

REPORT TO THE BOARDS OF HEALTH

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Food Insecurity and Food Deserts

It is estimated that over 12% of U.S. households dealt with food insecurity at some point in 2016; in rural areas, over 15% were food insecure. According to the Life Sciences Research Office of the Federation of American Societies for Experimental Biology, food security and insecurity are defined as:

- **Food security:** access by all people at all times to enough food for an active, healthy life, and includes, at a minimum:
 - the ready availability of nutritionally adequate and safe foods, and
 - an assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies.)
- **Food insecurity:** limited or uncertain availability of nutritionally-adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

A **food desert** is defined by the United States Department of Agriculture (USDA) as “parts of the country void of fresh fruit, vegetables, and other healthful whole foods, usually found in impoverished areas.” An area that has limited access to healthy options yet has no lack of access to unhealthy foods, such as fast food, convenience stores, and liquor stores, are referred to as **food swamps**.

Food insecurity is associated with poor health and chronic illness. People that worry about feeding themselves or their families suffer from stress, anxiety, and depression. They are also more likely to be overweight, have poor sleep, chronic disease, and a worse quality of life. This may impact their ability to work, which adds to their struggle with food insecurity. Rural residents are known to have higher rates of chronic disease, disability, and obesity, as well as a lower life expectancy, as compared to urban residents. Approximately 6% of rural U.S. residents have to travel between 10 to 20 miles to get to the nearest supermarket. In rural areas, those that struggle with limited access to food feel that lack of transportation is their biggest barrier. This causes many to rely on more expensive and less nutritious foods, such as is available at nearby gas stations and convenience stores.

Children, pregnant women, seniors, people with disabilities, and immigrants and refugees are at higher risk of poor outcomes due to food insecurity. Children dealing with food insecurity struggle with worse school performance, increased school absenteeism, worsened social skills, stunted growth, obesity, and deficiencies such as iron-deficiency anemia. Older adults dealing with food insecurity have high rates of physical and mental deterioration, while pregnant women have more excessive weight gain and gestational diabetes.

There are many factors in addition to lack of transportation associated with a higher likelihood of dealing with food insecurity. These include low income, lower education, immigration, depression, anxiety, physical and mental disability, gambling, drug use, number of people in a household, available food storage and preparation areas, food cost, store location, and single-parent households.

The food supply chain has many steps: production, processing, distribution, retail and market, consumption, and waste recovery.



Source: *What is Sustainable Agriculture?*
UC Davis Sustainable Agriculture Research
and Education Program

Gaps anywhere in this chain will affect access to healthy food. Ways to improve and impact food production, processing, and distribution include:

- **Land Use Policies:** policies offering financial credits to food producers can ease the burden of starting and maintaining farmland.
- **Food Hubs:** processors and/or distributors for small farms, which can help them make a profit without expanding their production or land size.
- **Community Gardens:** which provide residents with a space to grow food.

