

# Orientation to School Nutrition Management

## Special Needs

### Instructor's Manual

Time: 50 minutes



**Institute of Child Nutrition**

The University of Mississippi

2017

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The University of Mississippi**

**Building the Future Through Child Nutrition**

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The purpose of the Institute of Child Nutrition is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

**MISSION**

The mission of the Institute of Child Nutrition is to provide information and services that promote the continuous improvement of child nutrition programs.

**VISION**

The vision of the Institute of Child Nutrition is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

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## Table of Contents

Background Information .....	1
Functional Area and Competencies .....	3
Lesson Objectives .....	3
Lesson-at-a-Glance.....	4
Preparation Checklist .....	5
Lesson Plan .....	6
Objective: Identify Major Legislation Related to Disabilities .....	6
Objective: Identify Legal, Food Safety, and Financial Considerations.....	9
Objective: List Required Components of a Diet Prescription.....	12
Objective: List Common Dietary Modifications .....	16
Objective: Describe Effective and Appropriate Interaction .....	23
Follow-Up Suggestions .....	24
Key Terms.....	s25
Supplemental Resources .....	26
Supplemental Websites.....	27
References.....	29
Pre/Post-Assessment.....	30

## Background Information

**Note to Instructor: The purpose of the background information section is to help you become familiar with the context of the lesson. It is not a part of the lesson detail.**

It is estimated that 17% of children less than 18 years of age have some type of developmental disability. Three to four million Americans have a developmental disability, and an additional three million have milder forms of cognitive disorders or intellectual disabilities. Many of the children and adolescents with disabilities have health problems that require nutrition intervention and benefit greatly from modification of the school breakfast and lunch.

We will discuss the issues involved in preparing meals at school for children with special health needs. These issues are complex and can be overwhelming, especially for a new school nutrition program director. Gaining a broad understanding of the regulations and procedures involved in accommodating special nutrition needs in schools will guide your decisions and make the process of meeting the needs of children with special needs more manageable.

Many children with developmental disabilities or special health needs require nutrition intervention and will bring a diet prescription to school. For some children, the special diet prescription is the most critical component of their overall care and well-being. The role of the school nutrition program director is important in ensuring that the special diet prescriptions for children with special needs in your school district are followed correctly. School nutrition services should be an active part of the school team whenever a child has a special diet prescription. Good communication between parents, students, school nutrition program staff, and other members of the school team is necessary in meeting special diet requirements and providing a safe environment for the child. Parents must be aware of the procedures for requesting a modified meal for their child at school. This may involve contacting someone in school nutrition; however, the procedure should also be documented and available to parents. It is often the school nutrition program director who initiates communication when a special diet is a part of the child's care plan. This lesson will present a brief background of regulations pertaining to the topic, procedures,

and an overview of some of the dietary modifications commonly required in the school setting.

### **Role of the School Nutrition Director**

The school nutrition program is required to offer special meals at no additional cost to children whose disability restricts their diet as defined in USDA's nondiscrimination regulations, 7CFR Part 15b. The director of the child nutrition program ensures that meals are made available to all children, including those with disabilities. The responsibilities of the child nutrition program include the following:

- Staff must make food substitutions or modifications for students with disabilities.
- Substitutions or modifications for children with disabilities must be based on a prescription written by a licensed physician.
- The child nutrition program is encouraged, but not required, to provide food substitutions or modifications for children without disabilities who have medically certified special dietary needs and are unable to eat regular meals as prepared.
- Substitutions for children without disabilities with medically certified special dietary needs must be based on a statement by a recognized medical authority.

**Note to Instructor: Please review the SP 59-2016 Policy Memorandum on Modifications to Accommodate Disabilities in the School Meal Programs. This is included as a separate handout.**

# Functional Area and Competencies

## Functional Area 7: Menu and Nutrition Management

**Competency 7.1:** Develop guidelines for planning menus that comply with nutrition objectives and support operational goals of the school nutrition program.

**Knowledge Statement:** Know menu planning and service techniques for children with special food and/or nutrition needs, as appropriate.

**Source:** *Competencies, Knowledge, and Skills for District-Level School Nutrition Professionals in the 21<sup>st</sup> Century* available on the ICN website: <http://ICN.org/ResourceOverview.aspx?ID=284>

## Lesson Objectives

At the end of this lesson, participants will be able to accomplish the following:

1. Identify major legislation related to disabilities.
2. Identify legal, food safety, and financial considerations related to special needs.
3. List required components of the diet prescription.
4. Identify common dietary modifications.
5. Describe effective and appropriate interactions with those who have disabilities and their caregivers.

## Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
5 minutes	<ul style="list-style-type: none"> <li>Introduction to lesson</li> </ul>	<ul style="list-style-type: none"> <li>Pre-Assessment</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> <li>Pre-Assessment</li> </ul>
<b>Objective: Be familiar with major legislation.</b>			
5 minutes	<ul style="list-style-type: none"> <li>Federal</li> <li>State</li> <li>Local</li> </ul>	<ul style="list-style-type: none"> <li>Section 504</li> <li>IDEA</li> <li>ADA</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> </ul>
<b>Objective: Identify legal, food safety, and financial considerations related to special needs.</b>			
5 minutes	<ul style="list-style-type: none"> <li>Legal considerations</li> <li>Food safety considerations</li> <li>Financial considerations</li> </ul>	<ul style="list-style-type: none"> <li>Identify potential problems</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> </ul>
<b>Objective: List required components of the diet prescription.</b>			
10 minutes	<ul style="list-style-type: none"> <li>Disability</li> <li>Non-disability</li> </ul>	<ul style="list-style-type: none"> <li>Definition of disability</li> <li>List of disabilities</li> <li>Terms</li> <li>Rachel's case study</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> </ul>
<b>Objective: Identify common dietary modifications.</b>			
15 minutes	<ul style="list-style-type: none"> <li>Texture</li> <li>Calories</li> <li>Thickening of liquids</li> <li>Diabetes</li> <li>Food allergy</li> </ul>	<ul style="list-style-type: none"> <li>Modifications to the Regular Menu-Lunch</li> <li>Video: Helping Students with Diabetes</li> <li>Allergenic Food Activity</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> <li>Video; 10 minutes</li> </ul>
<b>Objective: Describe effective and appropriate interaction with those with disabilities and their caregivers.</b>			
5 minutes	<ul style="list-style-type: none"> <li>Dining environment considerations</li> <li>General information</li> </ul>	<ul style="list-style-type: none"> <li>General Information for Working with Children and Adults with a Disability</li> </ul>	<ul style="list-style-type: none"> <li>Participant's Workbook</li> </ul>
5 minutes		<ul style="list-style-type: none"> <li>Post-Assessment</li> </ul>	<ul style="list-style-type: none"> <li>Post-Assessment</li> </ul>
<b>50 minutes</b>			



## Preparation Checklist

**Instructions:** The following tasks are necessary for presenting this lesson. Assign each task to a specific person and determine the date that each task must be completed. Keep track of the progress by recording information on the tracking form and checking off tasks as they are completed.

Task	Person Responsible	Completion Date	√
<p><b>Reserve equipment and gather supplies as needed for use on the day of class (6 weeks prior).</b></p> <p><b>Instructor's Manual</b> Roster of participants attending for instructor  Participants' sign-in sheets  Pre/Post-assessment</p> <p><b>List of equipment and supplies needed</b> Microphone (preferably wireless)  Computer to present slides and/or DVD  Projector  Screen  Wireless presenter device and laser pointer  Flip chart paper (self-adhesive strip sheets)  Painter's tape (do not use masking tape)  Markers (flip chart)  Pens, pencils, note paper, highlighters, self-adhesive notes, page markers, index cards (each table)  Name tags and table tents</p>	<p>Instructor</p>		
<p><b>Participant's Workbook</b> Agenda, roster of presenters/participants, and handouts</p>			

## Lesson Plan

**SHOW: Slide Accommodating Special Dietary Needs**

**SAY:**

It is estimated that 17% of children less than 18 years of age have some type of developmental disability. Other surveys indicate that 3 to 4 million Americans have a developmental disability, and an additional 3 million have milder forms of cognitive disorders or intellectual disabilities. Many of the children and adolescents with disabilities have health problems that require nutrition intervention and benefit greatly by modification of the school breakfast and lunch.

We will discuss the issues involved in preparing meals at school for children with special health needs. These issues are complex and can be overwhelming, especially for a new school nutrition program director. The lesson will provide you with the basic information to help you participate fully in the team process at school. Gaining a broad understanding of the regulations and procedures involved in accommodating special nutrition needs in schools will help guide your decisions and make the process of meeting the needs of children with special needs more manageable.

**Objective: Identify major legislation related to disabilities.**

**SHOW SLIDE: Objective: Identify major legislation related to disabilities.**

**SAY:**

Four major pieces of federal legislation require school nutrition services to make accommodations for special needs children.

## **Major Legislation Related to Disabilities**

- The Rehabilitation Act of 1973 (Section 504)
- Individuals with Disabilities Education Act (IDEA)
- The Americans with Disabilities Act (ADA)
- The Americans with Disabilities Amendments Act of 2008

### **SHOW SLIDE: Section 504 of the Rehabilitation Act of 1973**

#### **SAY:**

Section 504 of the Rehabilitation Act of 1973 was a landmark piece of federal legislation for people with disabilities. This legislation makes it illegal to discriminate against someone because of their disability.

### **SHOW SLIDE: Section 504 of the Rehabilitation Act of 1973 cont.**

#### **SAY:**

This law also defines a handicap (disability) as "... a physical or mental impairment which substantially limits one or more major life activities." Major life activities include such activities as eating, breathing, learning, walking, working, seeing, hearing, and speaking.

### **SHOW SLIDE: Individuals with Disabilities Act (IDEA)**

#### **SAY:**

The Individuals with Disabilities Education Act (IDEA) states that all children with a disability between 3 and 21 years of age are entitled to a "free and appropriate public education."

### **SHOW SLIDE: Americans with Disabilities Act of 1990 (ADA)**

**SAY:**

The Americans with Disabilities Act of 1990 (ADA) is a comprehensive federal law that further broadens and extends civil rights protection to areas of employment and public service areas such as transportation for all Americans with disabilities. Schools that receive federal money are legally bound to abide by these federal laws and to make reasonable accommodations for children with disabilities.

**SHOW SLIDE: *The Americans with Disabilities Amendments Act of 2008***

**SAY:**

The Americans with Disabilities Amendments Act of 2008 (ADAA) made changes to the definition of the term “disability,” clarifying and broadening the definition and therefore, the number and type of persons who are protected under the ADA and other federal disability nondiscrimination laws may be expanded. It was designed to strike a balance between employer and employee interests.

