

**Special Food and Nutrition Needs of Children:  
Current Issues and Training Needed by  
School Nutrition Professionals**



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 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 Information Services 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.

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## **SPECIAL FOOD AND NUTRITION NEEDS OF CHILDREN: CURRENT ISSUES AND TRAINING NEEDED BY SCHOOL NUTRITION PROFESSIONALS**

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### **EXECUTIVE SUMMARY**

School nutrition (SN) programs are responsible for accommodating a wide variety of special food and/or nutrition needs. When the Rehabilitation Act of 1973 was passed, Section 504 stated if children have defined disabilities, their special needs must be met. The Individuals with Disabilities Education Act (IDEA) took the definition of disability even further and defined 13 disabilities common to children. Under both pieces of legislation, a disability was defined as a condition that had a profound impact on the daily activities of an individual (United States Department of Agriculture [USDA], 2001). With recent increases in the prevalence of food allergies and chronic conditions, such as diabetes and obesity, the definition of disability may not adequately capture all children who are in need of special services through the National School Breakfast and National School Lunch Programs. If a child receives a physician's order that states a lack of substitution or omission of foods in the diet can result in a life-threatening situation, appropriate changes must be made (USDA, 2001; American Academy of Allergy Asthma & Immunology [AAAAI], 2008b; Massachusetts Department of Education, 2002).

Since schools receive funding from the USDA to support breakfast and lunch programs, school administrators are responsible for meeting the special food and/or nutrition needs of children who attend their schools. Once a physician's order is received, the school or school district must make appropriate modifications to the menu, adjusting the foods offered to that child. Modifications could include a simple food substitution, a change in texture, the provision of tube feedings, or highly specialized, modified diets. Any changes to the menu or costs related

to purchasing and preparing the foods is the responsibility of the school or school district, not the family (Lucas, 2001).

There is little current research available that attempts to estimate the prevalence of special needs in the school setting. With the recent increases in food allergies and chronic disease, it is important to assess the most common conditions to provide SN professionals the resources needed to accommodate dietary changes. Also, research is not available on current practices and challenges encountered by SN professionals working with this population. Therefore, the purpose of this research was to identify the prevalence, barriers, and training resources needed related to serving school-aged children with special food and nutrition needs.

An expert panel discussion was utilized in Phase I of the research. This qualitative research approach was used to gather information on the prevalence of special nutrition needs, resources and training needed, barriers in preparing and serving food to children with special needs, and the role of SN professionals in accommodating special needs. The information gathered from the panel discussion was used to develop a questionnaire. During the second phase of the research, the questionnaire was mailed to 700 SN directors, representing each of the seven USDA regions. Also included in the packet was an identical questionnaire, which was to be delivered to an SN manager, for a total of 1400 questionnaires distributed. The final questionnaire contained the following sections:

- Section I: Identification and Prevalence;
- Section II: Issues Related to Serving Children with Special Food and/or Nutrition Needs;
- Section III: Training/Resources to Serve Children with Special Food and/or Nutrition Needs; and

- Section IV: Personal and Program Characteristics.

A total of 405 questionnaires were completed and returned (28.9%). Slightly more than one-third of the respondents were SN directors/assistant directors (34.5%), and only 16.1% of the respondents were SN managers. The average respondent had been in SN more than 25 years, but in his/her current position for only 1 to 5 years. Milk allergies were the most commonly reported special need (80.6%), followed by peanut allergies (76.2%). Cystic fibrosis was the least reported special need (3.6%).

Section II focused on issues related to providing special food and/or nutrition needs. Both best practices and barriers were included in this section. A three-point scale of 1 (*strongly disagree*) to 3 (*strongly agree*) was used to assess agreement with each of the statements. Participants most strongly agreed that a physician's order must be received once SN is aware of a child with special food and/or nutrition needs ( $2.64 \pm .51$ ). This practice was followed in agreement by these practices: the SN manager ensures meals are appropriately prepared for the special needs child ( $2.57 \pm .50$ ); specific requirements of the diet must be received ( $2.54 \pm .52$ ); and confidentiality of the child's special needs are maintained ( $2.52 \pm .52$ ). The respondents disagreed strongly with the following practices: teachers can request menu modifications ( $1.88 \pm .52$ ); posting questions regarding special needs on Meal Talk Listserv ( $1.84 \pm .46$ ); and teachers monitoring food the child brings from home ( $1.75 \pm .54$ ).

Training and resource needs were evaluated in Section III of the questionnaire. Utilizing a four-point scale of 1 (*strongly disagree*) to 4 (*strongly agree*), participants were asked to respond to each statement twice. They first were asked to respond to each statement using the phrase, "I need training/resources on..." and then respond to each statement using the phrase, "My staff needs training/resources on..." Both district-level SN staff and SN managers rated a

personal need for training on implementing an Emergency Allergy Response Plan as the highest ( $2.96 \pm .71$  vs.  $3.05 \pm .75$ ). Items two and three were scored in the same order for both groups. District staff and managers both believed they needed training on the conditions that are considered disabilities under Section 504 ( $2.85 \pm .68$  vs.  $2.95 \pm .67$ ) and in identifying foods to avoid for specific food allergies ( $2.77 \pm .80$  vs.  $2.76 \pm .67$ ). In addition, both groups rated the same training needs in the bottom three. District staff and managers were less likely to agree that they personally needed training on reading and understanding ingredients on food labels ( $2.39 \pm .75$  vs.  $2.37 \pm .86$ ), purchasing appropriate food items ( $2.34 \pm .76$  vs.  $2.30 \pm .69$ ), and understanding confidentiality issues ( $2.39 \pm .86$  vs.  $2.17 \pm .84$ ).

In Section IV of the survey, respondents provided personal and program characteristics. SN directors/assistant directors were most likely to be responsible for planning the menus to meet special needs (58.2%), while SN staff were responsible for preparing the meals (84.8%). SN directors followed by SN managers were responsible for purchasing items for special menus (55.6% vs. 48.8%). Managers and parents were most likely to be responsible for selecting the actual food items that were to be served to the students (57.4% vs. 48.5%). Over half of the respondents reported they have an Emergency Allergy Response Plan (54.8%) for children with special needs. Only 41.7% of the respondents indicated that emergency information is provided to the feeding sites by the SN office. Nearly one-third of the schools or school districts indicated that an “allergen free” environment was supported.