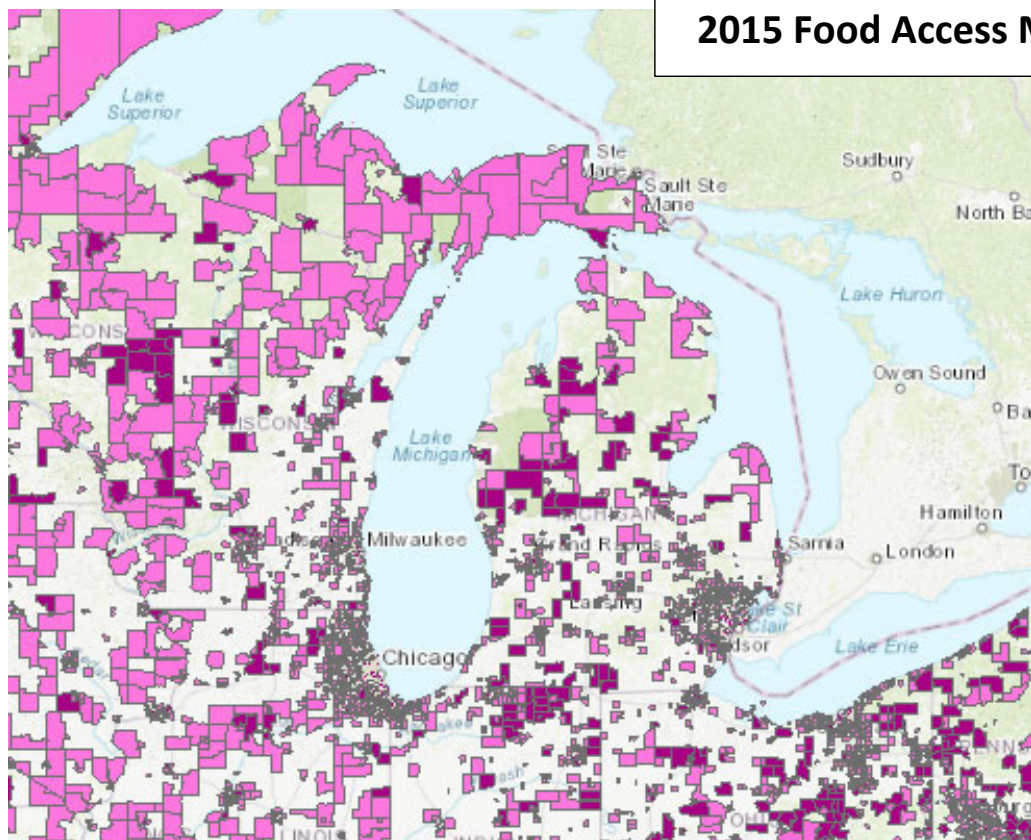
School programs exist to help children and adolescents have access to healthy foods. Over 44 million meals are served in U.S. schools each day. School-based models include:

- **School Breakfast:** These programs have been shown to increase attendance, decrease tardiness, and provide quality nutrition to students who lack food at home. Participating students have improved standardized test scores and lower behavior problems during the day. This program is federally funded and many students qualify for free and reduced priced meals.
- **Afterschool Meals:** provided after the school day but during a supervised, educational activity. Afterschool meals are normally implemented through the Child and Adult Care Food Program (CACFP) or the National School Lunch Program.
- **Farm to School Models:** a national program focused on increasing the amount of local, fresh, and healthy foods in schools. The U.S. Department of Agriculture provides grants and funding to help implement Farm to School programs.
- **Backpack Food Program Models:** This program helps to close the gap in meals for children between Friday lunch and Monday breakfast by providing food for children over breaks. Provide kids with whole grains, fruits, vegetables, and micronutrients and is typically implemented with assistance from a sponsor, such as a food bank or local business.
- **Summer Meals:** Provides lunches to students at little or no cost during the summer break. This program increases access to food throughout summer months for students who rely on school meals. Summer food programs can be located at schools or community agencies such as libraries, faith-based organizations, or community centers.
- **School Food Pantries:** schools devote space specifically for a food pantry to provide relief to hungry students and staff.

Retail-based models focus on providing or improving places where people buy food. Retail-based models include:

- **Food Assistance:** This includes programs such as Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- **Mobile Markets:** These work similar to food trucks and have a set schedule and route where they make stops and deliveries. Transportation barriers are reduced by bringing a food market to rural and underserved areas. The USDA authorizes the use of SNAP and WIC benefits at mobile markets.
- **Healthy Corner Stores (or convenience stores):** Helps small food retailers stock more fruits and vegetables. Programs that increase store capacity to sell and market healthy food and beverage items, provide training and technical assistance for store owners, in-store community nutrition lessons, youth education efforts in schools near targeted corner stores, and connecting store owners with community partners, local farmers, and fresh food suppliers to encourage healthy food sourcing.
- **Farmers Markets:** organized, scheduled, recurring gatherings where producers can sell their food products directly to consumers. Participating farmers markets accept SNAP and WIC benefits.
- **Community Supported Agriculture:** direct farmer to consumer market, similar to farmers markets. Consumers buy “shares” in the harvest and prepay before the growing season for a certain amount of produce and/or other farm products during the harvest season. Once the food is ripe or produced, the farmers deliver the food directly to the consumer or a predetermined pick-up site, or customers pick up their shares at the farm. Participating farmers can accept SNAP and WIC benefits.

