



# MANAGING NUTRITION SERVICES FOR CHILDREN WITH SPECIAL NEEDS

A PUBLICATION FOR CHILD NUTRITION PROFESSIONALS FROM THE NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE

## WELCOME TO NFSMI INSIGHT

This new publication is created to communicate National Food Service Management Institute (NFSMI) research and projects to you, the Child Nutrition Professional, in reader-friendly terms. Our goal is to help you incorporate state-of-the-art information and procedures into the daily operation of Child Nutrition Programs. We hope this publication will be read, used, and shared by all people interested in the health and well-being of children. The format of *NFSMI Insight* is designed to slip easily into a file or a three-ring notebook. This publication will be produced periodically. Please let us know if *NFSMI Insight* has been helpful, and we would be interested in your ideas for additional topics.

## OVERVIEW OF THIS ISSUE

Children who have a variety of special food and nutrition needs exist in every school district. Studies have shown that most school nutrition managers have at least one child in their school with special needs. The medical conditions reported most frequently include food allergies, diabetes, and a variety of disorders that require modifications to the texture of food. Federal regulations require school nutrition professionals to modify meals for a child with a medical authorization that his or her diet is restricted by a disability. Providing special meals need not be a costly undertaking for school nutrition services. This issue of *NFSMI Insight* presents recommendations for managing nutrition services for children with special food and nutrition needs. These recommendations focus on administrative processes that can reduce labor and food costs.

## LEGISLATION

Federal requirements for providing nutrition services to children with special needs are based on: The Rehabilitation Act of 1973, the Individuals with Disabilities Education Act (IDEA) of 1990, and the Americans with Disabilities Act of 1990. Section 504 of the Rehabilitation Act prohibits discrimination against individuals with disabilities participating in federally-assisted programs, including Child Nutrition Programs. Federal regulations require school nutrition professionals to modify meals for a child with medical authorization that his or her diet is restricted by a disability.

IDEA requires states to provide free and appropriate public education for children with disabling conditions. IDEA and Section 504 strengthen each other by emphasizing the importance of educating children with disabilities alongside their peers without disabilities. The act also states that education and related services, including medically prescribed meal modifications, must be provided without altering costs to parents. A child may be considered disabled under Section 504 even though he or she is not in special education because Section 504 broadly defines disability as a physical or mental impairment that substantially limits a major life activity such as walking, speaking, and learning. The Americans with Disabilities Act strengthens this broad definition of disabling conditions.

## RESEARCH

Several state or regional studies have been conducted to determine the need for dietary modifications in school nutrition services. The most common conditions requiring special diets are food allergies, diabetes, and a variety of disorders that require texture modifications. Financing has been identified as an important consideration in providing special diets. Feeding children with special needs often requires obtaining special foods, nutritional supplements, and adaptive feeding devices.

At the National Food Service Management Institute (NFSMI), we conducted a nationwide survey to determine the administrative requirements for meeting special food and nutrition needs of children and estimate costs for providing those meals. Findings showed that most school nutrition managers had at least one child in their schools with special food and nutrition needs. The medical conditions reported in the research confirmed findings of previous researchers. A small number of school nutrition or special education personnel used consultation from a registered dietitian. Findings also indicated that a wide range of costs was associated with serving children with special food and nutrition needs.

We also conducted a case study in eight school districts in three states to further investigate food and labor costs associated with providing meals to children with special food and nutrition needs. We collected data on indirect and direct school nutrition costs in 15 schools. Indirect costs were associated with the administration of the special meals program at the district and school levels. Included was the time of district school nutrition directors/supervisors, clerical staff, and school nutrition managers. Direct costs were the food and labor costs directly related to producing special meals. We found the following:

- Administrative labor, at both the district and school levels, made up the majority of labor costs for providing special meals.
- School nutrition services purchased special food products, such as sugar-free or low sodium items and strained fruits. One district bought canned nutritional supplements.
- School nutrition services purchased blenders and food processors to prepare special meals modified in texture.