**DO:**

Review the Policy Memo SP 59-2016 Modifications to Accommodate Disabilities in the School Meal Programs. Copies of this memo are included in the participant’s binders.

**DO:**

**(Workbook Activity) Some Diseases/Conditions That Cause Physical or Mental Impairment**

***Instructor’s Note:** Review the following list of conditions that are commonly considered disabilities. Remember that this list could include other conditions based on the Policy Memo SP 59-2016. Ask participants for open discussion as to how the following diseases/conditions could impact school nutrition – cross-contact, seating, menus, equipment, etc. – not to exceed 3 minutes.*

- Orthopedic, visual, speech, and hearing impairments
- Cerebral palsy
- Epilepsy

- Muscular dystrophy
- Multiple sclerosis
- Cancer
- Heart disease
- Metabolic diseases (diabetes, inborn errors of metabolism)
- Severe food allergy
- Intellectual disability
- Emotional illness
- Drug addiction and alcoholism
- Specific learning disabilities
- HIV infection
- Tuberculosis

Source: USDA, Food and Nutrition Service. (2001). *Accommodating children with special dietary needs in the school nutrition programs: Guidance for school food service staff*. p.3. Retrieved from [http://www.fns.usda.gov/cnd/guidance/special\\_dietary\\_needs.pdf](http://www.fns.usda.gov/cnd/guidance/special_dietary_needs.pdf)

**Objective: Identify legal, food safety, and financial considerations related to special needs.**

**SHOW SLIDE: Objective; Identify legal, food safety, and financial considerations related to special needs**

### **Other Legal Considerations**

**SAY:**

In addition to the federal laws we have just discussed, you should be thoroughly familiar with some other legal considerations related to serving children with special needs.

**SHOW SLIDE: Other Legal Considerations**

**SAY:**

The United States Department of Agriculture (USDA) is the federal agency responsible for administering child nutrition programs which interprets the federal laws that apply to

child nutrition programs. These interpretations of federal law by the USDA are called “regulations.” The regulations spell out the parameters of the law and are published in the Code of Federal Regulations (CFR). In addition to the regulations, the USDA sometimes writes “guidance” and “instructions.” These documents provide additional clarification of the regulations. Guidance from USDA may be found on USDA’s website. The instructions are sent to state agencies.

Schools also must abide by the laws of their respective states. At the state level, the state agency is the regulatory authority for child nutrition programs, responsible for administering the USDA regulations. Additionally, courts of law issue opinions called “case law.” At the local level, school districts have policies and procedures that impact all the schools in the school district. Child nutrition directors must understand and comply with all laws and regulations.

**SAY:**

All records and documentation such as diet prescriptions (also referred to as medical orders or statements) must be held for the length of time required by your state agency or the length of the statute of limitations for general liability in your state—whichever is greater. The following tips will help to guide you in appropriate handling of documentation:

- All student medical information must be maintained in a confidential manner and only shared with other school personnel who have direct contact with the student or who need information for the student’s safety.
- Never revise or change a diet prescription.
- If the diet changes, a new prescription must be obtained from the physician or recognized medical authority.
- New diet prescriptions must be dated so that it is clear which diet prescription is current.
- Out-dated diet statements/prescriptions and related documentation, such as team meeting notes, should be maintained in accordance with your school’s established policies and procedures.

- All records and documentation must be held for the length of time required by your state agency or the length of the statute of limitations for general liability in your state—whichever is greater.

## Food Safety Considerations

### **SHOW SLIDE: Food Safety Considerations**

#### **SAY:**

Children are especially vulnerable to foodborne illnesses. Foodborne illness can be particularly disruptive and dangerous for children with chronic health problems. Some children, because of their health problems, are already at high risk for aspirating (an occurrence in which all or part of a food/liquid bolus enters the airway) or dehydrating. A bout of vomiting would put these children at an even greater risk of aspiration or dehydration. The same food safety procedures for storing, preparing, serving, and handling food for regular meals should be followed for special diets, formulas, and snacks. Foods to which a child has an allergy, particularly a life-threatening allergy, should be stored and prepared in a separate area to avoid cross-contact with other foods. Some critical food safety practices include:

- washing hands frequently, properly, and at appropriate times;
- cooking foods to the proper internal temperature;
- using a calibrated thermometer for cooking, cooling, hot-holding, cold-holding, and reheating; and
- cooling foods rapidly.

## Financial Considerations

### **SHOW SLIDE: Financial Considerations**

#### **SAY:**

There are financial considerations in accommodating children with special nutrition needs. Sometimes these accommodations can be met through minor modification to the existing school menu at minimal or no additional cost. Other accommodations that require special foods, supplements, or consultations with medical professionals can be a significant expense. Some accommodations such as equipment may be funded



through IDEA. Medicaid or private insurance can also be a source of funding, but can vary from state to state. Local agencies such as your health department or school parent-teacher organization may also provide funds. When requesting funds from an organization, remember to keep the identity of the child confidential unless the organization has the authority to obtain this information.

**SAY:**

USDA strongly recommends that school nutrition personnel work with students, teachers, school nurses, dietitians, parents, and the child's physician in a team approach to address the needs of children with disabilities who are unable to consume the regular school meal.

