 68%
- Navajo Area 93%

Growth

- Hunger may flatten the normal curve of growth, with more children being underweight and more children being overweight.
- Hungry children can be overweight, underweight, or normal weight.

Obesity

- High fat, high calorie foods increase satiety (the feeling of fullness) and may be eaten when there is not enough money to buy food.
- Risk factors for hunger are very similar to those of obesity: genetics, race and poverty.

Elderly – Hunger and Aging^v

- Food insecurity persists among our elderly. Today, the underlying causes of or contributors to many of the nutrition-related difficulties that elders face include frailty and poor health, exacerbating medical conditions, increasing disability, and extended hospital stays.
- A 2002 study by the Department of Agriculture found that lower-income older people consume fewer calories and fewer servings of the foods recommended on the official food pyramid. New research confirms that chronic nutritional deficiencies jeopardize health in many ways, including weakening the body's immune defenses.^{vi}

Maternal Health

- A 1997 study of Navajo women reported that 42% of participants who had diabetes during pregnancy were subsequently diagnosed with non-insulin dependent diabetes within 4 years.^{vii}
- The percentage of Native American women receiving early prenatal care has risen from 38.2% in 1970 to 66.7% in 1995. However, this is far below the percentage for non-Hispanic white women, 83.6% of whom reported receiving early prenatal care in 1995.^{viii}

Trends

Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp program):

- *National:* The number of people participating in SNAP in November 2008 was 14.2 million more persons than in July 2000. This is a 46% increase in less than 10 years. Between November 2008 and November 2007, there was nearly a 3.8 Million (or 12%) increase.^{ix}
- *Southwest:* An average 19% increase of persons participating in SNAP in the six states served by NRC in its Southwest service area.
- *Plains:* An average 8% increase of persons participating in SNAP in the six states served by NRC in its Plains service area.

US Obesity Trends^x

- *National:* Thirty states had obesity prevalence equal to or greater than 25%.
- *Southwest:* Of the six states in the NRC Southwest service area, four have an obesity prevalence of 20-24% (CA, NV, UT, and NM). One state had a prevalence of 25-29% (AZ) and one state had the lowest national prevalence at 15-19% (CO).
- *Plains:* Of the six states in the NRC Plains service area, three states have an obesity prevalence of 20-24% (ID, MT, WY), and three states have a prevalence of 25-29% (ND, SD, NE).

Hunger & Poverty Inextricably Linked

Poverty is, of course, the principal factor in causing food insecurity, hunger, malnutrition, and under-nutrition among Native Americans. The association between poverty, hunger and food insecurity has been well documented. A number of studies, including FRAC's Community Childhood Hunger Identification Project and the U.S. Department of Agriculture's studies of Household Food Security, provide evidence that poverty and food insecurity are inextricably linked.^{xi} The U.S. Department of Agriculture found that "food insecurity prevalence rates, at all levels of severity, decline consistently as household income levels increase."^{xii}

Access to Food

- Healthy food is hard to come by on some reservations. Fresh fruit or produce may be non-existent in some reservation communities.
- Some reservations have no grocery store. People shop at the reservation convenience stores.
- Most food on the reservation costs 30% to 50% more, and those who have to buy it are among the poorest residents in the country.
- Over the course of a month, probably 30% to 50% of reservation members don't make it to a real grocery store. Typical reasons are no store, not enough money, no transportation, the distance is too far (they live too remotely), or they are disabled.

Availability of Resources^{vi}

- Food banks and meal programs have seen their shelves grow bare, as the value of federal surplus food donations fell from \$242 million in 2003 to \$59 million in 2007.
- The National Association of Area Agencies on Aging reports that half of the organizations it represents have cut back on home-delivered meals, and 9 out of 10 expect to cut back in the coming year.
- The food stamp program, which was created to keep Americans from going hungry, has failed to keep pace with rising food prices.

ⁱ WIC in Native American Communities: Building a Healthier America Report Summary at <http://www.frac.org/html/publications/wic01summary.pdf>.

ⁱⁱ Cook, JR., Frank, DA., Berkoqitz, C., et al. Food Insecurity is Associated with Adverse Health Outcomes Among Human Infants and Toddlers. *Journal of Nutrition*, 2004; 134: 1432-1438.

ⁱⁱⁱ Alaimo, K., Olson, C.M. and Frongillo, E.A. Food Insufficiency and American School-Aged Children's Cognitive, Academic and Psychosocial Development. *Pediatrics*, 2001; 108: 44-53.

^{iv} Surgeon General's Report on Oral Health, 2000.

^v Frongillo, E., and Horan, Claire. Hunger and Aging – Generations, *Journal of the American Society on Aging* at <http://www.generationsjournal.org/generations/gen28-3/article.cfm>.

^{vi} Jaret, Peter. Going Hungry in America – How Could it Happen Here? *AARP Bulletin*, September 2, 2008 at http://bulletin.aarp.org/yourworld/family/articles/going_hungry_in_america_by_peter_jaret.html.

^{vii} Steinhart JR, et al. Gestational diabetes is a herald of NIDDM in Navajo women. High rate of abnormal glucose tolerance after GDM, *Diabetes Care*, 1997; 20(6): 943-947.

^{viii} U.S. Department of Health and Human Services. Early Prenatal Care: Receipt of Prenatal Care in the First Trimester, *Trends in the Well-Being of America's Children and Youth*, 1998; 210-211.

^{ix} Food Research and Action Center. Current News and Analysis, November 2008 at http://www.frac.org/html/news/fsp/2008.11_FSP.htm.

^x Center for Disease Control and Prevention. US Obesity Trends, 1987-2007 at <http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/index.htm>.

^{xi} Food Research and Action Center. Community Childhood Hunger Identification Project: A Survey of Childhood Hunger in the United States; 1995.

^{xii} U.S. Department of Agriculture. Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project.