

**House Agriculture Committee
Subcommittee on Operations, Oversight, Nutrition and Forestry
United States House of Representatives**

**Hearing on
Access to Affordable and Nutritious Food:
Measuring and Understanding Food Deserts and Their Consequences**

**Testimony of
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Chairman Baca, Ranking Member Fortenberry, and Members of the Subcommittee, I would like to thank you for allowing me to testify before you today on the issue of access to affordable and nutritious food.

Increases in obesity rates and diet-related diseases are major public health problems. These problems may be worse in some American communities because they lack access to affordable and nutritious foods. Previous studies suggest that some areas and households have easy access to fast food restaurants and convenience stores, but less access to supermarkets and larger grocery stores that provide more nutritious and varied selections. Differences in access may make some communities more reliant on stores and restaurants that offer fewer healthy food choices, such as convenience stores or food marts at gas stations. Limited access to nutritious food and relatively easier access to less nutritious foods may be linked to poor diets and ultimately to obesity and diet-related diseases.

Concerned that some households lack access to affordable and nutritious food, Congress, in the Food, Conservation, and Energy Act of 2008, directed the U.S. Department of Agriculture (USDA) to conduct a one-year study of 'food deserts'. The USDA was directed to assess the extent of the problem of limited access, identify characteristics and causes, consider how limited access affects local populations, and outline recommendations to address the problem. The findings of the study are given in detail in a report entitled Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences, which was released in June, 2009 and can be found at <http://www.ers.usda.gov/Publications/AP/AP036/>. My testimony today summarizes the key findings of the report.

Methods

Economic analysis was conducted on the extent, determinants, and consequences of food deserts. A variety of data and methods were used to assess the extent of limited access to affordable and nutritious food. To conduct the analysis of the prevalence of food deserts, a comprehensive database was developed that identified the location of supermarkets and large grocery stores within the continental U.S. Food access was estimated as the distance to the nearest supermarket or large grocery store. The analysis was refined by examining households without vehicles and specific socio-demographic subpopulations drawn from the 2000 Census. The key determinants of areas with low access to supermarkets and large grocery stores were also analyzed.

Research also examined national-level data on questions of household food adequacy and access from the 2001 Current Population Survey. This information was complemented with national-level data on time spent traveling to grocery stores from the 2003-2007 American Time Use Survey. To consider the economic consequences of limited access, ERS also analyzed demand for certain nutritious foods for a sample of participants of the Supplemental Nutrition

Assistance Program (SNAP) using data from the National Food Stamp Program Survey (NFSPS) of 1996/1997. Variation in prices for similar foods purchased at different store types was also estimated.

Measuring and Characterizing Areas with Limited Access

Overall, findings show that access to affordable and nutritious food is a problem for a small but significant share of the national population. Urban core areas with low access are characterized by higher levels of racial dissimilarity and income inequality. Lack of transportation infrastructure is the most defining characteristic of small towns and rural areas with low access.

Direct questions from a nationally representative survey of U.S. households conducted in 2001 show that nearly 6 percent of all U.S. households did not always have the food they wanted or enough food because of access-related limitations. More than half of these households also lacked enough money for food. It is unclear whether food access or income constraints were relatively greater barriers for these households.

Households that live far from a supermarket or large grocery store and without easy access to transportation will have more limited access to affordable and nutritious food. Of all households in the U.S., 2.3 million, or 2.2 percent live more than a mile from a supermarket and do not have access to a vehicle. An additional 3.4 million households, or 3.2 percent of all households, live between one-half to one mile and do not have access to a vehicle.

Area-based measures of access show that 23.5 million people live in low-income areas (areas where more than 40 percent of the population has income at or below 200 percent of Federal poverty thresholds) that are more than one mile from a supermarket or large grocery store. However, not all of these 23.5 million people are defined as low-income. If estimates are restricted to consider only the low-income people in low-income areas, then 11.5 million or 4.1 percent of the total U.S. population lives in low-income areas more than one mile from a supermarket.