**DO:**

**(Workbook Activity) Identify Potential Problems**

*Instructor's Note: Allow 3 to 4 minutes for interactive discussion with participants, so that all may hear and think about potential problems and consequences which may occur in relation to legal, food safety, and financial considerations.*

**SAY:**

Each person should identify one potential problem that might occur if school nutrition personnel are not aware of and up-to-date on these considerations. Note which area the problem would occur in and what types of consequences might take place.

**Objective: List required components of the diet prescription.**

**SHOW SLIDE: Objective: List required components of the diet prescription**

**SAY:**

If a child has a nutritional need that meets the federal definition of a disability, the school nutrition program must make reasonable accommodations for the child.

**SHOW SLIDE: Disability**

**SAY:**

Some examples of food-related disabilities are food anaphylaxis (severe food allergy) and metabolic diseases such as diabetes and phenylketonuria (PKU).

**SHOW SLIDE: Examples of Food Related Disabilities**

**SAY:**

The accommodations must be supported by a written prescription or statement from a licensed physician and provided at no extra charge to the student.

**SHOW SLIDE: Statement for Children with Disabilities**

**SAY:**

The statement from the physician must provide the following information:

- Identity of the disability
- Major life activity(s) impacted
- Diet restriction(s)
- Complete diet order
- Foods to be omitted
- Foods to be substituted

**DO:**

**(Workbook Activity) Rachel's Case Study**

**Instructions:** Working with a partner, read the description of Rachel in the case study and answer the following questions.

## **Case Study**

### **Rachel's Diet Prescription**

“Rachel has spastic cerebral palsy. She is unable to walk independently or chew and swallow regular foods. All foods must be blended or pureed to a baby food or pudding consistency. May have any liquids. One can of Ensure with meals as needed to maintain weight within normal range. Encourage snacks of blended consistency between meals such as ice cream, pudding, or applesauce. Encourage fluids between meals.”

Signed by John Smith, M.D.

### **Description of Rachel's Condition**

The diet prescription provided for Rachel states that she has been diagnosed with spastic cerebral palsy. Cerebral refers to the head and palsy refers to a loss of control of the muscles (muscle tone) in the body. Cerebral palsy (CP) is caused by an injury to the brain before, during, or shortly after birth. In many cases, the cause of the injury is not known. The location of the injury in the brain and the severity of the injury will determine the loss of muscle tone and what areas of the body are affected. In order for us to move our bodies, some muscles must shorten while other muscles must lengthen. When a person has CP, muscles may be too tight, too loose, or a combination of both. Without normal muscle tone, smooth, deliberate movement of the body cannot occur. Persons with CP may display random, jerky movements; may have difficulty holding their head up, sitting, or standing; may have muscles that are constantly stiffened (spastic); and may need extra fluids to compensate for fluid losses due to drooling.

### **Case Study Questions**

1. How might Rachel's spastic cerebral palsy impact her ability to eat in the cafeteria, and how might you work with other members of the school team to accommodate her?
2. Bend your arms at your elbows and clench your fists tightly and hold for 1 minute. Is this tightening of your muscles tiring? Do you think Rachel might tire easily and require additional calories as a result of her tight muscles?

3. Does Rachel's medical condition meet the federal definition of a disability?
4. If Rachel's condition does meet the definition of a disability, what major life activity(s) is (are) affected?
5. Was the diet prescription provided by a licensed physician?
6. Does the diet prescription contain the required information?

***Instructor's Note:*** *Participants may mention a few of the recommendations, but the instructor will need to provide feedback.*

**SAY:**

Rachel's meals will require cooperation between school nutrition services and other school staff. Rachel will most likely need the following accommodations:

- longer than the normal meal period
- adaptive equipment to encourage and maximize safe self-feeding
- encouragement to eat and help with eating when fatigued
- increased calories to maintain weight due to increased muscle tone
- monitoring by school nurse of weight and hydration status
- close supervision during meals and snacks because of high risk for choking
- assistance with grasping and releasing eating utensils
- recommendations from a therapist for proper positioning at mealtimes
- menu for daily snacks between meals (so the same food is not offered every day)
- fluids between meals

**SAY:**

As the case study about Rachel illustrated, accommodating special dietary needs can be challenging and requires staff training. We also learned that school nutrition programs cannot function in isolation when implementing diet prescriptions, and good communication and teamwork among school staff are required.

## **Non-Disability Dietary Accommodations**

**SHOW SLIDE: Special Dietary Needs that are NOT a Disability**

**SAY:**

If a child brings a diet prescription to school that does not meet the definition of a disability, you may make accommodations but are not required to do so. Often, medical conditions or special requests that are not a disability may be accommodated by making school menus available to parents and students in advance, offering additional choices, or through offer versus serve.

**SHOW SLIDE: Statement for Children Who are NOT Disabled**

**SAY:**

Diet prescriptions that do not meet the definition of a disability must be signed by a recognized medical authority. A recognized medical authority is a physician or other health care professional specified by the state. The diet prescription for non-disability conditions should state what the medical condition is as well as the foods to be omitted and foods that may be substituted.

**Objective: Identify common dietary modifications.**

**SHOW SLIDE: Objective: Identify common dietary modifications**

**SHOW SLIDE: Common Menu Modifications**

**SAY:**

A variety of dietary modifications may be requested on a diet prescription. Diet prescriptions or statements can require a single modification or a combination of multiple modifications. It is important to read each student's diet prescription carefully and ask questions for clarification as needed.

