

FNS Research Corner

John R. Endahl, PhD; and Patricia McKinney

SUMMARY OF RESEARCH

The FNS Research Corner provides a continuing series of summaries of recently completed and current research conducted by the Food and Nutrition Service in the area of child nutrition. For further information, contact the Office of Analysis, Nutrition, and Evaluation (OANE) at (703) 305-2117. Links to published studies and reports as well as descriptions of ongoing studies conducted by OANE are available from the FNS Internet Web site at www.fns.usda.gov/oane/.

RECENTLY COMPLETED RESEARCH

The School Meals Initiative Implementation Study

This is a three-year longitudinal survey of a nationally representative sample of about 2,000 public school foodservice directors and 50 state child nutrition directors. It documents the changes occurring in public school districts throughout the nation as school foodservice directors adjust their programs to meet the far-reaching reform of school meals programs identified in the School Meals Initiative (SMI) for Healthy Children. Data collection began in school year (SY) 1997-98 and was completed in SY 1999-2000. Data were collected through the use of self-administered mail surveys, supplemented by telephone interviews when necessary. Results from the first year data collection were reported last year. A summary of the major findings of the second year data collection efforts is reported below. Results of the third year of data collection should be released early 2002.

Overall Status of SMI Implementation

- In SY 1998-99, a large majority of all school districts (80%) and schools (71%) were using one of the food-based menu-planning systems. Most of the remaining districts (20%) and schools (25%) were using Nutrient Standard Menu Planning (NSMP). Within the food-based category, about twice as many districts were using the traditional approach (51%) as were using the enhanced approach (29%). The distribution of districts using the various menu-planning systems changed comparatively little between SY 1997-98 and SY 1998-99.
- Although regulations required that schools serve meals that comply with the updated nutrition standards by the start of SY 1996-97, states had the authority to grant waivers to delay compliance with the nutrition standards and *Dietary Guidelines* until SY 1998-99. The Food and Nutrition Service (FNS) recognized that compliance with the new standards might be an incremental process achieved through trial and error over a period of time. Although findings indicate that most districts are making substantial and rapid progress in moving toward full implementation, there are still a substantial number of

districts not fully implemented. The share reporting that their chosen menu-planning method was "fully implemented" rose from 35% in SY 1997-98 to 55% in SY 1998-99.

- Thirty-nine percent of those school districts using food-based menu-planning systems in SY 1998-99 said that they were either working toward adoption of NSMP or planned to do so. This is down from the 51% that had said in SY 1997-98 that they were either moving in this direction or planned to do so.
- A significant share (37%) of all districts using food-based systems are conducting nutrient analysis, up from 33% in SY 1997-98. In fact, almost 60% of the very large (25,000 or more) districts are conducting nutrient analyses. A large majority (94%) of all food-based systems continued to make changes in the composition of the foods they serve or in how foods are prepared in an effort to meet the nutrition standards.
- Of those districts using a nutrient-based menu planning system, 81% assigned weights in conducting nutritional analyses.

Overall Impact of SMI on All School Districts

- School foodservice directors continued to report making numerous changes from the previous year in the menu-related features of their programs such as an increase in the number of new food items, which rose from 71% in SY 1997-98 to 81% in SY 1998-99.
- Districts have continued to make numerous changes in procurement practices. A majority or near majority of districts report increasing purchases of fresh fruits and vegetables (69%) and lowfat/reduced-fat foods (69%); requiring more information on nutrition from their vendors (71%); and increasing their use of product specifications (49%).
- Among school districts offering a la carte offerings, they report an increased number of items available. The increase is evident across all food categories though the rate of increase was greatest for entrees, beverages, and snacks.
- A predominant view of foodservice directors is that there has been no change in food waste since the adoption of SMI.
- School foodservice directors remain highly supportive of the SMI. Of their total number, 68% say that they are "very positive" or "somewhat positive" of the Initiative.
- School foodservice directors report that major stakeholders in the school meals program--students, parents, administrators, cooks, cashiers, financial staff, and kitchen managers--have a neutral-to-positive attitude toward SMI. To the extent that there has been an observable change between SY 1997-98 and SY 1998-99, it suggests a more neutral attitude on the part of some stakeholders.

