

## FNS RESEARCH CORNER SUMMARY OF RESEARCH

*Please note that this study was published before the implementation of Healthy, Hunger-Free Kids Act of 2010, which went into effect during the 2012-13 school year, and its provision for Smart Snacks Nutrition Standards for Competitive Food in Schools, implemented during the 2014-15 school year. As such, certain research may not be relevant today.*

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

### RECENTLY COMPLETED RESEARCH

#### **School Meals: Building Blocks for Health Children**

FNS commissioned the Institute of Medicine (IOM) to provide recommendations to revise the nutrition- and food-related standards and requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). An expert committee was formed to review and assess the food and nutritional needs of school-aged children in the U.S. The committee used the 2005 *Dietary Guidelines for Americans* and the IOM's Dietary Reference Intakes (DRIs) for this assessment. Using this review as a basis, the committee recommended revisions to the NSLP and SBP nutrition standards and meal requirements.

The committee provides recommendations for nutrient targets rather than nutrition standards and focuses on only a food-based menu planning approach. The nutrient targets provide the foundation for setting revised meal requirements. The recommended meal requirements encompass meal patterns and other specifications for menu planning and specifications for the number and types of food that the student must select for a reimbursable meal. The goal is the development of a set of well-conceived, practical, and economical recommendations for standards that reflect current nutritional science, increase the availability of key food groups as appropriate, and allow these two meal programs to better meet the nutritional needs of children, foster healthy eating habits, and safeguard children's health.

**Note: This is a report of the National Academies' Institute of Medicine (IOM), Food and Nutrition Board, which was commissioned by the USDA Food and Nutrition Service. It is available on the FNS website by permission. It may also be obtained through the Institute of Medicine website. This is the final version of the report. An earlier, prepublication version was made available in October 2009, but should no longer be used. This final version includes some important corrections.**

**Direct Certification in the National School Lunch Program -- State Progress in Implementation:** This report responds to a requirement of Public Law 110-246 to assess the effectiveness of State and local efforts to conduct direct certification of children for free school meals. Under direct certification, children are determined eligible for free meals without the need for household applications by using data from other means-tested programs. The 2004 Child Nutrition and WIC Reauthorization Act required local educational agencies (LEAs) to establish, by School Year (SY) 2008-09, a system of direct certification of children from households that receive Supplemental

Nutrition Assistance Program (SNAP - formally Food Stamp Program) benefits. The mandate was phased in over three years; the largest LEAs were required to establish direct certification systems for School Year (SY) 2006/07. This report presents information on the outcomes of direct certification for SY 2008/09, the first year all LEAs were subject to the statutory mandate.

FNS estimated the number of school-age SNAP participants and the number of children directly certified for free school meals in each State. The ratio of these figures is a measure of the success of State and local systems to directly certify SNAP participant children. FNS also estimated the number of all students from households that participated in means-tested assistance programs such as SNAP, Temporary Assistance for Needy Families (TANF), or the Food Distribution Program on Indian Reservations (FDPIR) that were certified for free school meals, either by direct certification or by application. This provides a more comprehensive measure of State success in certifying categorically eligible children for free school meals.

As of SY 2008/09, 78 percent of LEAs directly certified some SNAP participants, up from 67 percent in SY 2007/08. These LEAs enrolled 96 percent of all students in NSLP-participating schools. Virtually all of the LEAs that had not yet established direct certification systems were small, private LEAs that were newly subject to the direct certification mandate.

The percentage of SNAP participant children directly certified for free school meals varied greatly by State. Across all States, the SY 2008/09 median direct certification rate of SNAP-participant children was 72 percent, up from 69 percent in SY 2007/08. States with the highest direct certification rate reached nearly all SNAP participant children. The States certified an even higher rate (85 percent) of all categorically eligible students for school meals, either by direct certification or by application.

States officials and policy experts agree that no single model of direct certification will prove equally effective for all States. States with large numbers of relatively small LEAs tend to rely on a centralized match, conducted at the State level. States with larger LEAs tend to allow the districts to design and run their own matching programs. Among the steps that State officials believe would improve the effectiveness of any State or LEA direct certification system are the use of periodic rather than annual matches, and the use of Web-based lookup systems to verify the SNAP-participant status of individual students.