## **Changes in Texture**

### **SAY:**

Changes in food texture are a commonly requested modification and are usually requested because of chewing or swallowing problems. Modifying the texture of the food makes the food safer for the child to eat. Texture modifications are frequently described as chopped, ground, or pureed. Sometimes health care professionals will use different terms to mean the same thing. This can make it difficult to know what texture modification is being requested. The National Dysphagia Diet was created to help establish standard terminology and refers to texture modifications as Level 1, 2, or 3. Special equipment may be needed to prepare these various texture modifications, and your staff will need instructions in cleaning and using the equipment as well as in understanding the terms used to describe the texture modification being requested.

## **Calorie Increase/Decrease**

### **SAY:**

An increase or decrease in calories from the regular school menu is another commonly requested modification. Offering healthy food choices on the menu will help children who need to decrease calories be able to eat the regular school meal. Children who need additional calories may need extra portions of food or milk, or may need a snack between meals.

## **Liquid Modifications**

### **SAY:**

The diet prescription also may request that a child's liquids be modified. Liquid modification is typically requested because the child has been found to aspirate on regular liquids. The diet prescription will specify the degree to which liquids should be thickened. The terms used to describe the thickness of liquids are nectar, honey, and pudding. Several thickeners are available commercially and can be added to liquids to achieve the desired thickness.

**DO:**

**(Workbook Activity) Modifications to the Regular Menu – Lunch**

**Instructions:** Review the modification information provided. More detailed information is available in the supplemental resources listed.

**Modifications to the Regular Menu – Lunch**

Menu	Low Calorie	High Calorie	Chopped	Ground	Pureed
Hamburger	no change	add cheese	cut into small pieces	ground, with cream soup added	puree with beef or tomato soup
Buns	no change	add margarine	cut into quarters	substitute noodles	soup or mashed potatoes
French Fries	baked French fries	no change	mashed potatoes	mashed potatoes	mashed potatoes
Broccoli	no change	add margarine or cheese	chopped and cooked	mashed	blended with cream soup
Canned Peaches	sugar free canned peaches	no change	cut into small pieces	chopped and mashed	pureed with juice
Milk	1%	whole	whole	whole	whole

Source: Institute of Child Nutrition. (2006). *Handbook for children with special food and nutrition needs*. p.46. Retrieved from <http://www.theicn.org/documentlibraryfiles/PDF/20110923022906.pdf>

**Strategies for Reducing Calories in School Lunch and Breakfast**

- Select meats, fish, and poultry low in fat.
- Limit preparation to baking and broiling.
- Omit frying.
- Limit the serving size.
- Emphasize salads and vegetables.
- Replace high-sugar desserts with fruit.
- Provide skim or low-fat milk.

**Methods for Increasing Calories**

Food	Calories	Suggested Use
Cheese	75-120/oz	Add to creamy foods

Infant cereal	15 /T	Add to fruits, soups, cereal
Eggs, cooked	75/egg	Baked goods, meat loaf, and puddings
Evaporated milk	40/oz	Beverages, soups, cereals, puddings
Powdered milk	25/T	Soups, mashed potatoes, cream sauces, puddings
Peanut butter* (may be a choking risk for children with swallowing disorders)	87/T	With crackers or bread
Margarine	100/T	Add to meats, hot cereal, vegetables or bread
Vegetable oil	110/T	Soups, casseroles, vegetables, gravies
Baby food meat	100-150/jar	Mix with cream soups, thin mashed potatoes, soup
Commercial nutrition supplements	30/oz	Serve as a beverage
Graham crackers/vanilla wafers	20-30 each	Snack

Source: Institute of Child Nutrition. (2006). *Handbook for children with special food and nutrition needs*. p.48. Retrieved from [www.theicn.org](http://www.theicn.org).

**SAY:**

Many special nutrition needs are encountered in the school setting. For this lesson, we will examine two you might deal with most often: diabetes and food allergies.

**Diabetes**

**SAY:**

A growing number of children are being diagnosed with diabetes. A person with diabetes either does not produce the hormone insulin or is not able to effectively use the insulin the pancreas produces. This results in higher than normal blood sugar levels. Students with diabetes typically use diabetic exchanges or carbohydrate counting to plan their meals. USDA recipes, manufacturer food labels, the American Diabetes Association and Academy of Nutrition and Dietetics' exchange lists, and nutrient analysis software offer assistance in planning and preparing food items for diabetics. The following video will help you gain a sense of what it is like for a student to have



diabetes and how the school nutrition director and staff and other school staff can work together to assist students in managing their diabetes.

**PLAY:**

Video, *Meeting Children's Special Food and Nutrition Needs in Child Nutrition Programs, Lesson 2: Helping Students with Diabetes.*

**Instructor's Note:** *The entire video is 9 minutes long and time may permit only showing a portion. The video may be viewed or downloaded from [www.theicn.org](http://www.theicn.org).*

**Food Allergies**

**SHOW SLIDE:** *Food Allergy*

**SAY:**

Approximately 8% of children have food allergies. A food allergy is an allergic reaction to a substance (usually a protein) ingested in food. This reaction involves the body's immune system and can range from mild to life-threatening.

