

**State Agency
Funded Research, 2004-2006:
Annotated Bibliography**



National Food Service Management Institute
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National Food Service Management Institute The University of Mississippi

Building the Future Through Child Nutrition

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

PURPOSE

The purpose of NFSMI is to improve the operation of Child Nutrition Programs through research, education and training, and information dissemination. The Administrative Offices and Divisions of Technology Transfer and Education and Training are located in Oxford. The Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

MISSION

The mission of the NFSMI is to provide information and services that promote the continuous improvement of Child Nutrition Programs.

VISION

The vision of the NFSMI is to be the leader in providing education, research, and resources to promote excellence in Child Nutrition Programs.

CONTACT INFORMATION

Headquarters

The University of Mississippi
Phone: 800-321-3054
Fax: 800-321-3061
www.nfsmi.org

Education and Training Division

Technology Transfer 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

**Shellie Hubbard, MA
Research Assistant**

EXECUTIVE DIRECTOR
Charlotte B. Oakley, PhD, RD, FADA

TABLE OF CONTENTS

State Agency Funded Research (2004-2006) Annotated Bibliography.....	6
Georgia.....	7
Missouri	9
New Hampshire	11
New York.....	12
Pennsylvania	13

STATE AGENCY FUNDED RESEARCH

[2004-2006]

Annotated Bibliography

The National Food Service Management Institute (NFSMI), Applied Research Division (ARD), routinely collects information on state agency-funded research related to Child Nutrition Programs (CNPs). In the spring of 2006, state agency representatives responsible for overseeing CNPs were contacted via email to provide ARD researcher information regarding state funded research. The information was requested as a final report, abstract, executive summary, or state agency Web link of any finished unpublished research funded by the state agency, primarily since 2004. A reminder email was sent in early fall 2006. Of the 76 contacted, five provided the requested information for a total of 11 research projects, 44 replied that their state had no current research, and 30 did not respond. This report contains summaries of state agency-funded research during 2004 – 2006.

We appreciate the response from state agency representatives and their willingness to share the results of their research with others. For more information about these studies, a state agency contact is included with each project summary.

GEORGIA

PROJECT IDEAL – CHILDREN FIRST: SURVEY OF SCHOOL NURSES IN GEORGIA

Overview of the Study

The purpose of the project was to determine outcomes for best practices related to interventions for diabetes education and prevention in order to support the initiative to improve the care of children in Georgia with the optimal goal of enhancing the educational goals for children living in Georgia.

Methodology

Over 1700 surveys were mailed to contacts obtained from the Children's Healthcare of Atlanta (CHOA) school nurses' mailing list, with a return rate of approximately 20%. Over 70% of the individuals completing the survey were registered nurses with greater than two years of experience as a school nurse. Over 54% of the participants had completed the Georgia Department of Education's training program. Approximately 85% of the respondents have cared for at least one child with diabetes over the last year.

Major Study Findings

- Seventy-five percent of nurses improved their knowledge skills to treat high and low blood sugars; These two symptoms cause children to be sent home and to be hospitalized, thus not learning.
- Nurses reported improved knowledge in the following areas: (a) diabetes knowledge (77%); (b) responsibilities (60%); (c) pumps, pens, meters (64%).
- Nurses reported improved skills in the following areas: (a) use of insulin pens (57%); (b) insulin administration (51%); (c) pumps (55%); (d) role of water consumption in lowering blood glucose (62%); (e) applying carbohydrate counting to school menus (75%); sharing training information with other school personnel (73%).
- Ninety-four percent of nurses agreed the program assisted them in providing better care.
- Eighty percent of nurses agreed academic learning improved for children.
- Overall, participants of the diabetes training program were satisfied and would like to continue to receive updates or refresher courses.

Research Scientist
Timothy Akers

State Agency Contact
Lynn Davis, PhD, School Nutrition Program
Georgia Department of Education

**GEORGIA POLL AND GEORGIA DEPARTMENT OF EDUCATION,
SCHOOL NUTRITION PROGRAM**

Overview of the Study

The purpose of this study is to learn the attitudes and opinions of Georgia residents on a variety of topics, one of which is their opinion on school nutrition programs.

Methodology

The Georgia Poll is a telephone survey by the University of Georgia, Survey Research Center. The sample includes interviews with 500 randomly selected households from the Georgia residents polled.

Major Study Findings

In progress is statistical analysis of data from 14 polls over the last 18 years. A copy of that report (article) will be forwarded to NFSMI, upon completion.