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- Labor used to prepare special meals was not excessive. Direct labor costs would only be an issue if a large number of special meals was produced.
- Food costs for special meals were equal to or less expensive than food costs for regular meals. When school nutrition services purchased canned nutritional supplements or additional food products for special meals, costs increased greatly.

Providing special meals need not be a costly undertaking for school nutrition services. Food and labor costs associated with providing special meals can be minimized by improving administrative processes, especially the training of school nutrition personnel.

## MANAGING SPECIAL MEALS

Figure 1 gives recommendations for managing nutrition services for children with special food and nutrition needs. These recommendations focus on administrative processes that can reduce costs. A key to managing nutrition services for children with special needs is to recognize that these children exist in all school districts. Plans should be developed to produce the special meals with a minimum use of resources. Successful nutrition management for children with special food and nutrition needs involves teamwork among the child, his or her family, health professionals, special education staff, and school nutrition personnel. The four boxes at the beginning of the figure depict planning and policy making that can reduce administrative time. Quickly resolving the five issues associated with providing special meals, indicated by the solid blue boxes in Figure 1, will reduce administrative labor time and also reduce food purchases for these meals.

### NOTIFY COMMUNITY

Notify parents, teachers, and health care professionals that school nutrition services can provide meals for children with special food and nutrition needs. Send a letter to parents, school nurses, principals, special education teachers, pediatricians, and family practitioners explaining the procedures to follow in requesting a special meal. Include forms for the diet order in this letter. Check to see if the State Department of Education has any forms available. If forms need to be developed, be sure to include the following information:

- Child's name; age; parent's name, address, and telephone number; school attended; name of teacher and grade; physician's name, address, and telephone number.
- Child's disabling condition or a statement of the medical or other special food and nutrition needs that restrict the child's diet.
- Food or foods to be omitted from the child's diet and the food or choice of foods that may be substituted. Specific information such as desired calorie level or grams of sodium intake, if there are restrictions in terms of calories or individual nutrients such as sodium.

## FOOD AND LABOR COSTS ASSOCIATED WITH PROVIDING SPECIAL MEALS CAN BE MINIMIZED BY IMPROVING ADMINISTRATIVE PROCESSES

- Texture modifications as necessary
- Signature of physician or medical authority.

### ESTABLISH A SYSTEM FOR NUTRITION ADVICE

Set up a system for services of a registered dietitian or other qualified nutrition professional in the district. Services that need to be provided by a dietitian are interpreting the diet order, planning modified meals based on specific types of diets, developing the nutrition component of an Individualized Education Plan (IEP), and training school nutrition staff on special diets and the food production techniques that assure proper special meal preparation. Strategies to obtain dietitian services include the following:

- *Employing.* If a registered dietitian is employed by the district school nutrition services, she/he may be assigned the responsibility to handle special meal requests in the district.
- *Contracting.* Consulting dietitians contract with districts on a fee-for-service basis, or the district may decide to negotiate with a dietetics department in a community hospital to furnish similar services. Hospital dietetics departments are looking for revenue-generating projects. The school district benefits by tapping the knowledge of several dietitians who may specialize in specific medical conditions; for example, renal disease or diabetes.

## SUCCESSFUL NUTRITION MANAGEMENT FOR CHILDREN WITH SPECIAL FOOD AND NUTRITION NEEDS INVOLVES TEAMWORK

- *Networking.* Dietitians/nutritionists involved in federal, state, and local health agencies can provide consulting for school nutrition services. In most instances, this will be free of charge. Consider joining a regional nutrition committee, if it exists, to network with nutrition professionals. Many nutrition committees are trying to establish a "seamless" system of food and nutrition programs for all children in the community. In some states, the Department of Education has helped school nutrition services obtain expert nutrition advice. These departments contracted with dietetics departments in large medical centers to supply information to school nutrition services on special diets not commonly prescribed in small community hospitals. Another resource in many communities is the university-affiliated program.

