School nutrition (SN) programs are experiencing a growth in the number of students with special food and/or nutrition needs. According to the Centers for Disease Control and Prevention (CDC), 17% of children under the age of 18 have a developmental disability, and consequently require a food substitution or modification to the regular school breakfast, school lunch, and/or after school snack. Section 504 of the Rehabilitation Act of 1973 requires SN programs to accommodate children with disabilities and/or conditions who have a diet prescription/order from a licensed physician. Federal laws and regulations protect children with disabilities from discrimination and ensure appropriate accommodations related to school activities and nutrition services are made available. As disabilities and chronic conditions among children continue to rise, the responsibilities of SN programs are expanding. SN programs must be prepared to face the following challenges: providing foods and services necessary to accommodate students with special food and/or nutrition needs; providing SN personnel with the appropriate training on these issues; and planning, developing, and implementing policies and procedures in the event of urgent medical situations. In recognition of these challenges, the National Food Service Management Institute, Applied Research Division (NFSMI, ARD) conducted two studies to provide insight into identifying the needs of SN professionals who play a role in serving students with special food and/or nutrition needs in SN programs.

In the first study, Special Food and Nutrition Needs of Children: Current Issues and Training Needed by School Nutrition Professionals, researchers surveyed SN professionals who serve school-aged children with special food and/or nutrition needs. Four practice categories of issues related to serving children with special food and/or nutrition needs were identified in this study: (1) District/School Accountability; (2) School Nutrition Responsibility; (3) Information Resources; and (4) Environmental Considerations. These practice categories provided a foundation for the second study. In the second study, Identification of Best Practices for Serving Students with Special Food and/or Nutrition Needs in School Nutrition Programs, researchers assembled and worked with an expert panel of SN directors and representatives from state agencies and the USDA to identify goals and to establish best practices for SN programs that serve students with special food and/or nutrition needs.

OBJECTIVES
The objectives of these studies were to:

- Assess the prevalence of special food and/or nutrition needs, as indicated by SN directors and managers;
• Determine issues related to preparing and serving food to children with special food and/or nutrition needs;
• Identify the role of the SN director and manager in providing for special food and/or nutrition needs;
• Determine the best practices as related to the practice categories identified from previous NFSMI, ARD research;
• Compile a best practice resource that can be used as a Web-based tool for SN professionals; and
• Validate and evaluate the usefulness of the best practice resource.

METHOD

Phase I
• In 2008, NFSMI, ARD conducted a study to identify the prevalence, barriers, and training resources needed related to serving school-aged children with special food and nutrition needs.
• SN professionals participated in an expert panel discussion to gather information on the prevalence of special nutrition needs, resources and training needs, barriers in preparing and serving food to children with special needs, and the role of SN professionals in accommodating special needs.
• The qualitative information gathered from the expert panel discussion was used to develop a questionnaire.
• 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 1,400 questionnaires distributed.
• A total of 405 questionnaires were completed and returned.
• This study identified four major practice categories of issues related to serving children with special food and/or nutrition needs: “District/School Accountability,” “School Nutrition Responsibility,” “Information Resources,” and “Environmental Considerations.”

Phase II
• Another study was conducted that used the four practice categories identified in the Phase I research to identify and confirm best practices for serving students with special food and/or nutrition needs in SN programs.
• Using a best practice research model for guidance, researchers drafted best practice statements from previous research and published regulations and standards for children with special food and/or nutrition needs, such as Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act (ADA), USDA Guidance for Accommodating Children with Special Dietary Needs in the School Nutrition Programs: Guidance for School Foodservice Staff, Individuals with Disabilities Education Act (IDEA), and Food Allergy and Anaphylaxis Network.
• An expert panel of SN directors, a school nurse, and representatives from state agencies and the USDA Food and Nutrition Services (FNS) was held to evaluate and confirm the draft best practice statements, group similar statements within the four practice categories, identify goal themes, and provide formatting suggestions for the best practice resource.
• Based on recommendations from the expert panel, the preferred format of the resource was a checklist which would include two 3-point scales, one scale for current status and one for priority level, and a plan of action section.
• The comments and suggestions from the expert panel were used to draft the best practice resource for evaluation by a national review panel.
• The draft NFSMI Best Practices for Serving Students with Special Food and/or Nutrition Needs in School Nutrition Programs resource consisted of four practice categories, goals, and best practice statements. The draft resource also included a plan of action section and a glossary with definitions of key special food and/or nutrition need terms.
• The national review panel was comprised of SN directors and representatives from state agencies, the American Dietetic Association (ADA) School Nutrition Services (SNS) practice group, and NFSMI.

