

8. Assessment of Food Availability and Affordability

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8. Assessment of Food Availability and Affordability

8.1 Purpose

In addition to food resource accessibility, community food security also depends on the availability and affordability of a variety of food items sold through retail and other food resources. Households participating in the Federal Food Stamp Program receive benefits that are used to purchase food from food retailers authorized by USDA to accept food stamps. Maximizing the effectiveness of Federal food assistance programs requires that sufficient quantities of healthful foods are available in the marketplace at prices low-income households can afford.

The key questions for this assessment include

- Is a variety of food available in retail stores?
- Are the available foods affordable to low-income households?
- Can the Thrifty Food Plan (TFP) market basket be purchased from these retailers at or below the TFP cost threshold set by USDA?

The assessment begins by using a food store survey to determine whether retail stores used by low-income residents offer a variety of affordable foods (see Appendix C: Food Store Survey Instruments and Materials). The survey is based on a food list that provides all of the foods needed to prepare a week's worth of recipes and menus developed for USDA's TFP for a reference family of four. (See box 12.) The survey is based on USDA's TFP

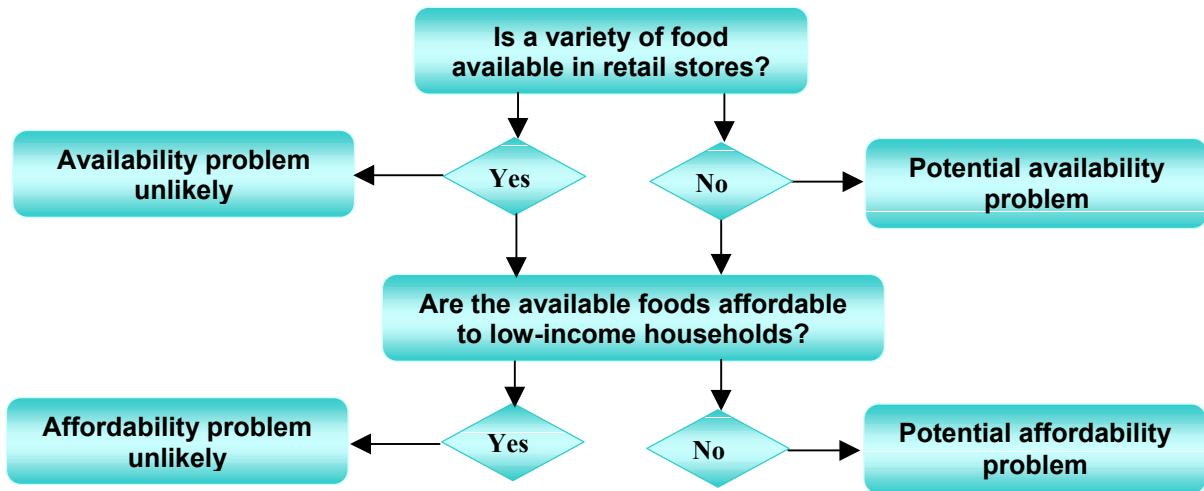
because the plan is a national standard for a nutritious diet at a minimal cost and is used as the basis for food stamp allotments.

Because the TFP is based on a single week's menus and recipes, it is not meant to be representative of any individual household's food needs or habits. Rather, it is intended to serve as a standard for assessing the availability and affordability of a standardized TFP market basket across food stores.

The measure of variety will be determined using a TFP market basket of food to determine whether availability is a problem. Whether or not a variety of foods are available, it is also important to determine whether the food that is available is affordable. Thus, the store survey also will be used to collect information on the prices of food available in retail stores. A community may have a wide variety of available food (no availability problem), but the food may be too expensive for low-income residents (affordability is a potential problem). On the other hand, a community may have a poor variety of food, but the available food may be affordable to all residents.

The following diagram presents the framework for this assessment. It introduces key questions, different response patterns, and their implications. The highlighted elements provide community leaders with a way of determining whether a potential community food insecurity problem exists.

Exhibit 2. Food Availability and Affordability Assessment



Box 12 USDA's Thrifty Food Plan

The U.S. Department of Agriculture (USDA) Thrifty Food Plan (TFP) serves as a national standard for a nutritious diet at a minimal cost. It is one of four official USDA food plans, which also include the Low-Cost Plan, the Moderate-Cost Plan, and the Liberal Plan. The TFP is used by the Federal Government to provide food and economic information to consumers preparing food on a limited budget. It also serves as the basis for food stamp allotments.

The TFP represents a set of market baskets, each applicable to 1 of 12 age-gender groups. Each market basket contains a selection of foods in quantities that reflect current dietary recommendations, actual consumption patterns, food composition data, and food prices. The current TFP, revised in 1999, is the first to incorporate the *Dietary Guidelines for Americans* (1995, 4th edition) and serving recommendations from USDA's Food Guide Pyramid.

The monthly and weekly cost of the TFP market baskets and the other USDA food plans is calculated by USDA's Center for Nutrition Policy and Promotion (CNPP) and updated to current dollars on a monthly basis using the Consumer Price Index for specific food items. These cost estimates assume that all meals and snacks are purchased at stores and prepared at home.