State Agency Contact
Lynn Davis, PhD, School Nutrition Program
Georgia Department of Education

MISSOURI

MISSOURI COMMODITY SUPPLEMENTAL FOOD PROGRAM SURVEY

Overview of the Study

The Missouri Commodity Supplemental Food Program (CSFP) supports nutritional well-being by providing supplemental foods rich in vitamins A, C, and calcium and iron to women, children, and the elderly. The purpose of this study was to evaluate the effectiveness of the CSFP and to better evaluate the needs of the customers.

Methodology

The survey spanned November 2005 through early 2006. Thirty-four food distribution sites were randomly selected within St. Louis and Bootheel, Missouri. Using a Likert Scale of “smiley faces,” 1,035 surveys were completed, generating a response rate of 85%.

Major Study Findings

- Ninety percent of CSFP participants agreed that a good diet would keep them healthy; Seventy-nine percent knew the recommended number of fruits and vegetables a day was five; and over 80% knew two servings of meat or protein were necessary each day.
- Regardless of this knowledge, only 3-6% surveyed consumed the recommended five servings of fruits and vegetables. Over half at one to two servings, while almost a third consumed three to four servings.
- Physical limitations due to lack of running water, electricity and limited cooking equipment were reported by 10-16% of the participants.
- Food security questions revealed approximately 40% of CSFP recipients were worried about having enough money to buy food.
- One out of 4 individuals reported cutting the size of meals or skipping meals due to lack of money with the last 12 months.
- Overall, 96% of participants expressed positive comments of acceptance and appreciation of the CSFP program.

Research Scientist
Linda Browning, PhD, MPH, RD

State Agency Contact
Ann McCormack, MPH, RD
Missouri Department of Health and Senior Services

MISSOURI CHILDCARE INITIATIVE

Overview of the Study

The Childcare Initiative began in 2005, and serves two primary goals, (1) to assess the nutrition and physical activity environment and policy practices of Missouri Child and Adult Care Food Program (CACFP) participants, and (2) to develop childcare provider training that enables providers to create policies and environments which support healthy eating and physical activity within the childcare setting. The Missouri Department of Health and Senior Services (DHSS) Bureaus of Health Promotion, Community Food and Nutrition Assistance and Child Care Licensing collaborated with University of Missouri Extension to address the goals of the Childcare Initiative.

Methodology

The survey instrument, “Child Care Nutrition and Physical Activity Self-Assessment Tool” was placed on a Web site hosted by DHSS-CACFP, where CACFP participants were required to access the site monthly to submit reimbursement claims. Completing the survey was encouraged, but voluntary, and a free poster was provided as incentive. A total of 230 responses were received from the 576 eligible CACFP childcare centers, generating a response rate of 40%.

Major Study Findings

- Fifty percent (115) of respondents allow children to serve food and beverages to themselves, while 19% never and 16.4% rarely allow the children to serve themselves.
- The majority of respondents (89%) report that they sit with the children during meal and snack times daily. However, only 75% of the respondents indicated that they consume the same food and beverages as the children on a daily basis.
- Although most respondents never (84%) or rarely (10%) require all of the children to eat all of their food, 5% of the respondents require children to eat all of their food on a daily basis.
- Eighty-four percent (193) of respondents rarely use food as a reward, punishment or comfort, while 3% of respondents use food as a reward, punishment or comfort daily.

State Agency Contact
Ann McCormack, MPH, RD
Missouri Department of Health and Senior Services

NEW HAMPSHIRE

NEW HAMPSHIRE HEALTH ASSESSMENT PROJECT: A STUDY OF HEALTH INDICATORS OF THIRD GRADERS IN NH

Overview of the Study

The purpose of this project was to provide data organization, evaluation, and reporting for the 2001 USDA Team Nutrition Training Grant Obesity Project. Project dates spanned July 1, 2002 through September 30, 2003.

Methodology

Current existing data on 1,538 8-year-old third graders from all 10 New Hampshire counties was used. SPSS Version 11.5 and Excel for Windows was used to run statistical tests to show relationships between obesity and student family income levels, school size, county, height, weight, and other demographic variables. The key outcome for this study was body-mass-index (BMI) and national standards of BMI served as a benchmark.

Major Study Findings

- BMI rates are consistently high through the state.
- Third grade boys have higher BMI percentages for the at risk and overweight ranges than third grade girls (42% verses 37%).
- Third grade boys and third grade girls have equal BMI ranges greater than the fiftieth percentile and higher (79% and 78%).
- BMI has an inverse correlation with academic test scores for all third graders in NH.

