

# INSTRUCTOR'S MANUAL



**PLANNING REIMBURSABLE SCHOOL  
MEALS FOR MENU PLANNERS**

# PLANNING REIMBURSABLE SCHOOL MEALS FOR MENU PLANNERS

## INSTRUCTOR'S MANUAL

### PROJECT COORDINATORS

Danielle Barrett, EdD, RDN

Shannon FitzGerald, MS, RDN

### EXECUTIVE DIRECTOR

Aleshia Hall-Campbell, PhD, MPH



**Key Area: 1000 (Nutrition)**

**USDA Professional Standards Code: 1100 (Menu Planning)**

**2023**

# Institute of Child Nutrition

## The University of Mississippi

This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the Institute of Child Nutrition at the University of Mississippi. The content of this publication does not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (AD-3027) found online at <https://www.usda.gov/oascr/how-to-file-a-program-discrimination-complaint> and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

- (1) Mail: U.S. Department of Agriculture  
Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, SW  
Washington, D.C. 20250-9410;
- (2) Fax: (202) 690-7442; or
- (3) Email: [program.intake@usda.gov](mailto:program.intake@usda.gov)

The USDA is an equal opportunity provider, employer, and lender.

The University of Mississippi is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA Employer.

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

Suggested Reference Citation:

Institute of Child Nutrition. (2023). *Planning reimbursable school meals for menu planners participant's workbook*. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by the University of Mississippi under a licensing agreement. The university cannot, therefore, grant permission to use these images. Please contact [helpdesk@theicn.org](mailto:helpdesk@theicn.org) for more information.

©2023, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences



# Table of Contents

1	Background Information
2	Functional Area and Competencies
2	Professional Standards
2	Objectives
5	Ground Rules
4	Training-at-a-Glance
15	Preparation Checklist
19	Introduction
23	Lesson 1: Milk Component for the National School Lunch Program
29	Lesson 2: Fruits Component for the National School Lunch Program
42	Lesson 3: Vegetables Component for the National School Lunch Program
56	Lesson 4: Grains Component for the National School Lunch Program
59	Lesson 5: Meats/Meat Alternates Component for the National School Lunch Program
63	Lesson 6: Modifying Menu Offerings for Grade Groups to Meet Meal Pattern Requirements for the National School Lunch Program
66	Lesson 7: School Breakfast Program
75	Lesson 8: Nutrient Standards



## Table of Contents (Continued)

<b>103</b>	Summary and Wrap Up
<b>105</b>	Appendix
<b>111</b>	Additional Resources
<b>113</b>	References



# BACKGROUND INFORMATION

Planning Reimbursable School Meals for Menu Planners is a face-to-face training to communicate and identify reimbursable school meals strategies and best practices for menu planners. The training includes practical applications, individual knowledge checks, and hands-on application in group trainings. It provides general concepts to help directors, managers, and school nutrition staff understand the general requirements for a reimbursable lunch and breakfast meal under the National School Lunch Program (NSLP) and National School Breakfast Program (SBP). The intended audience for this resource is school nutrition professionals who have a role in planning school meals, including food service directors, menu planners, site managers, and school chefs.

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

## **Prompts are as follows:**

### **SAY:**

This is what the instructor is to say to participants. This is the content that teaches the learning objectives.

### **ASK:**

This prompt is used when the instructor should ask the participants a question.

### **FEEDBACK:**

This prompt is used to ensure certain elements are covered in discussions.

### **DO:**

This prompt is used to explain what the instructor/participants are to do. It may be used to lead into activities, do demonstrations, or show videos.

### **SHOW SLIDE:**

This prompt is used for showing slides.

### **PRE-/POST-ASSESSMENTS:**

This manual includes a Pre-/Post-Assessment that will be administered at the beginning and at the end of the training.