Four Research-Based Practice Categories

- **District/School Accountability** is related to the district and/or school’s accountability and responsibility to the student and/or family in meeting the special food and/or nutrition needs(s).
- **School Nutrition Responsibility** is related to the responsibility of the school nutrition program and school nutrition staff in meeting the special food and/or nutrition needs of students.
- **Information Resources** encompasses the resources used to gather information on managing and responding appropriately to special food and/or nutrition needs issues. Resources are identified as print media, Web media or professional experience.
- **Environmental Considerations** focuses on the physical environment where the food is prepared and/or served and any accommodations that may be needed for students with special food and/or nutrition needs.

| Top Five Special Food and/or Nutrition Needs Identified in Phase 1 of the Study |
|------------------------------------------|--------|------|
| Special Need                          | Frequency | %   |
| Milk Allergies                       | 315     | 80.6 |
| Peanut Allergies                     | 298     | 76.2 |
| Food Intolerances                    | 245     | 62.7 |
| Diabetes (Type 1)                    | 229     | 58.6 |
| Tree Nut Allergies                   | 183     | 46.8 |

Participants allowed to check more than one option; total exceeds 100%
• Review panel members were e-mailed review packets that included instructions, the evaluation questionnaire, and the draft best practice resource.
• Panel members were asked to evaluate the best practice statements, goal statements, and draft resource. Panel members also provided feedback on the content, scales, format, and usefulness of the resource as a self-assessment tool for SN professionals.

• Twenty-one of the review panel members (70%) returned the completed evaluation questionnaire via e-mail along with comments and suggestions for the best practice resource.
• Researchers used qualitative research methods to confirm goals and best practices for the practice categories. Descriptive statistics were calculated and consisted of frequencies and percentages of the total responses from the review panel’s evaluation questionnaire.

FINDINGS

• The best practice resource is a user-friendly, Web-based self-assessment tool for SN professionals to assess operational issues based on the identified best practices.

• The NFSMI Best Practices for Serving Students with Special Food and/or Nutrition Needs in School Nutrition Programs resource consists of eight goals and 137 best practice statements within the four practice categories (District/School Accountability, School Nutrition Responsibility, Information Resources, and Environmental Considerations).

• Each best practice statement is assessed using two 3-point scales, current status (fully addressed, partially addressed, and not addressed) and priority level (high priority, medium priority, and low priority). These two scales are assessment tools to determine the current status and priority level of each best practice statement as it pertains to the user’s SN program.

• Upon assessing the current status and priority level of the best practices, a plan of action can be established for addressing and prioritizing those best practices identified as needing attention.

• The best practice resource contains definitions of key terms used throughout the resource, and a list of references and resources useful for personal study regarding serving students with special food and/or nutrition needs.
GOAL 1: A systematic approach is developed to ensure safe and effective service for students with special food and/or nutrition needs while complying with federal, state, and local guidelines.

<table>
<thead>
<tr>
<th>Best Practices</th>
<th>Current Status</th>
<th>Priority Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Addressed</td>
<td>Partially Addressed</td>
</tr>
<tr>
<td>The district school nutrition director/designee participates on a district-level team to initiate a needs assessment of the district’s capability to accommodate students with special food and/or nutrition needs.</td>
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<tr>
<td>The district school nutrition director/designee collaborates with district administrators and school nurse(s) to develop procedures/protocols that accommodate students with special food and/or nutrition needs in compliance with federal, state, and local guidelines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The district school nutrition director/designee develops forms for use by licensed physicians that includes identification of the disability, how it restricts the diet, the major life activity affected, the food(s) to be omitted from the diet, and the food or choice of foods to be substituted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The district school nutrition director/designee develops forms for use by recognized medical authorities that includes identification of the medical or other special dietary condition which restricts the diet, the food(s) to be omitted from the diet, and the food or choice of foods to be substituted.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Excerpt from the Resource
Suggestions and Implications for Using This Special Needs Resource

- The best practice resource can be used to identify essential practices for implementing special food and/or nutrition services in SN programs.
- SN professionals can use the resource to identify the roles of stakeholders and the resources necessary for planning, developing, and implementing policies and procedures related to serving students with special food and/or nutrition needs.
- The best practice resource can be used to identify training needs for SN personnel specific to serving students with special food and/or nutrition needs.
- The best practice resource can be used to determine effective communication strategies between district SN director/designee, SN personnel, teachers, parents/guardians, other school personnel, and district/school administrators.
- SN professionals can use this resource to establish a plan of action based on their assessment of the best practices needing attention.
- Additional resources in the reference list at the end of the best practice resource can also be used to assist with the implementation of special food and/or nutrition services in SN programs.
For More Information


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Information about this and other topics may be obtained by contacting the

NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE
The University of Mississippi
Telephone: 800.321.3054

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Authors – Elaine Fontenot Molaison, PhD, RD; Alexandra Castillo; Mary Frances Nettles, PhD, RD; Shellie Hubbard, MA. Dr. Molaison is Associate Professor, Department of Nutrition and Food Systems. Dr. Nettles, Ms. Castillo, and Ms. Hubbard are Director and Research Assistants, respectively, with the Applied Research Division of the National Food Service Management Institute.

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