2015 Food Access Map



- Low Food Access:** At least 500 people or 33% of the population lives farther than 1 mile (urban) or 10 miles (rural) from the nearest supermarket
- Low Vehicle Access:** More than 100 households have no access to a vehicle and are more than 1/2 mile from the nearest supermarket.

Source: USDA Economic Research Service <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>

Healthy Living Recommendations:

1. Recognize food insecurity is more common in rural areas and is known to have many negative impacts on health.
2. County community health assessments and health improvement plans should consider identifying local risk factors for poor nutrition and access available resources to address the problems identified.

RESOURCES:

Rural Health Information Hub Rural Food Access Toolkit <https://www.ruralhealthinfo.org/toolkits/food-access>

- Using Food Policy Councils to Address Rural Food Issues <https://extension.purdue.edu/extmedia/EC/EC-795-W.pdf>
- Food Policy Council Directory <http://www.foodpolicynetworks.org/directory/online/index.html>
- Drafting a Resolution to Create a Food Council <http://www.publichealthlawcenter.org/sites/default/files/resources/Drafting%20a%20Resolution%20to%20Create%20a%20Food%20Council.pdf>
- The CSA Farmer's Nationwide Guide to Accepting SNAP/EBT Payments <http://eorganic.info/sites/eorganic.info/files/u461/2013-3%20National%20SNAP%20CSA%20Guide.pdf>

- Community Food Systems Farm to School Grant Program <https://www.fns.usda.gov/farmtoschool/farm-school-grant-program>
- Local Food Promotion Program (USDA Food Hub grant) <https://www.ams.usda.gov/services/grants/lfpp>
- Community Food Projects (grant) <http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/community-food-project-grants/>
- Louisville Grows Community Garden Toolkit <http://www.louisvillegrows.org/wp-content/uploads/2016/11/LGCommunityGardenToolkit.pdf>
- Backpack Food Program Starter Toolkit https://www.northwestharvest.org/stuff/contentmgr/files/0/f0906a71cb000d92cf0f9e9a83912eed/files/how_to_start_a_backpack_program.pdf
- MSU Center For Regional Food Systems New Funding Sources For Food-Related Businesses http://www.canr.msu.edu/foodsystems/uploads/files/food_business_funding.pdf
- Local Food Directories: Food Hub Directory <https://www.ams.usda.gov/local-food-directories/foodhubs>
- Local Laws and Policies That Promote Access to Healthy Food: A Food System Crosswalk https://www.vermontlaw.edu/sites/default/files/2017-09/HFPP-Crosswalk_final.pdf
- Healthy Food Access Research and resources for communities that are working to increase access to healthy food for everyone. <https://www.rwjf.org/en/library/collections/healthy-food-access.html>
- Rural Grocery Tool Kit (from Kansas State University) <http://www.ruralgrocery.org/resources/>
- USDA Healthy Corner Stores Making Corner Stores Healthier Places to Shop <https://fns-prod.azureedge.net/sites/default/files/snap/Healthy-Corners-Stores-Guide.pdf>
- A Guide to Healthy Small Food Retailer Certification Programs <http://changelabsolutions.org/publications/health-on-the-shelf>
- A Guide About Rewarding Small Food Stores For Healthy Improvements <http://changelabsolutions.org/small-food-stores-incentives>
- Model Ordinance and Guide for Licensing Healthy Food Retailers <http://changelabsolutions.org/publications/HFR-licensing-ord>
- Finding Public Funding For Healthy Food Retail <http://changelabsolutions.org/publications/green-for-greens>
- Rural Childhood Obesity Prevention Toolkit <https://www.rwjf.org/en/library/research/2014/10/rural-childhood-obesity-prevention-toolkit.html>
- Federal Food Assistance Programs <https://www.nutrition.gov/subject/food-assistance-programs>
- Michigan Good Food Fund <http://migooodfoodfund.org/about/> : a \$30 million public-private partnership loan fund, provides financing to food enterprises working to increase access to affordable, healthy food in low-income and underserved communities in Michigan.

Sources

- Hoflund, A. Bryce, Jones, John C., Pautz, Michelle C.; The Intersection of Food and Public Health : Current Policy Challenges and Solutions
- Rural Health Information Hub and Rural Health Information Hub Rural Food Access Toolkit <https://www.ruralhealthinfo.org/toolkits/food-access>
- USDA Economic Research Service <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>