# FUNCTIONAL AREA AND COMPETENCIES

## Functional Area and Competencies

### Functional Area 7: Menu and Nutrition Management

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

#### Knowledge Statements:

- Knows menu planning principles.
- Knows current USDA menu planning options and requirements.
- Knows Federal, State, and local regulations governing food and beverage sales.
- Knows the Dietary Guidelines for Americans, USDA Menu Planner for Healthy School Meals, and Food Buying Guide as menu planning tools.

Source: Institute of Child Nutrition. (2009). *Competencies, knowledge, and skills for district-level school nutrition professionals in the 21<sup>st</sup> century*. University, MS: Author.

# PROFESSIONAL STANDARDS

## Nutrition – 1000

### Key Area Code: Menu Planning (1100)

Employee will be able to effectively and efficiently plan and prepare standardized recipes, cycle menus, and meals, including the use of USDA Foods, to meet all Federal school nutrition program requirements, including the proper meal components.

**1110** – Plan menus that meet USDA nutrition requirements for reimbursable meals, including calculating meal components.

# OBJECTIVES

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

1. Identify the fluid milk component choices, serving size requirements, and how to credit fluid milk toward meeting meal pattern requirements for the National School Lunch Program (NSLP).
2. Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.
3. Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.
4. Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.
5. Identify the meats/meat alternates component choices, serving size requirements, and how to credit meats/meat alternates toward meeting meal pattern requirements for the NSLP.
6. Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the NSLP.
7. Identify the meal components and serving size requirements to meet the School Breakfast Program meal pattern requirements.
8. Define nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program.

# GROUND RULES

ICN developed Ground Rules to help the class run smoothly and allow all participants to benefit from the course instruction and information. (These Ground Rules can be found on the ICN website [Ground Rules for Training Mini-Posters](#).)

1. Show up on time.
2. Be present.
3. Let everyone participate.
4. Listen with an open mind.
5. Think before speaking.
6. Attack the problem not the person.

## Training-at-a-Glance

Time	Objectives	Activity	Materials
20 minutes	<ul style="list-style-type: none"> <li>• Introduction to lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Assessment</li> <li>• Ice breaker</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pre-Assessment</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 1: Milk Component for the National School Lunch Program</b>			
15 minutes	<ul style="list-style-type: none"> <li>• Identify the fluid milk component choices, serving size requirements, and how to credit fluid milk toward meeting meal pattern requirements for the National School Lunch Program (NSLP).</li> </ul>	<ul style="list-style-type: none"> <li>• Milk Component – Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 2: Fruits Component for the National School Lunch Program</b>			
15 minutes	<ul style="list-style-type: none"> <li>• Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.</li> </ul>	<ul style="list-style-type: none"> <li>• Favorite Fruits</li> <li>• Fruits Component– Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 3: Vegetables Component for the National School Lunch Program</b>			
30 minutes	<ul style="list-style-type: none"> <li>• Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.</li> </ul>	<ul style="list-style-type: none"> <li>• Favorite Vegetables</li> <li>• Vegetables Component– Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 4: Grains Component for the National School Lunch Program</b>			
30 minutes	<ul style="list-style-type: none"> <li>• Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.</li> </ul>	<ul style="list-style-type: none"> <li>• Grains Component– Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 5: Meats/Meat Alternates Component for the National School Lunch Program</b>			
30 minutes	<ul style="list-style-type: none"> <li>• Identify the meats/meat alternates component choices, serving size requirements, and how to credit meats/meat alternates toward meeting meal pattern requirements for the NSLP.</li> </ul>	<ul style="list-style-type: none"> <li>• Meats/Meat Alternates Component – Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>