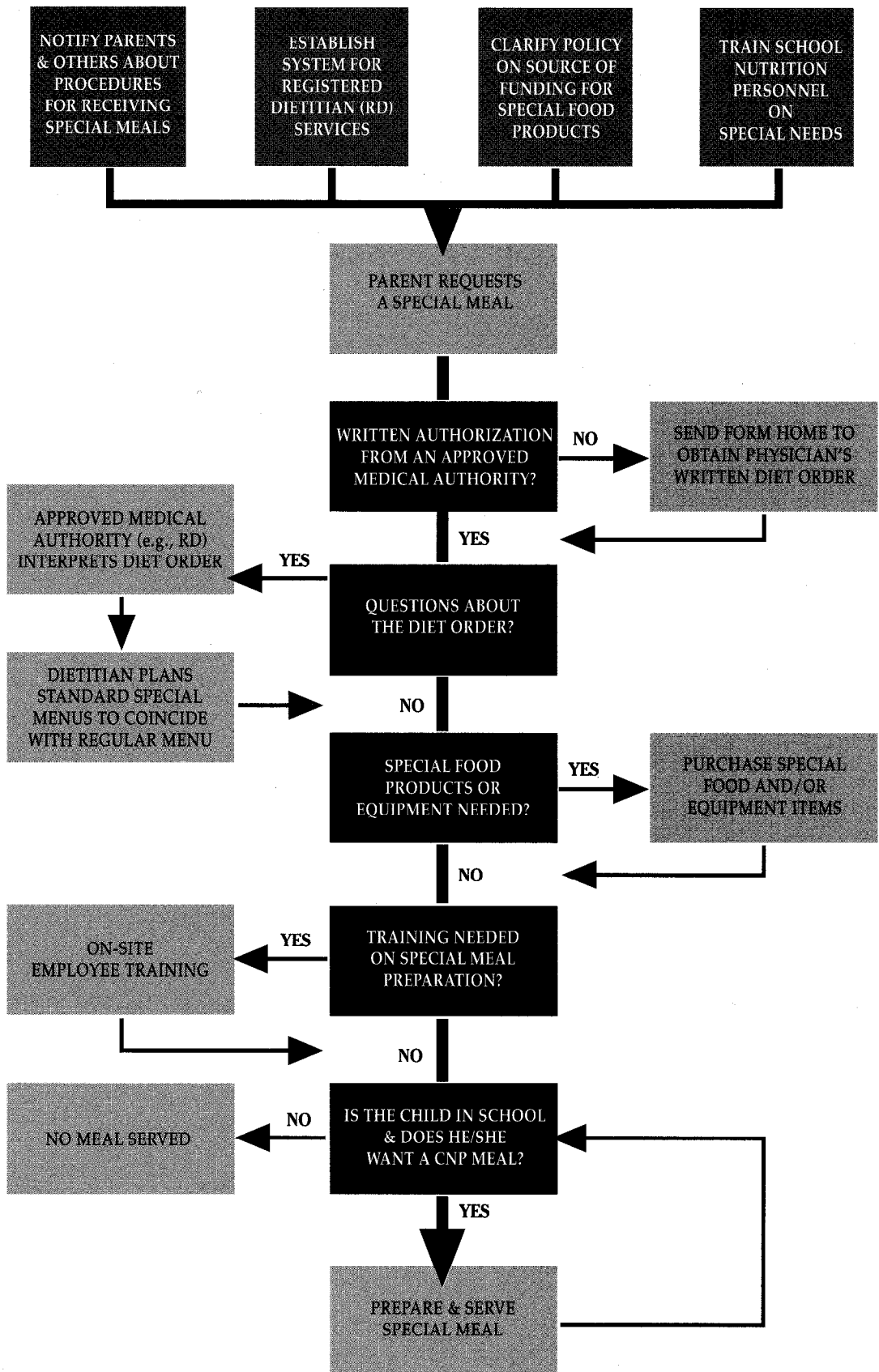


Figure 1. Steps involved in managing nutrition services for children with special needs