**SHOW SLIDE:** *Most Common Allergenic Foods*

**SAY:**

The Food and Drug Administration (FDA) has identified eight major food allergens. It is critically important to check food labels for allergy warnings. The terminology "major food allergen" is defined by the FDA as one of the listed allergenic foods or food ingredients that contain protein derived from one of these foods.

**SHOW SLIDE:** *Anaphylaxis*

**SAY:**

Physical symptoms may occur as a result of consuming a food to which one is allergic. These may include hives, itching, scratchy throat, wheezing, and difficulty breathing or

swallowing. A severe, life-threatening allergic response that may occur is called “anaphylaxis.” Follow the policies and procedures established by your school and ensure that school nutrition staff receives training on emergency procedures.

**DO:**

**(Workbook Activity) Allergenic Food**

**Instructions:** Work in your groups. Each group will be assigned an allergy category. Look at these school lunch menu items and discuss whether you think it would be safe for a person with the assigned allergy to eat such a food item. Mark the chart for the food item(s) you think a person with the assigned allergy would NOT be able to eat. Check your answers using the School Lunch Item Ingredient Labels below the activity.

**Allergenic Food Activity**

Food Item	Source of Allergen			
	MILK	SOY	EGG	WHEAT
Meatballs	X	X	X	X
Crinkle cut fries		X		
Biscuits	X			X
Chicken nuggets	X	X		X
Mashed potatoes	X			
Creamed corn				
Hotdogs		X		
Hotdog buns	X	X	X	X
Cheese ravioli	X		X	X
Tacos	X			X
Cheese pizza	X	X		X
Carrot and celery sticks with ranch style dressing	X	X	X	

Source: Institute of Child Nutrition. (2011). *Meeting children's special food and nutrition needs in child nutrition programs*. p.125. Retrieved from <http://www.theicn.org/>

## School Lunch Item Ingredient Labels

### **MEATBALLS**

BEEF, WATER, TEXTURED SOY PROTEIN, EGGS, DEHYDRATED ONION, GARLIC, SPICES, BREAD CRUMBS  
ALLERGIES: CONTAINS EGGS, MILK, SOY AND WHEAT

### **CRINKLE CUT FRIES**

POTATOES, VEGETABLE OIL, SALT, DEXTROSE  
CONTAINS: SOY BEANS

### **BISCUITS**

ENRICHED FLOUR, SKIM MILK, SOYBEAN OIL, SUGAR, BAKING POWDER, SALT  
CONTAINS: WHEAT AND MILK INGREDIENTS

### **CHICKEN NUGGETS**

CHICKEN BREAST, WATER, WHEAT FLOUR, SALT, SOYBEAN OIL, WHEY, RICE FLOUR, SPICES, FLAVORING, FOOD STARCH  
CONTAINS: MILK, WHEAT, AND SOY

### **CARROT AND CELERY STICKS WITH RANCH STYLE DRESSING**

CARROTS, CELERY, DRESSING (SOYBEAN OIL, WATER, EGG YOLK, SUGAR, SALT, NON-FAT BUTTERMILK, NATURAL FLAVORS [SOY], SPICES)

### **TACOS**

SHELL: STONE GROUND CORN FLOUR, WATER, CELLULOSE GUM, CALCIUM PROPIONATE, LIME  
MEAT: HAMBURGER, SPICES (CHILI PEPPER, CUMIN, OREGANO, AND RED PEPPER), ONION, WHEY SOLIDS (MILK), SALT, SUGAR, PAPRIKA, GARLIC, POTATO STARCH, CITRIC ACID

### **MASHED POTATOES**

POTATOES, SOUR CREAM, BUTTER, SALT, PEPPER  
CONTAINS: MILK

### **CREAMED CORN**

CORN, WATER, SUGAR, MODIFIED CORN STARCH, SALT

### **HOTDOGS**

BEEF, WATER, GARLIC POWDER, HYDROLYZED SOY PROTEIN, PAPRIKA, POTASSIUM AND SODIUM LACTATE, SALT  
CONTAINS: SOY

### **CHEESE PIZZA**

TOPPINGS: LOW-MOISTURE PART-SKIM MOZZARELLA CHEESE, TOMATOES, FOOD STARCH, SALT, SPICES  
CRUST: ENRICHED FLOUR, WATER, VEGETABLE SHORTENING, YEAST, SALT, SUGAR

### **HOTDOG BUNS**

ENRICHED FLOUR, WATER, BUTTERMILK, HIGH FRUCTOSE CORN SYRUP, EGG, SOYBEAN OIL, WHEY, YEAST, SUGAR, WHEAT GLUTEN, SOY FLOUR  
ALLERGIES: CONTAINS MILK, SOY, EGG, AND WHEAT

### **CHEESE RAVIOLI**

ENRICHED DURUM FLOUR, WHOLE MILK RICOTTA CHEESE, WATER, WHOLE EGG, ROMANO CHEESE, SALT, SPICES, SOYBEAN OIL  
ALLERGIES: CONTAINS EGG, MILK, AND WHEAT

Source: Institute of Child Nutrition. (2011). *Meeting children's special food and nutrition needs in child nutrition programs*. p.127. Retrieved from <http://www.theicn.org/>

**Objective: Describe effective and appropriate interaction with those who have disabilities and their caregivers.**

**SHOW SLIDE: *Objective: Describe effective and appropriate interaction with those who have disabilities and their caregivers.***

**SAY:**

Policies, procedures, and communication with children with special needs and their families should reflect the same courtesies extended to any child or family. The environment in which students eat is an important part of providing for the needs of children with disabilities.