Time	Objectives	Activity	Materials
<b>Lesson 6: Modifying Menu Offerings for Grade Groups to Meet Meal Pattern Requirements for the National School Lunch Program</b>			
30 minutes	<ul style="list-style-type: none"> <li>• Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the NSLP.</li> </ul>	<ul style="list-style-type: none"> <li>• Meal Pattern Components (Other Grade Groups) – Menu Planning Form</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 7: School Breakfast Program</b>			
30 minutes	<ul style="list-style-type: none"> <li>• Identify the meal components and serving size requirements to meet the School Breakfast Program meal pattern requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Planning a Breakfast Menu</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Lesson 8: Nutrient Standards</b>			
20 minutes	<ul style="list-style-type: none"> <li>• Define nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program.</li> </ul>	<ul style="list-style-type: none"> <li>• Think – Pair – Share: Nutrient Standards</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> </ul>
<b>Summary and Wrap Up</b>			
10 minutes	<ul style="list-style-type: none"> <li>• Summarize the lessons.</li> </ul>	<ul style="list-style-type: none"> <li>• Post-Assessment</li> <li>• Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Participant's Workbook</li> <li>• Pen/pencil</li> <li>• Post-Assessment</li> <li>• Evaluation</li> </ul>
<b>4 hours</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 checking off tasks as they are completed. [Items may vary according to the needs of particular lessons.]

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

# INTRODUCTION

**SHOW SLIDE:** *Planning Reimbursable School Meals for Menu Planners*

**SAY:** Welcome and thank you for taking part in today's training.

**Instructor's Note:** Introduce yourself and provide participants with a brief overview of your background related to School Nutrition.

**SHOW SLIDE:** *Ice Breaker*

**DO: Activity:** Ice breaker

**Purpose:** Participants will complete the ice breaker activity to introduce themselves and list what they hope to get out of the training.

**Materials Needed:** chart paper, marker

**Time:** 10 minutes

**SAY:** We are going to do a quick ice breaker activity. This activity will help you meet new people and identify what you would like to learn about planning reimbursable school meals. Navigate around the room, locate someone you do not know, and introduce yourself to that individual. Describe in no more than five words what you would like to learn about a reimbursable school meal. At the end of the activity, you will introduce each other to the rest of the group and state the individual's response.

**DO:** Write the participants' responses on chart paper. List the responses.

**SAY:** This is quite an impressive list.

**Instructor's Note:** The purpose of this activity is to let the participants meet each other and begin thinking about the training ahead. Time is critical, so keep the pace fast for this activity. At the conclusion of the activity, if you have not already been introduced, provide a brief overview of your background, school nutrition interests, and experiences.

**SHOW SLIDE:** *Reimbursable Meal Training for Menu Planning*

**SAY:** Today, we will discuss Food Based Menu Planning (FBMP), which uses meal patterns and grade groups as planning tools. It requires specific meal components to be offered in specific amounts in order to qualify as a reimbursable meal. FBMP will allow you to serve economical meals that are varied, balanced, safe, wholesome, and health-promoting. A complete meal, meeting meal pattern and dietary requirements, is referred to as a "reimbursable meal." Reimbursable meals allow a school to receive benefits (money and entitlement dollars). The school food authority (SFA) receives monetary funds for each reimbursable meal served to a student. The SFA must plan menus that provide all the required components in the minimum required quantities according to the students' age/grade grouping so that the meals served are eligible for reimbursement.

Today's training will discuss planning reimbursable meals for the National School Lunch Program

and the School Breakfast Program.

The [National School Lunch Program](#) (NSLP) is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. It provides nutritionally balanced, low or no-cost lunches to children each school day. The program was established under the National School Lunch Act, signed by President Harry Truman in 1946.

The [School Breakfast Program](#) (SBP) is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. It began as a pilot project in 1966, and was made permanent in 1975.

**SHOW SLIDE: Training Objectives**

**SAY:** At the end of today's training, you will be able to do the following:

- Identify the fluid milk component choices, serving size requirements, and how to credit fluid milk toward meeting meal pattern requirements for the National School Lunch Program (NSLP).
- Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.
- Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.
- Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.
- Identify the meats/meat alternates component choices, serving size requirements, and how to credit meats/meat alternates toward meeting meal pattern requirements for the NSLP.
- Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the NSLP.
- Identify the meal components and serving size requirements to meet the School Breakfast Program meal pattern requirements.
- Define nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program.

