

National Food Service Management Institute Research Summary

Deborah H. Carr, PhD, RD

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.

NUTRITION/WELLNESS

Overcoming Barriers to Participation in the Summer Food Service Program – An Identification of Best Practice Solutions

The purpose of this research is to evaluate the Summer Food Service Program (SFSP) sponsors' perceptions of the benefits and barriers related to operating the program, and to assess the practices they use to increase participation of eligible children. This study was conducted in two phases. Phase I of the research included 21 telephone interviews with nine state agency directors and 12 SFSP sponsors. Participants in Phase I were asked similar questions regarding the benefits and barriers to sponsor participation, as well as what factors influenced the participation of eligible children. Six themes emerged from the telephone interviews: 1) barriers related to a sponsor starting a program; 2) reasons a sponsor might leave or discontinue a program; 3) resources that are beneficial to a sponsor operating a program; 4) benefits to children participating; 5) barriers that would prevent an eligible child from participating; and 6) methods used to increase participation.

Phase II included the development of a questionnaire that was sent to 803 SFSP sponsors in the southeast region, generating a 39% response rate. Sites primarily served children in upper elementary grades (53.9%). Only 34.3% operated under the Simplified Summer Food Program. The average number of years sponsoring a program was 9.9, and sponsors oversaw an average of 14.5 sites. Providing nutritious meals to children was seen as the most important benefit of the program. Sponsors believed the large volume of paperwork was the primary reason why both an individual would not want to start a program and why a sponsor would leave or discontinue a program. Transportation was the primary issue relating to participation by eligible children. Some of the recommendations that were made to help improve access to the site may help others boost participation. The study also found that good advertising in communities or areas visited by families of eligible children is the method most often used to increase the number of participants.

Determining Perceptions, Practices, and Perceived Barriers Associated with School Professionals Serving the Nutritional Needs of PreK Children in the Public School Setting

A two-phase research study was conducted to explore perceptions, practices, and perceived barriers facing school foodservice directors, managers, principals, classroom teachers, and early education directors when addressing the nutritional needs of public school children. In Phase I of the study, four two-hour focus group sessions were conducted. Phase II of the study included a four section questionnaire which was developed using the qualitative data obtained in Phase I. The survey contained three sections asking participants to indicate their agreement with practices, perceptions, and barriers related to serving the nutritional needs of PreK children in their schools. In the fourth section, participants were asked to provide information about

themselves and their school district. The sample participants for the study were foodservice directors, managers, elementary school principals, PreK classroom teachers, and early education directors in public school districts with PreK programs. From a listing of public school districts with PreK programs, researchers selected a stratified random proportional sample of 700 foodservice directors in public school districts, which represented the seven U.S. Department of Agriculture (USDA) regions (N=3500). The research sample generated a 21% response rate from the school professionals.

The findings of this research suggest that addressing the nutritional and developmental needs of PreK children is a more wide-ranging and complex undertaking than just serving meals. A team approach should be implemented to fully meet the needs of these children. Team members should include, but not be limited to, the foodservice director and manager, PreK teachers, principals, and early education directors. Effective communication among team members is essential. Understanding how each team member can and does contribute to the practice areas would enhance provision of nutritional services for PreK children. Recommendations for additional education and training include the development of training modules to address each of the seven practice factors.

Focus Group Discussions with Elementary School Foodservice Directors, Teachers, and Parents Regarding the School Breakfast Program

The purpose of this study is to identify perceptions of school foodservice directors, teachers, and parents of elementary school students in Utah, New Jersey, and Illinois in an effort to identify advantages, disadvantages, and barriers to children participating in the School Breakfast Program (SBP). Focus group discussions were conducted with three separate groups of participants: 1) school foodservice directors who were responsible for foodservice in elementary schools; 2) elementary school teachers; and 3) parents of elementary school children. Participants were recruited from three elementary schools, one in each state. These three states were selected from a list of ten states identified in the Food Research and Action Center (FRAC) 2004 School Breakfast Scorecard as reaching 34 or fewer low-income students with school breakfast per 100 students reached with school lunch.

