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# Comparing National Household Food Acquisition and Purchase Survey (FoodAPS) Data With Other National Food Surveys' Data

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## What Is the Issue?

USDA's National Household Food Acquisition and Purchase Survey (FoodAPS) is the first nationally representative survey to collect detailed and comprehensive information about household food purchases and acquisitions for a full week for everyone in the surveyed household. The survey also collects information on household food security, income and employment, and diet- and health-related behaviors and status. Although several other national surveys separately collect information on these key variables, no other nationally representative survey contains all of this information. This report compares several key FoodAPS estimates to those from other national-level surveys, including: (1) food spending; (2) food security; (3) food assistance program participation and income; (4) dietary knowledge and preferences; and (5) body mass index and general health, as well as sociodemographic information.

## What Did the Study Find?

Total food spending and food-at-home (FAH) spending estimates from FoodAPS exceed estimates from the Consumer Expenditure Survey (CE) by the Bureau of Labor Statistics that uses a similar diary-style recording method. But the FoodAPS estimates are below those based on respondents' recalling food spending in the past month, as in USDA's National Health and Nutrition Examination Survey (NHANES).

- FoodAPS estimate of total weekly food spending is \$124.03 compared with \$117.34 from the CE survey, or about a 5-percent difference. The CE is the primary national data set for consumer spending estimates and uses a similar 7-day purchase-recording method to measure food spending. This difference is mostly the result of greater FAH spending estimates from FoodAPS, which are 9 percent greater than CE estimates. The difference may reflect the explicit attempt by FoodAPS to obtain data on food spending from all sources and for all household members, using multiple reporting methods to collect purchase information. FAFH spending estimates are similar for the two surveys.
- Compared with estimates of FAH spending from the Information Resources Consumer Network Panel (IRI)—a proprietary data source that also uses a diary-style collection—FoodAPS captures about 26 percent more FAH spending.

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- FoodAPS estimates of total food spending are 23 percent lower than those reported by respondents of the NHANES. This difference may be partially due to larger household sizes in NHANES relative to FoodAPS and to different methods for obtaining data on food spending.

Almost 16 percent of FoodAPS households reported experiencing low or very low food security in the past 30 days compared with 11 percent reported in the National Health Interview Survey (NHIS) by the Centers for Disease Control and Prevention, and 8 percent in the Current Population Survey Food Security Supplement (CPS-FSS). One reason for these results may be that FoodAPS respondents have heightened attention to food hardship after participating in this food-centered survey for 1 week.

Estimates of Supplemental Nutrition Assistance Program (SNAP) participation in FoodAPS are similar to estimates from the Census Bureau's Survey of Income and Program Participation (SIPP). There are also some differences in the estimates of SNAP households' total income and income from specific sources in FoodAPS compared with SIPP, but these differences are partially explained by the definition of the household used in FoodAPS (all people in the household who live together and share food during the survey week) compared with SIPP (where household members that are within each SNAP unit are specifically identified).

Average self-reported weight and height measures from FoodAPS are similar to those from the NHANES, which are obtained by actual measurement of weight and height by trained medical professionals. FoodAPS respondents are more likely to be overweight than NHANES respondents (31 percent compared with 25 percent).

## **How Was the Study Conducted?**

FoodAPS is a nationally representative survey of noninstitutionalized households in the contiguous United States, as well as four subpopulations: (1) SNAP participants; (2) nonparticipants with incomes less than the Federal poverty threshold (FPL), which varies by household size and family size; (3) nonparticipants with incomes between 100 and 185 percent of FPL, and (4) nonparticipants with incomes greater than or equal to 185 percent of FPL. FoodAPS contains data on FAH and FAFH purchases and foods acquired for free. It collects item expenditure and quantity data and includes rich data about the sampled households. A total of 4,826 households, comprising 14,317 individuals, participated. Data were collected from April 2012 to January 2013.

For this report, FoodAPS weekly food spending estimates are compared with estimates from the CE, NHANES, and IRI. Household food security estimates are compared with estimates from the CPS-FSS and from the NHIS using the 10-item U.S. Adult Food Security Survey Module to assess household food security status in the last 30 days. SNAP participation and income estimates are compared with estimates from the Survey of Income and Program Participation (SIPP). Data from NHANES are also used to compare dietary behavior and knowledge, body mass index, and general health measures. General demographic characteristics reported in the FoodAPS sample are compared with estimates from the Current Population Survey Annual Social and Economic Supplement (CPS-ASEC). Comparisons are made for continuous variables using weighted estimates of sample means and standard errors in t-tests. Categorical variables are also compared using  $\chi^2$  tests. Key sample and question design differences between estimates are highlighted as caveats to comparability.