REGULAR MENU	GROUND/PUREED MENU	DIABETIC/CALORIE CONTROLLED MENU	NO-SALT-ADDED MENU
Oven-fried Chicken	Pureed Chicken	Baked Chicken	Plain Baked Chicken
Mashed Potatoes ( <i>instant</i> )	Mashed Potatoes ( <i>instant</i> )	Mashed Potatoes ( <i>instant</i> )	Baked Potato w/Sour Cream
Bu Green Beans	Pureed Bu Green Beans	Green Beans w/Herbs	Bu Green Beans ( <i>frozen</i> )
Peach Crisp	Pureed Peach Crisp	Fresh Peach or Sliced Peaches ( <i>natural juices</i> )	Peach Crisp
Homemade Roll		Homemade Roll	Homemade Roll
2% Milk	2% or Whole Milk	Skim Milk	2% Milk

Figure 2. Meal modifications based on a regular menu

## Menu Planning

Food products already purchased by the school system should be used in modified menus. For example, use frozen vegetables for salt-restricted diets instead of purchasing low sodium, canned vegetables. The nutrition expert involved in planning menus should plan several days of special menus based on regular menus. Modified meals based on a regular menu are illustrated in Figure 2. When a child with a specific medical condition (e.g., diabetes) needs a special meal, the school nutrition manager looks for a special menu similar to the regular meal served that day. She/he instructs employees to prepare this menu with possible adjustments for calorie level. Note:

- A modified meal is altered only in the food or nutrients mentioned in the written diet order; otherwise, USDA meal patterns and portions should be maintained.
- Unless a diet order specifically states that calories need to be reduced, menus should consist of food that provides 1/3 of the RDA for children in calories.
- All meals should be tasty and eye-appealing. Prepare low sodium and low fat meals with alternative seasonings for salt and margarine. Garnishes are important for all meals.
- Texture modifications should be tailored to the needs of each child. Food production techniques for ground and pureed meals differ. Find out how to best change the texture of the food by working with the child's special education teacher.

## Nutrition Integrity

Implementing the Nutrition Integrity Standards will help school nutrition services adapt menus for children with special food and nutrition needs. These standards include increasing the variety of foods offered, implementing choice on the menu, incorporating the Dietary Guidelines for Americans (DGA) in menu and recipe development, and offering more unprocessed food on the menu. These changes will enable school nutrition personnel to modify meals for children with special food and nutrition needs

within the menus served to all children. If the regular menu in Figure 2 were changed to:

Lemon-Baked Chicken  
Baked Potato  
with Sour Cream and Chives  
Green Beans with Herbs  
*(made from frozen green beans)*  
Fresh Peach  
Homemade Roll  
2% Milk

very little changes would need to be made for special diets except the texture modifications. Many district school nutrition directors/supervisors have stated that problems with special meals were reduced by implementing the DGA and offering choices on the menu.

## CLARIFY PURCHASING POLICIES

Clarify the school district's policy on purchasing nutritional supplements, other special foods, blenders, and special eating utensils. It is possible that the cost of these products can be absorbed by special education if nutrition goals are part of the IEP. Medicaid might be another source of funds for these products. If school nutrition services purchases these items, set up line-items in the budget to identify costs.

## TRAIN SCHOOL NUTRITION PERSONNEL

Train all school nutrition personnel on types of special diets and menu and recipe modifications that must be made to meet the needs of children requiring special meals. Remember to train on liability issues. Employees need to know what they should and should not do in providing these meals. A registered dietitian employed by the district as a consultant or full-time employee can provide this training to district school nutrition directors/supervisors, school nutrition managers, and school nutrition employees responsible for preparing and serving special meals. A previous NFSMI study determined that the three most important topics for continuing education of school nutrition staff on special needs was understanding liability issues; calculating the amount of protein, fat, carbohydrate, and calories in menus; and modifying recipes to decrease fat, cholesterol and/or sodium.