**SHOW SLIDE: Ground Rules**

**SAY:** Let's take a minute to review the ground rules for this training.

**SHOW SLIDE: Key Terms**

**SAY:** Let's take a minute to review some key terms and definitions that are in this training.

**DO:** Refer to the Key Terms chart in your Participant's Workbook. Highlight the key terms with the group.

**Instructor's Note:** A chart with the key terms of this training is located in the back of the manual.

**SHOW SLIDE: What Is the Meal Pattern?**

**ASK:** In your own words, how would you describe the meal pattern?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SAY:** The meal pattern dictates which meal components and daily and weekly minimum serving amounts must be served for different grade groups to provide adequate calories and nutrients.

Now, let's take a look at the National School Lunch Program Meal Pattern Chart. We will be looking at one meal component at a time.

**Instructor's Note:** National School Lunch Program Meal Pattern Chart is located at the end of this lesson.

**DO:** Introduce the meal pattern chart.

**SHOW SLIDE: Meal Components**

**ASK:** What are the five meal components?

**DO:** Encourage participants to share until all five components are stated.

**FEEDBACK:** meats/meat alternates, grains, fruits, vegetables, and fluid milk. Be prepared to explain the difference between a meal component and a menu item.

**SAY:** There are five meal components required in menu planning: meats/meat alternates, grains, fruits, vegetables, and fluid milk.

**SHOW SLIDE: Recognizable Versus Unrecognizable Meal Components**

**SAY:** Let's talk a bit more about recognizable and unrecognizable meal components. A recognizable food is a food item visible in the breakfast or lunch offered that allows students to identify the food groups and amounts recommended for consumption at mealtime. Except for noodles made from vegetables that credit toward the vegetable component, foods must be recognizable to be creditable in the National School Lunch and School Breakfast Programs.

Per USDA **Memo [SP 05-2022](#)**, pureed foods such as fruits or vegetables may contribute to meal pattern requirements, provided that the dish that contains them also provides an adequate amount of recognizable, creditable fruits or vegetables ( $\frac{1}{8}$  cup is the minimum recognizable amount). For example, a menu offers macaroni and cheese made with butternut squash cubes and carrot puree. If the macaroni and cheese contains the minimum recognizable amount of vegetables (e.g.,  $\frac{1}{8}$  cup of diced squash), the volume of unrecognizable vegetables (e.g.,  $\frac{1}{8}$  cup of pureed carrots) may also credit. In this example, the dish would provide a total of  $\frac{1}{4}$  cup red/orange vegetables. In the example above, both the recognizable and unrecognizable vegetables are from the same vegetable subgroup (red/orange). This is encouraged for nutrition education but not required: the vegetables could be from different subgroups and credit accordingly. However, if the dish does not contain at least  $\frac{1}{8}$  cup of a recognizable component (in the above examples, vegetables), then the blended foods do not contribute to the meal requirements.

**SHOW SLIDE: Dietary Guidelines for Americans, 2020–2025**

**SAY:** Over the years, meal patterns have changed to reflect current research. School meals were first required to align with the *Dietary Guidelines for Americans* (DGAs) beginning in 1994. The DGAs are revised every five years. Meal patterns may continue to change to align with the guidelines. A link to the DGAs is included in the Participant's Workbook.

