

DATA DEVELOPMENT

Food and nutrition assistance research rests on the availability and quality of data. Investments in data sources and data collection instruments provide a critical foundation for addressing new and emerging food and nutrition assistance issues in a timely and scientifically credible manner.

Data Development Highlights

Enhanced Data Collection

A major barrier to evaluation of the food and nutrition assistance and nutrition programs is the difficulty and cost of collecting nationally representative data on program participation and associated outcomes. FANRP has addressed this issue by using cost-sharing partnerships with other government agencies to add a food and nutrition assistance dimension to a number of existing, large national surveys, including:

- *Current Population Survey Food Security Supplement (CPS-FSS)*
The Current Population Survey (CPS) is a monthly survey administered by the U.S. Census Bureau that obtains information from approximately 50,000 households. Once each year, the households participating in the CPS are asked a series of questions (the Food Security Supplement) about

Data Development Summary

FANRP has made it a priority to develop nationally representative data on USDA's major food and nutrition assistance programs and to improve data collection instruments and methodology. FANRP has leveraged a number of national surveys by supporting the addition of food assistance modules to these surveys. The data collected from these modules help increase understanding of issues related to food security, the relationship between food and nutrition assistance program participation and childhood cognitive and physical development (including obesity), and the nutritional status and diet of food assistance program participants. FANRP has also developed data collection instruments and methodologies to improve research and evaluations. FANRP projects have also pioneered the feasibility of linking administrative data to estimate multiple food and nutrition assistance and nutrition program participation, and evaluated various data sources for their potential for analyzing the impact of USDA's food and nutrition assistance programs on nutrition- and health-related outcomes, including those that focus on American Indians.

food security, food expenditures, and use of food and nutrition assistance programs. The supplement is the basis of national and State estimates of food security at the household level.

- *National Health and Nutrition Examination Survey (NHANES)* Conducted by the Centers for Disease Control and Prevention, NHANES assesses the health and nutritional status of the population and monitors changes over time. Data from NHANES provide information about the nutritional status and diets of food assistance participants.
- *Early Childhood Longitudinal Study (ECLS)* The ECLS is conducted by the U.S. Department of Education and is comprised of two cohorts; one follows a sample of approximately 22,000 children from kindergarten through fifth grade (ECLS-K) and the other one follows a sample of approximately 11,000 children from infancy through first grade (ECLS-B). The surveys collect information on the children's cognitive, social, emotional, and physical development and home and school environment. FANRP funded the addition of questions

on participation in various food assistance programs, household food security status, as well as measured height and weight. Data from the ECLS can be used to examine the relationship between food assistance participation and children's cognitive and physical development (including obesity).

Development of Data Collection Instruments and Methodologies

FANRP has supported the development of new and improved data collection instruments and methodologies to examine food assistance and nutrition-related issues.

FANRP is working to improve evaluations of FSNE

USDA promotes healthful diets among program participants through its support for Food Stamp Nutrition Education (FSNE) which is aimed at improving the food choices of program participants. State Food Stamp Program agencies have the option to provide FSNE, with USDA reimbursing States 50 percent of allowable costs. The last decade has seen a dramatic expansion in FSNE, accompanied by increased interest in improving FSNE evaluation. As part

of a larger FANRP effort to develop a short questionnaire to assess the dietary behavior impact of FSNE, Hartline-Grafton et al. (2004) provided a compendium of 128 survey questions used in previous research to assess dietary knowledge, attitudes, and behaviors for low-income populations over the age of 18. The short questions or sets of questions on nine topics, (fruits/vegetables, grains/legumes/fiber, variety, fat, calcium, nonalcoholic beverages, knowledge, attitudes, and behaviors) are drawn from an extensive inventory and evaluation of available questions reported in the research literature.