State Agency Contact
Laura Jackson Gaudette, MPH, RD, LD
New Hampshire Department of Education

NEW YORK

EVALUATING THE QUALITY OF DAY CARE CENTER MENUS IN CACFP: THE USE OF A COMPUTERIZED TOOL FOR REVIEWING MENUS

Overview of the Study

The New York CACFP designed a computerized tool for evaluating day care menus before and during participation in the Child and Adult Care Food Program (CACFP), and this tool has been in use since 2003. The purpose of this study is for participants to recognize how use of this computerized tool facilitates the menu evaluation process. The system evaluates compliance with the CACFP child meal pattern and the ‘Eat Well Play Hard’ guidelines. “Eat Well Play Hard” is a public health initiative in New York that addresses the epidemic of childhood obesity by promoting increased intake of fruit, vegetables, and low fat dairy products while increasing physical activity to children over two years of age, their families, and their communities.

Methodology

Since 2003, this automated system has been in use. More than 1,100 menus have been assessed, and approximately 15% of the menus are from day care centers before they begin participation to allow for comparison of menu quality of non-participating vs. currently participating child care centers.

Major Study Findings

To date, this study is ongoing. Plans include tracking the child care center menus over time to evaluate the impact of specific nutrition education activities on menu quality.

Research Scientist
Kathie A. Bruso, MS, RD, CDN
Public Health Nutritionist
Child and Adult Care Food Program
New York State Department of Health

State Agency Contact
Lynne Oudekerk
Assistant Director, CACFP
New York State Department of Health

PENNSYLVANIA

PROJECT PA TELECONFERENCE IV: IMPROVING SCHOOL MEALS PARTICIPATION – CREATIVE STRATEGIES THAT WORK! ONE YEAR FOLLOW-UP REPORT

Overview of the Study

This project was able to show program effectiveness after one year, and also improvements in desired behaviors, resulting in more breakfast programs in Pennsylvania. The purpose of this study is to provide a follow-up evaluation to a prior study, *On-Site Evaluation of a Statewide Teleconference: Improving School Meals Participation – Creative Strategies That Work!*

This follow-up evaluation was conducted to determine if there were differences in key variables between teleconference participants and non-participants or between those individuals exposed to the teleconference component through an edited video/DVD which was distributed to all National School Lunch Program sponsors in Pennsylvania versus those not exposed.

Methodology

A 33-item survey form was created in scannable format and a total of 369 school foodservice directors were selected to receive the survey. Of that number, 169 school foodservice directors had attended the teleconference, and 200 had not attended. Three hundred and twenty-three school foodservice directors returned the survey, for a response rate of 88%.

Major Study Findings

- Teleconference participants rated their knowledge of strategies to improve school meals participation significantly higher than non-participants.
- More than a quarter (27%) of teleconference participants indicated having started a new school breakfast program in school year 2004/2005 compared to 19% of non-participants.
- Two-thirds of respondents exposed to the teleconference content reported that school breakfast participation had increased slightly or significantly during the 2004/2005 school year compared to those respondents not exposed to the teleconference content.

Research Scientist
Claudia Probart, PhD, RD

State Agency Contact
Patricia Birkenshaw, Chief
Division of Food and Nutrition
Bureau of Budget and Fiscal Management
Pennsylvania Department of Education

ON-SITE EVALUATION OF A STATEWIDE TELECONFERENCE: IMPROVING SCHOOL MEALS PARTICIPATION – CREATIVE STRATEGIES THAT WORK!

Overview of the Study

The purpose of this study was to evaluate the effectiveness of a teleconference for school foodservice (SFS) personnel. Objectives were to determine perceptions of the teleconference and intentions to act based on information presented.

Methodology

A one-day satellite teleconference was developed and presented for SFS personnel through Project PA, a collaboration between the Pennsylvania Department of Education (PDE), Division of Food and Nutrition, and Penn State University. Teleconference objectives were to provide motivation and information to help SFS personnel initiate or improve participation in school breakfast programs (SBPs). Through pre-taped segments, a variety of creative strategies featuring successful SBPs from throughout the state were featured. Expert panels responded to questions from participants at the 28 downlink sites. Three hundred-fifty SFS employees attended the teleconference. A 56-item pre/post survey was developed and administered. Two hundred ninety-one surveys were returned, generating an 83% response rate, and descriptive statistics were generated using SPSS version 11.5.1.