**Dining Environment Considerations**

- Generally, it is recommended that children with disabilities eat in the cafeteria with the other students.
- Ample time should be allowed for the child to eat.
- Plan for space in the dining area to accommodate wheelchairs and teachers or aides who assist the child.
- Ramps or handrails may be needed to make the cafeteria accessible.
- Provide adequate lighting for students who are visually impaired.
- Provide an area where a screen could be used for children who are easily distracted.

**SAY:**

In your Participant's Workbook, you will find "General Information for Working with Children and Adults with a Disability." It offers guidance in working with children with disabilities.

***Instructor's Note:*** *If there is time available, discuss the handout as a group.*

**General Information for Working with Children and Adults with a Disability**

- Speak as you would to any other person.
- Speak directly to the person rather than to the companion.

- When speaking to a person with a visual impairment, always identify yourself and others with you.
- Speak in a normal tone of voice unless you know the person is hard of hearing.
- Use conversation appropriate to the age of the person. Individuals with a developmental disability may be small in stature but older than they appear.
- Remember, each individual has a unique personality.
- Don't talk about the person in front of them unless it is something you want them to hear.
- Individuals with a neurological impairment may have difficulty sensing hunger or fullness.
- Continue to offer and encourage new foods that are allowed within their diet prescription.
- Do not use food for purposes of reward or punishment.
- Do not pretend that you understand an individual with a speech impairment. Ask someone familiar with the individual to help you. Individuals with a speech impairment do not always have an intellectual and developmental disability.

**SHOW SLIDE:** *Thank You*

## Follow-Up Suggestions

1. Develop a schedule of in-service topics related to accommodating children with disabilities.
2. Review catalogs and talk to vendors about products available for assisting in feeding children with disabilities.
3. Visit a vendor who supplies adaptive equipment to assist children with disabilities.
4. Visit another district and review their system for working with children with disabilities.
5. Ask the managers to diagram how they would make accommodations for safely preparing and storing highly allergenic foods in the food preparation area.
6. Work with teachers and aides to better accommodate a child with disabilities.

## Key Terms

Key Terms	Definition
Aspirate	An occurrence in which all or part of a food/liquid bolus enters the airway
Cerebral palsy	A disorder where there has been an injury to the developing brain early in life; symptoms include increased muscle tone and abnormal motor patterns and postures; some have low muscle tone.
Diabetes	A disorder in which the body is unable to produce or respond to insulin
Disability	A physical or mental impairment which substantially limits one or more major life activities
Down Syndrome	A disorder of the chromosomes; the infant may be born with a heart defect; it is common for the infant to have slanted eyes, flattened nose, low-set ears, and low muscle tone, and feeding problems; cognitive and motor skills are slow to develop.
Food allergy	An adverse reaction to a food that involves the immune system
Food intolerance	An adverse reaction to a food caused by toxic, pharmacologic, metabolic, or idiosyncratic reactions to a food or chemical substances in food that usually does not involve the body's immune system
Food anaphylaxis	A sudden, severe allergic reaction that involves the person's whole body and can result in death
Individualized Education Program (IEP)	The written educational plan for a student with disabilities, developed by a team of professionals (teachers, therapists, etc.) and implemented to provide specially designed instruction and related services
Major life activities	Activities such as eating, breathing, learning, walking, working, seeing, hearing, and speaking
Prader-Willi syndrome	The Prader-Willi infant has very low muscle tone, difficulty in sucking and swallowing, and may have failure to thrive; most have an overwhelming appetite and lack ability to know when they are full
Spina bifida	A neural tube defect; these children are born with a lesion in the spinal column which can result in problems related to walking and elimination
504 Accommodation Plan	A planning document used in schools for children who require health related services (including modified meals) but who are not enrolled in a special education program; mandated by the Rehabilitation Act of 1973

## Supplemental Resources

- Institute of Child Nutrition. (2003). *Allergy fact sheet for child nutrition program professionals*. University, MS: Author. Retrieved from <http://www.theicn.org/>
- Institute of Child Nutrition. (2003). *Diabetes fact sheet for child nutrition professionals*. University, MS: Author. Retrieved from <http://www.theicn.org/>
- Institute of Child Nutrition. (2003). *Lactose intolerance fact sheet for child nutrition professionals*. University, MS: Author. Retrieved from <http://www.theicn.org/>
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- Institute of Child Nutrition. (2006). *Handbook for children with special food and nutrition needs*. University, MS: Author. Retrieved from <http://www.theicn.org/>
- Institute of Child Nutrition. (2006). *Meeting children's special food and nutrition needs in child nutrition programs 2006 breakfast lunch training*. University, MS: Author. Retrieved from <http://www.theicn.org>
- Institute of Child Nutrition. (2007). *Special needs in child nutrition programs satellite seminar*. University, MS: Author. Retrieved from <http://www.theicn.org/>

## Supplemental Websites

- Allergy & Asthma Network Mothers of Asthmatics: <http://www.aanma.org/>
- American Academy of Allergy, Asthma, and Immunology: <http://www.aaaai.org/>
- American Academy of Pediatrics: <http://www.aap.org/>
- American Association on Intellectual and Developmental Disabilities (AAMR):  
<http://www.aamr.org/>
- Asthma and Allergy Foundation of America: <http://www.aafa.org/>