### **Direct Verification Pilot Study: Final Report**

To ensure program integrity, school districts must select a sample of household applications for free or reduced price meals, contact the households, and verify their eligibility. This process (known as household verification) can be burdensome for both schools officials and households. When households do not respond to the verification request, the child and the school lose the free or reduced price subsidies even though the household could be eligible for those meal benefits. Direct verification uses information collected by means-tested programs to verify eligibility for free and reduced-price meals without contacting applicants. Potential benefits of direct verification include: enhanced program integrity, less burden for households and school officials, and fewer students with school meal benefits terminated because of non-response to verification requests.

The Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265) permits direct verification of school meal applications and requires FNS to evaluate the feasibility and effectiveness of direct verification by school districts. This study evaluated the feasibility and effectiveness of using Medicaid data for direct verification. Four States (Indiana, Oregon, Tennessee, and Washington; South Carolina tried but was unable to implement) participated in this pilot study during SY 2006/07 and two additional States (Georgia and Wisconsin) participated in SY 2007/08. These States implemented various methods to utilize Medicaid data to directly verify eligibility for free and/or reduced price meals. Data was collected from a random sample of 121 school districts in SY 2006/07 and 118 school districts in SY 2007/08.

Direct verification with Medicaid was found to be technically feasible. The pilot States established data-sharing agreements, secured Medicaid data, and made the data available to school districts by early October. The States implemented three basic models: Georgia and Indiana used statewide

online look-up systems, while Tennessee used a district-level look-up system and Washington used a State-level matching system. Indiana and Washington used Medicaid with the State Children's Health Insurance Program (SCHIP) while Georgia and Tennessee used Medicaid alone. The systems implemented in Oregon and South Carolina were not easy to use. The overall rates of verification with Medicaid were 25 percent in Indiana, 19 percent in each of South Carolina and Washington, 7 percent in Tennessee, and 2 percent in Georgia.

School districts had mixed reviewed on the usefulness of direct verification with Medicaid, with more districts in Washington and Tennessee finding it useful than elsewhere. Ratings reflected varying difficulties in implementation, differing expectations, and the underlying limitations of direct verification with Medicaid in States with low Medicaid income limits.

### **Analysis of Verification Summary Data School Year 2007-08**

Each year, local educational agencies (LEAs) are required to select a small sample of applications that they approved for free or reduced-price school meal benefits at the start of the school year. The sampled households are contacted and asked to provide documentation of household income or participation in means-tested public assistance programs at the time they submitted their application. Verification summary reports are compiled by the States and submitted annually to FNS. Each report summarizes the verification results for the sample of approved applications selected by an LEA for review. The data for School Year 2007/08 are based on nearly 300,000 household applications selected for review.

In SY 2007/08, LEAs confirmed the initial free or reduced-price certification status for almost half (48 percent) of the sampled applications. Twenty percent of the sampled applications were not supported by documentation submitted by households. Roughly 18 percent of applicants were found to be certified for more benefits than entitled (over-certified) while two percent were found to be certified for fewer benefits (under-certified). About 32 percent of sampled applicants failed to respond to the verification request and subsequently had their meal benefits changed to the paid category.

Since LEAs have been submitting results of their verification efforts in SY 2004/05, the share of sampled applications whose initial certifications were confirmed through verification has dropped from 65 percent to 48 percent and the rate of household nonresponse has increased from 23 percent to 32 percent. In interpreting these trends, two important developments must be considered. First, the Child Nutrition and WIC Reauthorization Act of 2004 requires most LEAs to select the verification samples from the subpopulation of error-prone applications rather than from the general population of approved applications. Second, the number of children who are directly certified, and thus not subject to verification, has risen significantly. LEAs are able to concentrate their verification efforts on applicants whose eligibility for free or reduced-price meals is less certain.

### **Regional Office Review of Applications (RORA) for School Meals 2008**

This is the fourth in a series of annual reports that examines administrative error incurred during the local educational agencies' (LEAs) approval process of applications for free and reduced-price school meals. It does not examine the accuracy of household reporting of information on the applications or errors made in counting and claiming.