Major Study Findings

- Participants' knowledge of strategies to improve school meals participation increased significantly, as did their rating of teleconferences as a training method.
- Seventy percent of participants indicated they might try "Grab 'n Go" breakfast.
- Forty-one percent said they might try Universal free breakfast.
- Thirty-nine percent indicated they might try "Breakfast in the Classroom."

Research Scientist
Elaine McDonnell, MS, RD

State Agency Contact
Patricia Birkenshaw, Chief
Division of Food and Nutrition
Bureau of Budget and Fiscal Management
Pennsylvania Department of Education

PROMOTION OF THE SCHOOL BREAKFAST PROGRAM: APPLICATION OF THE STAGES OF CHANGE MODEL

Overview of the Study

The purpose of this study was for participants to be able to describe how the Stages of Change model was applied to a school breakfast promotion (SBP) project. The Stages of Change model was used to promote the SBP through Project PA, a collaboration between the Pennsylvania Department of Education and Penn State University.

Methodology

School foodservice (SFS) directors in Pennsylvania were segmented based on interest in and need for assistance in initiating and/or improving SBPs. Nine were recruited to serve as “Breakfast Brigade” members and to provide consultation for their SFS colleagues. Workshops were offered through a Master Instructor program for SFS directors in need of information and action steps. A statewide teleconference was developed and presented, targeted primarily to provide motivation for SFS directors least interested in initiating SBPs. Breakfast Brigade members made contact with 37 school districts, assisting with initiation of SBPs in 13 districts. Workshops have reached 159 SFS employees in 49 school districts. The teleconference reached 350 SFS employees.

Major Study Findings

- Teleconference participants indicated a high likelihood of implementing one or more of the strategies for increasing SBP participation presented during the teleconference (7.4 on a 10-point scale with 10 being “very likely”).
- This project demonstrates how the Stages of Change model can be used to promote the SBP.

Research Scientist
Elaine McDonnell, MS, RD

State Agency Contact
Patricia Birkenshaw, Chief
Division of Food and Nutrition
Bureau of Budget and Fiscal Management
Pennsylvania Department of Education

LESSONS LEARNED FROM DEVELOPMENT OF SCHOOL NUTRITION POLICIES

Overview of the Study

The purpose of this study was for participants to be able to identify barriers and facilitators to successful development of school nutrition policies.

Methodology

Through Project PA, a collaboration between the Pennsylvania Department of Education (PDE) and Penn State University, seven schools were selected to receive grants to serve as model schools for development of nutrition policies. Schools were required to assemble a team consisting of representatives from among faculty, administration, and school foodservice, assess their school nutrition environments, identify areas for improvement, develop and implement action plans, develop a school nutrition policy, and present that policy to an administrative body. The project team offered resources and assistance, documented the activities and policy development, and conducted interviews with key school personnel after completion of policy development process to determine facilitators and barriers to successful policy development as well as the perceived effectiveness of the policies in addressing childhood obesity.

Major Study Findings

- Interview participants stressed the need for a team approach to policy development, a need for sample policies, and concerns about policy enforcement and financial constraints related to the school wellness policy requirement.

Research Scientist
Elaine McDonnell, MS, RD

State Agency Contact
Patricia Birkenshaw, Chief
Division of Food and Nutrition
Bureau of Budget and Fiscal Management
Pennsylvania Department of Education

PRE AND POST INTERVENTION PERCEPTIONS OF CHILDHOOD OBESITY BY SCHOOL FOODSERVICE EMPLOYEES

Overview of the Study

The purpose of this study was to evaluate the perceptions of childhood obesity among school food service (SFS) employees, and to determine if perceptions change following a presentation on childhood obesity.

Methodology

A 1-hour presentation was conducted for 65 SFS employees using a kit on childhood obesity which includes print materials and a video. A 28 question pre- and post-test was administered. Forty-two surveys were returned.

Major Study Findings

- Respondents were more likely to agree that home environments, compared to school and community environments, contribute to childhood obesity and that the issue should be addressed through families, compared to schools and communities.
- From pre-test to post-test, there were significant increases in respondents' agreement that school and community environments contribute to childhood obesity and that childhood obesity should be addressed through schools.
- They agreed that childhood obesity is a problem in the United States but significantly fewer believed it is a problem in their school district.

Research Scientist
Elaine McDonnell, MS, RD

State Agency Contact
Patricia Birkenshaw, Chief
Division of Food and Nutrition
Bureau of Budget and Fiscal Management
Pennsylvania Department of Education



National Food Service Management Institute

The University of Mississippi

P. O. Drawer 188

University, MS 38677-0188

www.nfsmi.org

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