Parents believed the greatest advantage to participating in the SBP was simply that it provided breakfast to those students who need it. Directors and teachers were very positive regarding the eating environment. When participants were asked about the disadvantages of taking part in the SBP, the majority of teachers and parents discussed poor meal quality and nutritional content of breakfast foods offered. Foodservice directors identified a concern with meal quality due to limited budgets which affected their ability to offer a wide variety of food items on the breakfast menu. When asked what barriers exist for students participating in their program, teachers and parents identified the low socioeconomic stigma associated with the SBP. Foodservice directors mentioned a lack of school staff support for the program as a primary barrier. Many parents stated that they did not realize their child could participate in the SBP since he/she did not qualify for free or reduced-price meals.

Gap Analysis Exploring School Nutrition Facility Design and Equipment Purchasing

A gap analysis of the National Food Service Management Institute's (NFSMI) manuals, *The Guide to Purchasing Foodservice Equipment* and *The New Design Handbook for School Food Service*, was conducted in response to various state agency requests for updated materials. The first step of the analysis included distributing the pre-meeting workbook in order to evaluate the two NFSMI manuals. This evaluation was two-fold. Participants reviewed the documents for current and timely information. In addition, they were asked to distinguish between information that was immediately useful or just-in-time and information that was helpful to know but not necessarily used by a school foodservice director on an everyday basis. The second step of the analysis used an Integrated Design Process led by BPG consultants. Participants recommended that the content be redesigned into a face-to-face resource, web-based resource, and just-in-time job aids. To capture the paradigm shift and help the school nutrition profession move from provider to Trusted Advisor, participants expressed the opinion that face-to-face training would be most effective.

Barriers to Recess Placement Prior to Lunch in Elementary Schools

A study was conducted to determine barriers to scheduling recess prior to lunch in schools participating in the National School Lunch Program (NSLP). After pilot focus groups were conducted in a Midwest district, focus group meetings were performed with homogenous groups of school administrators, school nutrition personnel, teachers, and parents from three school districts. The school districts were selected based on their USDA region (Mountain Plains, Southeast, and Northeast) and the current recess placement after lunch in the elementary schools. There were four focus groups (one with each group) held on the same day in each district. The number of participants ranged from 21 to 26 individuals.

The barriers most frequently mentioned by administrators included: 1) preservation of morning hours for academics; 2) logistical concerns of supervision, hand washing, and cold weather clothing; 3) possible resistance by faculty, staff, and parents; and 4) tradition. The barriers most frequently cited by school nutrition personnel included: 1) supervision; 2) movement of children on and off playground; 3) scheduling; and 4) winter clothing. The barriers most frequently pointed out by teachers were: 1) logistics; 2) academic priorities; 3) willingness of administrators to participate; 4) exercise; 5) weather; 6) scheduling blocks; and 7) tradition. The barriers most frequently indicated by parents were: 1) logistics such as scheduling, staffing, and space; 2) winter clothing; 3) nutrition beliefs; 4) previous experiences with a family member; 5) tradition; 6) behavior; and 7) communication.

There were positive outcomes predicted for recess prior to lunch including: 1) food wastage will decrease; 2) students will eat better; 3) behavior improvement; and 4) conflict management of recess issues occurring outside of classroom time. Participants felt the most important topics discussed were student learning and behavior, nutrition, scheduling, hand washing, operational procedures, and timing of lunch.