To help households implement the TFP, the market basket for a TFP reference family of four (male and female ages 20 to 50 and two children ages 6 to 8 and 9 to 11) has been converted into three sets of weekly menus, recipes, and food lists. Each weekly menu consists of seven daily menus, with three meals and usually one snack per day. The menus and food lists meet the cost criterion of the TFP market basket. Convenience was considered whenever possible but was a secondary objective in developing the menus and recipes. A sample of eight, four-person, food stamp households purchased the foods and tested the menus and recipes for acceptability.

For more information, visit www.usda.gov/cnpp/FoodPlans/TFP99/index.htm on the Web.

8.2 Analysis

Once you have collected data on food prices and availability using the Food Store Survey instrument, you will need to analyze the data and present it in a form that is understandable, meaningful, and easy to use. This section describes the process that you will use to analyze the data collected in the Food Store Survey and answer key questions for this assessment, including

- Is a variety of food available in retail stores?
- Are the available foods affordable to low-income households?

Food Availability

To determine whether an adequate variety of food is available in your community, you will need to calculate the number and share of missing items in each store and across all stores. For each store type (e.g., supermarkets, convenience stores), you will learn how to calculate the following indicators:

- Total number of missing items per store
- Average number of missing items per store
- Percentage of items missing per store
- Items most frequently missing
- Percentage of items missing per store in each food category (fresh vegetables, fresh meats, canned and frozen vegetables, condiments, etc.)
- Percentage of missing items compared with the national average

Detailed instructions for performing these calculations are included in Appendix C.

Comparisons Across Stores

Comparing the availability of foods across stores is helpful for determining whether stores in certain parts of your community may differ in the number and types of foods

available. You may want to make the following comparisons:

- Total number of items missing in each store
- Percentage of items missing in each store
- Percentage of items missing in each food category

Comparisons With National Data

Comparing your results with national data allows you to determine whether food availability is more or less of a problem in your community than in the United States as a whole. The best source of national data on food availability is the *Authorized Food Retailer's Characteristics and Access Study*, published by USDA's Food and Nutrition Service (FNS) in February 1997.

This report is based on food availability data collected from a nationally representative sample of 2,400 authorized food stamp retailers in six store type categories: supermarkets, large groceries, small groceries, convenience stores and/or grocery-gas combinations, specialty stores (e.g., meat and produce markets), and other stores (e.g., general stores, co-ops, produce routes). Separate data on food availability are available for rural, urban, and mixed areas and for different income levels.

For each store, information was gathered on the variety and availability of products in a 142-item market basket designed to include foods from all of the major food groups. Items were selected on the basis of their importance in food expenditures of low-income households.

These foods were aggregated into the following food groups:

- Fresh meat
- Processed meats
- Fresh poultry
- Fresh seafood
- Packaged meat

- Fresh produce
- Packaged produce
- Dairy products
- Eggs
- Cereals
- Bakery products
- Dinner mixtures
- Other foods

Food availability was measured as the percentage of the total market basket of foods offered in a particular store type. Results from the survey are as follows:

Supermarkets	95%
Large grocery stores	81%
Small grocery stores	51%
Specialty stores	20%
Convenience stores	50%
Grocery/gas combinations	53%
Other stores	29%
All stores	54%

Assume that you surveyed five supermarkets in your community and that these supermarkets were missing 15 percent of the total items on average; that is, 85 percent of foods surveyed were available. This compares negatively with 95 percent nationwide. It is important, however, when making such comparisons, to note that the market basket used in the FNS study differs in some important respects.

The list of food items in the Food Store Survey (appendix C) reflects current Federal Dietary Guidelines and Food Guide Pyramid recommendations. As a result, it includes many lowfat versions of frequently consumed foodstuffs, such as turkey ham, lean ground beef, and yolkless noodles, that were not included in the FNS market basket. To the extent that such items may be less likely to be available in supermarkets than their higher fat counterparts, the percentage of missing items would likely be higher using the Food Store Survey than the FNS market basket. However, differences in availability across

store types would likely be comparable whether the FNS market basket or our Food Store Survey is used.

Food Prices

Along with availability, the Food Store Survey can also be used to determine whether the foods available for sale are affordable to low-income households and to look at differences in food prices in different parts of your community. For each store type, you will learn how to answer the following questions:

- What is the average price of individual food items across all stores?
- What is the average price per unit of each food category across all stores?
- How does the average price for an individual food item differ across stores?
- How does the average price for an entire food category differ across stores?
- What is the cost of the entire toolkit market basket?
- How does the cost of the toolkit market basket vary across individual stores and store types?
- How does the cost of the toolkit market basket cost vary across different food categories?
- How does the cost of the toolkit market basket compare with the TFP reference price?
- How does the gap between the toolkit market basket price and the TFP reference price differ across stores?

Detailed instructions for calculating prices and costs from the food store survey are included in appendix C.

Presenting the Data

It may be helpful to present these and other data using either a chart or map. (For information on how and when to use charts or maps, see chapter 3). A bar chart would be a

useful way to present information on the

percentage of missing items across stores.

8.3 Indicators

Indicator	Appendix	Data Collection Tool
Availability of food	C	Food Store Survey
Cost of food	C	Food Store Survey