School districts were stratified into 28 strata defined by seven FNS regions and four size categories within each region. A total of 2,759 applications from SY 2007/08 were selected for review. The LEA's determination of household size, total gross income, and certification status (free, reduced-price, paid) for the selected students was recorded. FNS Headquarter staff reviewed each application and made an independent assessment of household size, total gross monthly income, and certification status, based on the information on the applications. FNS' independent assessments were compared to the LEA's determinations.

The percent of all students with administrative errors in the processing of their application for meal benefits has remained relatively stable over the 4-year period with administrative errors ranging

between 3 and 4 percent. In SY 2007/08 LEA eligibility determinations were incorrect for 3.9 percent of students approved or denied based on information on the application. Of these students approved incorrectly, more than three-fourths (81 percent) were certified for more benefits than were justified based on the documentation available. Half of over-certifications resulted from approval of incomplete applications.

More errors continue to be made on applications approved based on income and household size, with many associated with the determination of a household's gross income.

## RESEARCH IN PROGRESS

The following section provides a brief description of some on-going FNS research and the current status of these studies:

**School Nutrition Dietary Assessment IV (SNDA-IV):** Approximately every five years, FNS conducts a study to measure the progress schools are making toward meeting school meal nutrient standards. The last School Nutrition Dietary Assessment Study (SNDA-III) was conducted in School Year 2004/05. SNDA-IV is collecting data in SY 2009/10 that will enable FNS to measure the nutritional content and quality of meals offered to students and selected by students in the school meals programs. Unlike SNDA-III, this study does not include the collection of student dietary intake data. The study will also provide updated information on the school nutrition environment. A final report anticipated in 2011.

**School Food Purchase Study III:** The 2008 Farm Bill requires the Secretary to carry out a nationally representative survey of the foods purchased by school food authorities participating in the National School Lunch Program (NSLP). This study will provide national estimates of the type, volume, and dollar value of food acquired by public school districts participating in NSLP. Unlike the previous two school food purchase studies, it will include school districts from Alaska, Hawaii, and Puerto Rico. The study will provide insight into the importance of USDA commodity donations as a primary source of certain food items. Shifts in the type and mix of foods acquired compared to the previous school food purchase study (SY 1996/97) will be examined. The study will also examine school district food purchase practices and their relationship to food costs. In addition, the food purchase data will be linked to USDA's nutrient databases to examine the food energy, nutrient, and MyPyramid equivalent availability of the mix of foods acquired by school districts. Data is being collected during the SY 2009/10 with a final report anticipated in 2011.

**Fresh Fruit and Vegetable Program (FFVP) Evaluation:** The 2008 Farm Bill also provides for expansion of the Fresh Fruit and Vegetable Program and requires an evaluation including a determination as to whether children (a) experienced, as a result of participating in the program, increased consumption of fruits and vegetables and (b) made other dietary changes, such as decreased consumption of less nutritious foods. The study will also include a process evaluation that examines what fresh fruits and vegetables are being offered students and how school districts are implementing the FFVP. Data collection will occur in SY 2010/11. A final report to Congress is due no later than September 2011.

**Using the American Community Survey for NSLP Claiming Rates:** FNS has commissioned the Committee on National Statistics (CNSTAT) of the National Academies to convene an expert panel to technical and operational issues in using data from the American Community Survey (ACS) or other data sources to establish small area estimates (school district/school) of the percentage of households with school-aged children below the eligibility thresholds for free and reduced-price meals. The panel will consider the quality of these estimates in terms of sample variability, reporting error, timeliness, and other features that may affect their fitness for use. The panel will also address the process by which school districts can best obtain needed ACS estimates from the Census Bureau. The desire is to obtain accurate reimbursement rates for school districts that provide free meals to all students in participating schools without incurring the administrative burden of the traditional meal application process. A report is expected in 2011 that includes cases studies for 6 medium/large school districts comparing 1-year and 3-year estimates using ACS data with school estimates produced under the current application process. This report will also provide recommendations for estimation methods and processes.

**High Risk Indicators of Certification Error in the NSLP:** Given the results of the recent study examining erroneous payments in the National School Lunch and School Breakfast Programs (APEC Study), there is significant interest in identifying characteristics of school districts that have a higher probability of making certification errors. Exploration of various data sets including APEC, Regional Office Review of Applications (RORA), and the Verification Summary Report data will be used to develop high risk indicators of certification error. A final report is anticipated in late 2010.