Food Safety Training Needs Assessment Survey

The goal of the *Food Safety Training Needs Assessment Survey* was to use information from school nutrition personnel to design training programs and materials to continuously improve

food safety attitudes and practices in child nutrition programs. Information was gathered through a 33-question survey, with questions targeting food safety practices, food security practices, and training parameters. Surveys were distributed by CACFP, SFSP, and National School Lunch Program (NSLP) directors to their personnel. The sampling unit for the study was geographically described as the area defined by a public school district or school food authority (SFA). All child nutrition programs, including NSLP, CACFP, and SFSP, within the geographic range of the SFA were included in the sampling unit. Potential unit participants included districts with four to 25 schools. Sample stratification was based on percentage of school lunch meals within the U.S. Department of Agriculture (USDA) Food & Nutrition Service (FNS) region.

Data for these calculations were based on USDA reports concerning the numbers of school lunches served for School Year 2003, the most current data available at the time the study was conducted. The target set for the study included 144 school districts in 40 states. Actual responses were received from 1,174 participants from 121 districts in 33 states. The school districts participating in the study had a total population of 251,230 students. Respondents were from every USDA region: Mid-Atlantic (7.5%), Mountain Plains (8.0%), Midwest (7.8%), Northeast (5.9%), Southeast (50.2%), Southwest (15.2%), and West (4.0%). The Mountain Plains and Southwest region representation approximated the original estimated participation (8.3% and 14.6%, respectively). Mid-Atlantic, Midwest, and Northeast representation was about half of the estimated participation (12.5%, 16.7%, and 10.4%, respectively). Of the 1,174 participants, 75 (6.4%) self-reported working in a CACFP or Head Start, 110 (9.4%) in a SFSP, and 1,096 (93.4%) in an NSLP. Multiple responses were permitted for personnel with multiple program responsibilities.

Appropriate use of thermometers and temperature recording were the primary indicators for good food safety practices. Respondents reported that there were food thermometers in their work kitchens (87.7%), that they knew where the thermometers were located (81.2%), and that the thermometers were in working order (86.3%). There were no differences reported in thermometer access or use by the child nutrition program. Measures of security included asking respondents who was allowed in food storage, preparation, and service areas unsupervised; how food deliveries are handled; and how food is checked before being transferred to the child nutrition facilities' care. Questions on educational materials focused on their use, characteristics, and the role they played in training. Food safety training issues centered on accomplishments over time, preferred training methods, and training barriers.

Evaluation of NFSMI HACCP Training Network

The purpose of this study was to investigate the effectiveness of HACCP [NEED FULL NAME] training provided by the National Food Service Management Institute (NFSMI). Two questionnaires, one for the Trainers and one for the foodservice employees, were developed to address the objectives of the evaluation: 1) assess the training received by participants who attended NFSMI HACCP workshops to become Trainers; and 2) evaluate the HACCP education that these Trainers gave to foodservice employees. Part I of the study included mailing 400 questionnaires to individuals who attended the NFSMI training to become Trainers. All questionnaires were mailed in May 2005. The SPSS version 12.0 software was used for data analyses of the 77 usable surveys that were returned (19% response rate). The majority of the

Trainers indicated that the NFSMI HACCP training was the only education in HACCP that they had received. About half of the HACCP Trainers responded that they felt well prepared and confident in their teaching ability. Fifty-nine Trainers reported that they had conducted one or more HACCP training sessions, while 12 Trainers indicated that they had each conducted 12 workshops.

Part II of the HACCP evaluation involved mailing 1,100 questionnaires to foodservice employees who received HACCP training from the Trainers. One hundred and sixty-three surveys were returned, which yielded a response rate of 15%. The individuals who received training from the Trainers were mostly female employees (97%). Fifty-one percent were 45- to 54-years-old and 95% were 35- to 64-years-old. When questioned about language, 98% reported English as their first language, 1% indicated Spanish, and 1% indicated other languages. The largest number (n=55, 34%) worked with preschool-aged children and were employed at daycare centers, preschools, and Head Start. This research study was conducted prior to the release of USDA's guidelines for use of the Process Approach to HACCP in school foodservice.

BIOGRAPHY

Carr is director, NFSMI Applied Research Division at The University of Southern Mississippi in Hattiesburg, MS.