

School Nutrition Dietary Assessment Study-III
Summary of Findings
Final Report



National Food Service Management Institute
The University of Mississippi
1-800-321-3054

Item Number R-153-10 (GY 06)

2010

This project has been funded at least in part with federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the National Food Service Management Institute (NFSMI) at The University of Mississippi. The contents of this publication do not necessarily reflect the views or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

The information provided in this publication is the result of independent research produced by NFSMI and is not necessarily in accordance with U.S. Department of Agriculture Food and Nutrition Service (FNS) policy. FNS is the federal agency responsible for all federal domestic child nutrition programs including the National School Lunch Program, the Child and Adult Care Food Program, and the Summer Food Service Program. Individuals are encouraged to contact their local child nutrition program sponsor and/or their Child Nutrition State Agency should there appear to be a conflict with the information contained herein, and any state or federal policy that governs the associated Child Nutrition Program. For more information on the federal Child Nutrition Programs please visit www.fns.usda.gov/cnd.

The University of Mississippi is an EEO/Title VI/Title IX/Section 504/ADA/ADEA Employer.

© 2010, National Food Service Management Institute, The University of Mississippi

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use providing the following credit is included:

Suggested Reference Citation:

Bergman, E., Cashman, L., Englund, T., Gilmore, A., Elkins, A., Manwaring B., & Tibay, J. (2010). *School Nutrition Dietary Assessment Study-III Summary of Findings Final Report* (Technical Report No. R-153-10). University, MS: National Food Service Management Institute.

The photographs and images in this document may be owned by third parties and used by The University of Mississippi or The University of Southern Mississippi under a licensing agreement. The universities cannot, therefore, grant permission to use these images. For more information, please contact nfsmi@olemiss.edu.

National Food Service Management Institute The University of Mississippi

Building the Future Through Child Nutrition

The National Food Service Management Institute was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford and is operated in collaboration with The University of Southern Mississippi in Hattiesburg. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

PURPOSE

The purpose of the National Food Service Management Institute is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

MISSION

The mission of the National Food Service Management Institute is to provide information and services that promote the continuous improvement of child nutrition programs.

VISION

The vision of the National Food Service Management Institute is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

CONTACT INFORMATION

Headquarters

Administrative Division

The University of Mississippi

Phone: 800-321-3054

Fax: 800-321-3061

www.nfsmi.org

Education and Training Division

Information Services Division

The University of Mississippi

6 Jeanette Phillips Drive

P.O. Drawer 188

University, MS 38677-0188

Applied Research Division

The University of Southern Mississippi

118 College Drive #10077

Hattiesburg, MS 39406-0001

Phone: 601-266-5773

Fax: 888-262-9631

Acknowledgments

WRITTEN AND DEVELOPED BY

Dr. Ethan Bergman

Linda Cashman

Dr. Tim Englund

Andrea Gilmore

Ann Elkins

Bre-Anna Marwaring

Joe Tibay

NFSMI INTERIM EXECUTIVE DIRECTOR

Robin C. Buchannon, PhD, CRA

**SCHOOL NUTRITION DIETARY ASSESSMENT STUDY-III
SUMMARY OF FINDINGS
FINAL REPORT**

EXECUTIVE SUMMARY

A key objective of the U.S. Department of Agriculture (USDA) for its National School Lunch Program (NSLP) and School Breakfast Program (SBP) is to ensure that children have access to healthy, well-balanced meals. The Food and Nutrition Service (FNS) of USDA sponsored the third SNDA study to provide up-to-date information on the school meal programs, the school environment that affects the programs, the nutrient content of school meals, and the contributions of school meals to students' diets. Data were collected from a nationally representative sample of districts, schools, and students in school year (SY) 2004-2005. The nutrient content of school meals offered and served was compared to USDA's current regulatory standards. Students' diets were assessed using the Dietary Reference Intakes (DRIs), the most up-to-date scientific standards for assessing dietary status.

SNDA-III data are representative of all public School Food Authorities (SFAs) that offer the NSLP in the contiguous United States, schools in those SFAs, and students in those schools (and their parents). Data were collected from 129 SFAs, 398 schools in those SFAs, and 2,314 children attending those schools (and their parents). SFA directors provided information on district wide policies (such as menu-planning systems) and operations (such as food purchasing). School foodservice managers completed a Menu Survey, providing detailed information on all foods offered as part of reimbursable meals during a selected week, including, for each food, a detailed description, portion size offered, and, for the analysis of meals as selected or served, the number of servings provided as part of a reimbursable meal. The managers also completed a

brief telephone or in-person interview regarding their school's foodservice operations and policies on competitive foods available in or near the foodservice area. Principals in each school were interviewed concerning school schedules and rules about student mobility, nutrition education offered, and availability of competitive foods outside the foodservice area.

The report below represents the summary of findings from the secondary SNDA-III analysis concerning the characteristics of the representative 398 schools. The analysis concerned characteristics of the schools meeting the SMI standards. Characteristics in the report include: region of the contiguous United States in which the school is located, percentage of students in the schools that qualify for free and reduced meals, poverty level in the community where the school resides, and size of schools.

Key Findings from the SNDA Analysis

- Students in the Mountain Plains region of the country selected breakfast and lunch meals containing a greater quantity of calories than most other regions in the country. This occurred even though the students were offered a similar number of calories related to the other regions in the country.
- The students in the schools with the highest rates of students qualifying for free and reduced breakfasts were generally presented with and took foods that met the SMI standard for energy less often than students in the more affluent schools.
- Community poverty level does not affect the school's rate of meeting the SMI standards. Regardless of the poverty level in the community in which the school exists, schools have an equal likelihood of meeting the SMI standards.
- Students from largest schools (greater than 1,000 students) have a greater chance of being presented with adequate breakfast calories than smaller schools based on the SMI standards. This also results in the students from the largest schools selecting foods with more calories than students in all other sized schools except schools with less than 400 students.
- Only 9.2% of elementary schools met the SMI standard for breakfast calories while 57.5% met the 1989 REA. Only one calorie level is designated by the SMI standards for all levels of schools. The calorie level to be served to a 1st grader is the same as the calorie level to be served to a 12th grader. The age-adjusted 1989 REA standards for breakfast and lunch calories resulted in more schools (57.5%) meeting the standard for 1st graders and fewer schools (5.8%) meeting the standard for 6th graders.

- The BMI-for-age results show that children, as of the 2004-2005 school years, have a higher mean BMI than the children used to develop the 2000 CDC growth charts. This indicates that the students used to gather the SNDA III data are larger than the students used to create CDC growth charts which used NHANES III data gathered in 1988-1994.
- The percent of middle school and high school students who are dieting are significantly different between males and females. The percentage and number of female students dieting are higher than the male dieters. The data showed that fewer males diet than females in both middle school and high school. The data also showed that there were more middle school male dieters than high school male dieters. No dieting differences were noted between middle school and high school females.