Economic consequences

A related concern is that poorer households pay more for the same goods because they cannot access lower-priced retailers and thus, are more likely to purchase their goods in smaller, higher-priced stores. Past research on food prices was unable to match data on prices paid with the households that actually make the purchases. As a result, prior work focused on inferring the linkages between prices paid and household characteristics.

The analysis conducted for this study uses proprietary household-level data that contain information on food items purchased by approximately 40,000 demographically representative households across the United States. These data on household food purchases were used to examine differences in prices paid for milk, ready-to-eat cereal, and bread at supermarkets, convenience, discount, and other types of stores. Results show that consumers pay more for these goods at convenience stores than at supermarkets, holding constant characteristics of consumers such as income and education and characteristics of the products, such as size and fat content.

Other research, however, shows low- and middle-income households are more likely to purchase food at supercenters, where prices are lower. Results also indicate that while some of the very poorest households—those earning less than \$8,000 per year—may pay between 0.5 percent and 1.3 percent more for their groceries than households earning

slightly more, households earning between \$8,000 and \$30,000 tend to pay the least for groceries, whereas higher-income households pay significantly more.

How food store access is related to food shopping behavior, food purchasing and the prices paid for specific foods was also examined. The results show that most low-income consumers are able to access supermarkets, albeit with higher travel costs for those living farther away. For those with limited access to supermarkets, the results suggest that these consumers make fewer purchases of certain kinds of nutritious foods.

Dietary Behavior and Health Outcomes

Many studies find a correlation between limited food access and lower intake of nutritious foods. These studies, however, are not sufficiently robust to establish a causal link between access and nutritional outcomes. That is, other explanations cannot be eliminated as significant contributory causes of lower intake of nutritious food. A few studies have examined food intake before and after healthy options become available (either within existing stores or because new stores open). The findings are mixed—some show a small but positive increase in consumption of fruits and vegetables, while others show no effect.

Policy considerations

Access to affordable and nutritious food depends on supply (availability) and consumer demand. Understanding the market conditions that contribute to differences in access to food is critical to understanding which policy interventions may be effective in reducing access limitations. Consumer behavior and preferences and other factors related to the demand for some foods may lead to differences in what foods are offered where. Food retailer behavior and supply side issues such as higher costs to developing stores in underserved areas may also explain variation across areas in which foods are offered and what stores offer them. If high development costs for stores limit supermarkets in some areas, then subsidy programs or restructured zoning policies may promote new stores in areas of low access. If consumer demand factors, like inadequate knowledge of the nutritional benefits of specific foods, contribute to differences in access by reducing demand, then a public health campaign may be a preferred strategy. Several local and state level efforts are underway that could provide the basis to understanding which types of interventions work best. I would note, as well, that the President's FY2011 Budget proposes a healthy food financing initiative to address the issue of food deserts. This initiative includes funds for USDA activities.

Food access research continues at USDA

The current state of research is insufficient to conclusively determine whether some areas with limited access to certain kinds of food stores have inadequate access to nutritious food. Future research should consider improved methods to measure access levels, availability, and prices of foods faced by individuals and areas. The recently developed U.S. Food Environment Atlas at USDA provides a more comprehensive set of measures of access.

The basis of the U.S. Food Environment Atlas is a recognition that factors—such as store/restaurant proximity, food prices, food and nutrition assistance programs, and community characteristics—interact to influence food choices and diet quality. The Food Environment Atlas, developed by the U.S. Department of Agriculture, assembles statistics on three broad categories of food environment indicators.

- *Food Choices*
- *Health and Well-Being*
- *Community characteristics*

The online Atlas currently contains 90 indicators of the food environment and is available to the public. Most of the data are on the county level. A user can select an indicator – e.g., the prevalence of obesity – and create a map showing variation in that indicator among counties across the United States or across a state. Atlas users can identify counties with a combination of indicators – for example, those with persistent child poverty as well as high numbers of residents with limited access to grocery stores. The Atlas also allows users to get data on any and all of the county-level indicators for a particular county. The Atlas can be found at the following website: <http://www.ers.usda.gov/FoodAtlas/>.

Again, thank you for the opportunity to appear before you today, and I look forward to answering any questions.