Impact of Nutrient Standard Menu Planning

- Findings from the second-year survey indicate that directors viewed the overall array of tasks associated with implementing nutrient-based systems as slightly less burdensome than the year before. Some critical tasks needed to implement nutrient-based menu-planning systems were perceived to be a greater challenge. These tasks were: entering and analyzing recipes; entering and analyzing menus; obtaining missing nutrient information; and obtaining information for weighted analysis.
- A substantial share of all school districts using nutrient-based systems offered a la carte food sales--60% of elementary schools and 84% of secondary schools. Among those schools offering a la carte sales, the predominant trend appears to be one of increased sales. The highest percent of school districts reporting increased sales of a la carte foods appears to occur in more affluent areas.

Selected Operational Issues

- The share of all districts contracting with foodservice management companies (FSMC) continues to grow, increasing from 12% in SY 1997-98 to 14% in SY 1998-99. Proportionally, more mid-size districts use FSMCs, but the percentage of small districts (less than 1,000 students) turning to this option has grown substantially.
- About two-thirds (67%) of all school foodservice directors have access to the Internet from some location. Fewer than half of those with access had ever visited any child nutrition Web site maintained or supported by USDA.
- Seventy-one percent of all districts use direct certification (e.g. participation in Food Stamp Program or TANF) of children to establish eligibility for free meals. An estimated 35% of all students approved for free meals are directly certified.
- Although nearly one-third of all public school districts participating in the National School Lunch Program (NSLP) report that after-school care programs are held in some of their schools, child participation in these after-school programs is low--participants represented only 1.8% of total enrollment.
- Six percent of public NSLP districts reported having charter schools in their districts. Just over one-quarter report that no foodservice is provided in these schools. State agencies reported that of the 521 charter schools participating in the NSLP in SY 1998-99, about two-thirds had been granted separate school food authority (SFA) status.

The Role of the State Child Nutrition Agencies

- The number of state agencies providing direct support for the Assisted Nutrient Standard Menu Planning option declined from 15 to 12 states.

- Although state agencies continued to be a primary source of training related to the SMI and in providing nutrition assistance, the level of training activities has decreased as school districts move toward full implementation of their menu-planning options.

RESEARCH IN PROGRESS

The following section provides a brief description of ongoing FNS research and the current status of these studies:

School Breakfast Pilot Project Evaluation

FNS has begun an evaluation of the congressionally mandated three-year School Breakfast Program Pilot Project. The six school food authorities (SFAs) selected to participate in this pilot project are:

- Harrison County School District, Gulfport, MS;
- Independent School District of Boise City, Boise, ID;
- Santa Rosa City Schools, Santa Rosa, CA;
- Shelby County Board of Education, Columbiana, AL;
- Washington Elementary School District, Phoenix, AZ; and
- Wichita Public Schools, Wichita, KS.

The school districts will make free breakfasts available to all students regardless of their family income, in a limited number of schools. The evaluation will rigorously assess the effects of this universal-free school breakfast program on student participation and a broad range of student outcomes, including academic achievement, school attendance and tardiness, classroom behavior, and attentiveness and dietary status. It also will examine how the universal-free breakfast program was implemented, its costs and any changes to program operations. Data collection activities will include collection of school administrative records, student achievement and cognitive testing, dietary intake, surveys of students and their parents, surveys of school and foodservice personnel, and site visits.

The pilot project began in SY 2000-01. The evaluation team has completed the first year implementation data collection. An interim report is expected to be available in Fall 2002 with a final report available in Fall 2004. Additional information on the School Breakfast Pilot Project can be found on the project's Web site at

www.fns.usda.gov/OANE/MENU/sbppilot/sbpnotice.htm.

NSLP Application and Verification Pilot Projects

Twenty-two SFAs in 16 states currently are involved in a three-year demonstration to test alternative application, approval, and verification procedures for free/reduced-price meal eligibility determination. The types of pilot projects in operation are:

- Households submit corroborating documentation when they submit their application for free or reduced-price meal benefits (9 SFAs);
- SFAs verify the eligibility of directly certified children (6 SFAs); and
- SFAs conduct verification in several rounds, and conduct later rounds only if the SFA finds significant error rates in earlier rounds (4 SFAs).

FNS will conduct basic assessments of pilot performance by analyzing administrative data for each of the three pilot school years and two preceding school years. A report on Year-1 pilot operations--covering SY 2000-01--is expected in early 2002. FNS also anticipates awarding a contract in Fiscal Year 2002, which would support collection of additional information needed to evaluate whether the pilots' outcomes are consistent with the goals of the National School Lunch Program.

REFERENCE

Abraham, S., Daft, L., Chattopadhyay, M., Wilbraham, B., Montgomery, M., & Steiger, D.M. (2001). The School Meals Initiative Implementation Study--Second Year Report (CN-01-SMI2). U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis, Nutrition, and Evaluation. Alexandria: VA.