Retail scanner data provide new insights to WIC nutrition education

Nutrition education is a core component of the WIC program, along with the food packages and health care referrals. Federal regulations require that the WIC program offer at least two nutrition education contacts to the participant during each certification period. However, the effect of nutrition education on participants' food consumption behavior is difficult to ascertain. Bell and Gleason (2007) found that combining point-of-purchase grocery store data (i.e., store scanner data) with State WIC data is a feasible method to assess behavioral changes in WIC participants. The major obstacle is the recruitment of enough stores to allow for a representative sample of WIC participants to be included.

Module of eating habit questions was developed for inclusion in the ECLS-B

FANRP funded a study by ORC Macro (2005) to obtain a better understanding of the design considerations with respect to interview wording and format, for a series of questions to be asked of mothers of children in kindergarten and/or first grade

(Grades K-1), regarding their child's food consumption habits. The questions were proposed for inclusion in the ECLS-B. The study found that most mothers were able to answer questions on their child's eating habits by using a variety of recall strategies or by using references. Most mothers used recall strategies, such as the recall of preferences and special events or a child's specific likes or dislikes. They also used references, such as the presence of a menu or snacking policies at school. Mothers did not generally struggle with terminology, but some words and concepts required clarification. Based directly on the results of this study, the module of questions was incorporated into the ECLS-B.

FANRP explores feasibility of linking administrative data to estimate multiple program participation

Policy makers and researchers often want information about participation in multiple programs and the characteristics of families who choose to participate in some, but not all, programs for which they are eligible. Program participation is notoriously under-reported in national surveys, and currently administrative data are not combined across programs to allow USDA to calculate accurate and ongoing statistics on multiple-program participation. Cole (2003) investigated the feasibility of linking administrative data across programs to provide statistics on multiple-

program participation within the food assistance and nutrition programs. Results of the study indicate that Food Stamp Program and WIC statewide information systems vary significantly in the number and types of client identifiers, extent of data verification, and rules for data retention and overwriting. Despite that, record linkage is feasible in a number of States. The study found that participant data from the child nutrition programs are much more difficult to work with because they are typically unavailable at the State level and thus must be acquired at local levels.

Encouraging the Use of Publicly Available National Surveys

FANRP encourages research that makes appropriate use of existing nationally representative surveys.

Food and nutrition assistance program data sources are evaluated

FANRP sponsored a comprehensive review and evaluation of national data sources for their potential for analyzing the impact of USDA's food assistance and nutrition programs on nutrition- and health-related outcomes. The resulting report provided an inventory of data sources (mostly national level) that can be used as a foundation for future food assistance-related research (Logan et al., 2002). The report assessed data sources and identifies those most worthy of future investigation. Each data source was evaluated against three criteria:

- 1) coverage of both program participants and eligible nonparticipants for at least one of the food assistance and nutrition programs
- 2) identification of program participation status and sufficient information to determine eligibility for nonparticipants

3) nutrition- or health-related measures that might be useful in studying program impacts or in describing relevant characteristics of program participants and non-participants.

Thirteen data sources were classified as principal sources that appear to have the greatest potential for conducting research on food assistance and nutrition programs' outcomes. Another 13 sources could be made more useful for future food assistance research if questions were incorporated to fill gaps in relevant information.

FANRP examines sources of data on the use and impact of food assistance and nutrition programs on Indian reservations

American Indians are more likely than other Americans to be poor, food insecure, hungry, obese, and diabetic. National surveys on food and nutrition assistance program use and nutritional status provide limited information about American Indians and Alaska Natives, because of their relatively small numbers and dispersed population. To inform decisions on future efforts to collect data and support research, Finegold et al. (2005) reviewed existing data sources and prior research on six programs that provide food assistance to American Indians living on or near reservations: the Food Distribution Program on Indian Reservations, the Food Stamp Program, WIC, the National School Lunch Program, the School Breakfast Program, and the Commodity Supplemental Food Program. The study reviewed 26 surveys conducted at the national, State, or tribal level and the extent to which they provide information on population characteristics (for both participants and eligible nonparticipants), program participation, and health and nutrition outcomes.