American Association of Diabetes Educators: <http://www.aadenet.org>  
American Diabetes Association: <http://www.diabetes.org>  
Academy of Nutrition and Dietetics: <http://www.eatright.org>  
American Heart Association National Center: <http://www.americanheart.org/>  
American Lung Association: <http://www.lungusa.org/>  
American Optometric Association: <http://www.aoanet.org/>  
Exceptional Parent: <http://www.eparent.com>  
Indian Health Service/National Diabetes Program:  
<http://www.ihs.gov/MedicalPrograms/Diabetes/index.asp>  
International Food Information Council (IFIC Foundation): <http://www.ific.org/>  
Juvenile Diabetes Research Foundation International: <http://www.jdf.org>  
National Diabetes Education Program: <http://www.cdc.gov/diabetes/projects/ndeps.htm>  
National Diabetes Information Clearinghouse:  
<http://www.niddk.nih.gov/health/diabetes/ndic.htm>  
National Down Syndrome Congress: <http://www.ndscenter.org>  
National Eye Institute: <http://www.nei.nih.gov>  
National Institute of Diabetes and Digestive and Kidney Diseases:  
<http://www.niddk.nih.gov>  
Office of Minority Health Resource Center, U.S. Department of Health and Human  
Services: <http://minorityhealth.hhs.gov/>  
TASH, Equity, Opportunity, and Inclusion for People with Disabilities: <http://tash.org>  
The Arc, For People with Intellectual and Developmental Disabilities:  
<http://www.thearc.org/>  
The Food Allergy & Anaphylaxis Network: <http://www.foodallergy.org/>  
United States Department of Veterans Affairs: <http://www.va.gov/diabetes/>  
USDA Healthy Meals Resource System – Special Diets:  
<http://healthymeals.nal.usda.gov/nal>



## References

- Ekvall, S. W., & Ekvall, V. K. (Eds.). (2005). *Pediatric nutrition in chronic diseases and developmental disorders* (2<sup>nd</sup> ed.). New York: Oxford University Press.
- The Food Allergy and Anaphylaxis Network. (2006). *How to read a label*. Retrieved from <http://www.foodallergy.org/downloads/HTRLsheet.pdf>
- Institute of Child Nutrition. (2006). *Handbook for children with special food and nutrition needs*. University, MS: Author.
- Institute of Child Nutrition. (2011). *Meeting children's special food and nutrition needs in child nutrition programs*. (Rev. ed.). University, MS: Author.
- U. S. Department of Agriculture, Food and Nutrition Service. (2001). *Accommodating children with special dietary needs in school nutrition programs: Guidance for school food service staff*. Alexandria, VA: Author.
- S.2781 - 111th Congress (2009-2010): Rosa's Law. (2010, October 05). Retrieved from <https://www.congress.gov/bill/111th-congress/senate-bill/2781/text>

## Pre/Post-Assessment Special Needs

- 1.) The legislation that makes it illegal to discriminate against someone because of their disability is the
  - a. Americans with Disabilities Act
  - b. Rehabilitation ACT of 1973
  - c. Individuals with Disabilities Education Act
  - d. Civil Rights Act
  
- 2.) Which of the following components is NOT required for diet prescriptions?
  - a. Identity of the disability
  - b. Explanation of the disability
  - c. Food to be omitted or substituted
  - d. Written by a licensed physician
  
- 3.) Which of the following is NOT a recommended action for a child with a disability?
  - a. Offering foods as a reward
  - b. Longer than normal eating time
  - c. Assistance with grasping and releasing eating utensils
  - d. Placing children who are easily distracted behind a screen
  
- 4.) Which of the following is NOT a common menu modification?
  - a. Texture
  - b. Sodium content
  - c. Calories
  - d. Consistency of liquids
  
- 5.) The best place to look for allergy information in food is the
  - a. Menu
  - b. Ingredients label
  - c. Recipe
  - d. None of the above
  
- 6.) One way to avoid a possible life threatening allergic reaction would be to
  - a. Train staff on emergency procedures
  - b. List food allergens/food ingredients on the menu
  - c. Have food allergen/food ingredients available to parents and students
  - d. All of the above
  
- 7.) Some of the most common food allergies include
  - a. Milk
  - b. Eggs
  - c. Fish
  - d. All of the above

- 8.) For some children, the special diet prescription is the most critical component of their overall health and well-being.
- a. True
  - b. False
- 9.) If a child brings a diet prescription to school that does not meet the definition of a disability, the school nutrition program is still required by law to make accommodations.
- a. True
  - b. False
- 10.) It is OK for foods to which a child has an allergy to be stored and prepared in the same area as other foods—it is only when the child ingests the food that an allergic reaction can occur?
- a. True
  - b. False

**Answers: 1(a); 2(b); 3(a); 4(b); 5(b); 6(d); 7(d); 8(a); 9(b); 10(b)**





**Institute of Child Nutrition**

The University of Mississippi

[www.theicn.org](http://www.theicn.org)

**Headquarters**  
**Administration Division**  
**Education and Training Division**  
**Information Services 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 #5060  
Hattiesburg, MS 39406  
Phone: 601-266-5773  
Fax: 888-262-9631

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