# RESOLVING MANAGEMENT ISSUES

Prior planning should reduce the time, and thus the cost, needed to address the five issues associated with providing special meals (Figure 1).

## WRITTEN AUTHORIZATION

By notifying the community about the availability of special meals, parents and physicians will be informed about the need for written authorization. They are more likely to provide the proper documentation at the time of the meal request. This will, in turn, reduce the amount of time spent in tracking written diet orders.

## INTERPRETATION OF WRITTEN DIET ORDER

Create a system for expert nutrition advice before there is an urgent need to interpret diet orders. Dietitian services potentially increase labor costs on a short-term basis, but decision-making on special meals will be centralized with a person who has expertise in this area. Special meals are more likely to be produced efficiently which will decrease costs over time. If an arrangement is established ahead of time, school nutrition services will not have to depend on dietitians in the community who may or may not have the time to provide information regarding a special meal when advice is most needed. This alone will generate labor-savings for district school nutrition directors/supervisors who generally take the responsibility to track down this information.

## PURCHASE SPECIAL FOOD AND EQUIPMENT

Nutritional supplements and other special food items can increase food cost greatly. For texture modifications or blended diets, an institutional blender is needed. A variety of special eating utensils also may be purchased. Establish

a policy for handling this type of expense. Other funding sources within the district should be explored to determine the most appropriate method to meet the needs of the children within existing budgetary constraints. Menu planning for modified meals should use regular food products purchased through the normal school nutrition bidding process whenever possible. If nutritional supplements need to be purchased, check with local hospitals and nursing homes to see if these items can be obtained through a joint purchasing arrangement.

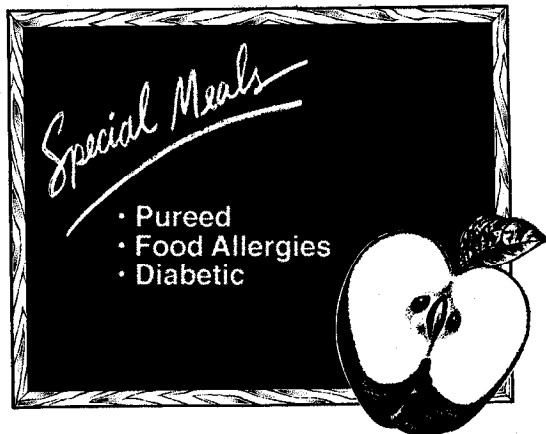
## CONTINUOUS TRAINING OF ALL SCHOOL NUTRITION PERSONNEL WILL IMPROVE THE ENTIRE PROCESS OF PROVIDING MEALS FOR CHILDREN WITH SPECIAL FOOD AND NUTRITION NEEDS

### EMPLOYEE TRAINING

Continuous training of all school nutrition personnel will improve the entire process of providing meals for children with special food and nutrition needs. When a special diet request comes to the school, the school nutrition manager and employees will be familiar with the types of modifications that have to be made. Training in combination with modified menus planned by a registered dietitian will enable managers to know how to make simple food substitutions and follow menus that dovetail with regular menus. Employees want to prepare the "right" food for these children and will be less nervous about their work, and food production tasks will flow more efficiently.

### ATTENDANCE AND MEAL VERIFICATION

The fifth and final issue to be resolved in providing meals to children with special food and nutrition needs is whether the child is present at school and whether he/she wants a school meal. Many children requiring special meals have fragile health conditions and miss several days during the school year. The school nutrition managers in many schools check morning attendance records before asking their employees to prepare special meals. This is a time-consuming process, but it saves in direct food and labor costs.



## 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 • Fax: 800-321-3061

Authors: Martha T. Conklin, PhD, RD, Mary Frances Nettles, PhD, RD, and Josephine Martin, PhD, RD. Drs. Conklin and Nettles are Research Scientists and Dr. Martin is Executive Director, National Food Service Management Institute, The University of Mississippi, P.O. Drawer 188, University, MS 38677-0188, July, 1994.

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