Highlights of the *Dietary Guidelines for Americans, 2020–2025*, as they relate to the NSLP and SBP meal patterns:

1. The Dietary Guidelines are developed to help all Americans. The Dietary Guidelines are based on scientific evidence on health-promoting diets in people who represent the general U.S. population, including those who are healthy and those who are at risk for or are living with diet-related diseases.
2. There are 4 overarching guidelines in the 2020–2025 edition:
  - Follow a healthy dietary pattern at every life stage.
  - Customize and enjoy nutrient-dense food and beverage choices to reflect personal preferences, cultural traditions, and budgetary considerations.
  - Focus on meeting food group needs with nutrient-dense foods and beverages, and stay within calorie limits.
  - Limit foods and beverages higher in added sugars, saturated fat, and sodium, and limit alcoholic beverages.
3. There are key recommendations supporting the four guidelines, including quantitative recommendations on limits that are based on the body of science reviewed. The guidelines recommend:
  - Limiting added sugars to less than 10% of calories per day for ages 2 and older and to avoid added sugars for infants and toddlers;
  - Limiting saturated fat to less than 10% of calories per day starting at age 2;
  - Limiting sodium intake to less than 2,300 mg per day (or even less if younger than 14).
4. To help improve Americans' eating patterns, the Dietary Guidelines suggests:
  - Meet nutritional needs primarily from foods and beverages.
  - Choose a variety of options from each food group.
  - Pay attention to portion size.

**SHOW SLIDE: Overview of Offer Versus Serve (OVS)**

**SAY:** Offer Versus Serve (OVS) is a provision in the NSLP and SBP that allows students to decline some of the food offered. The goals of OVS are to reduce food waste in the school meals programs while permitting students to decline foods they do not intend to eat. OVS is performed at the point of service, not at the menu planning level. Because this training is for menu planners or those with menu planning responsibilities, we are not going into detail on OVS. However, let's take a brief look at what OVS means during service times.

- OVS is optional at all grade levels for breakfast and required at the senior high school level only for lunch.

**SHOW SLIDE: OVS at Lunch**

**SAY:** At lunch, schools must offer students all five required food components in at least the minimum required amounts. The components at lunch are meats/meat alternates, grains, fruit, vegetables, and fluid milk. Under OVS, a student must take at least three components in the required serving sizes. One selection must be at least ½ cup from either the fruit or vegetable component.

**SHOW SLIDE: OVS at Breakfast**

**SAY:** At breakfast, schools must offer students all three required food components in at least the minimum required amounts. The components at breakfast are grains (with optional meats/ meat alternates allowed), juice/fruit/vegetable, and milk. Under OVS, a student must be offered at least four food items and must select at least three food items, one of which must be ½ cup of fruit or vegetables for OVS.

Please refer to USDA's [Offer Versus Serve Materials](#) for specific questions related to the lunch or breakfast meal pattern requirements.

**SHOW SLIDE: Training Activities**

**SAY:** Today, we will be planning weekly menus for breakfast and lunch using Menu Planning Forms. At the end of this training, you will have learned how to plan a weekly menu following the guidance for the National School Lunch Program and School Breakfast Program. Because this is a base-line reimbursable school meals training, ICN selected common menu items seen throughout the nation's schools. ICN recognizes and encourages that you include culturally diverse options in your menus.

The Breakfast and Lunch Menu Planning Forms are located in the Introduction lesson of your Participant's Workbook. Keep this form handy, as we will use it for each meal component.

**Instructor's Note:** The Lunch Menu Planning Form is located at the end of this lesson. Additional forms are located in each section with its related activity.

**SHOW SLIDE: Food Buying Guide**

**SAY:** We will also be using and referencing [USDA's Food Buying Guide for Child Nutrition Programs \(FBG\)](#) extensively in this training. The Food Buying Guide is available online as the FBG for Child Nutrition Programs Interactive Web-Based Tool or as a mobile app available on the IOS and Android platforms. We recommend either using the website or downloading the app for reference..

The Food Buying Guide is designed to help SFAs purchase the correct amount of food and determine the specific contribution different food items make toward the meal pattern requirements. The yield information provided in the Food Buying Guide represents average yields based on research conducted by the USDA. For foods with a standard of identity (e.g., specific cuts of meat, fruits, vegetables, etc.), you can use the Food Buying Guide to determine crediting information. If you are not familiar with the Food Buying Guide, please check it out. A link to this resource is provided in your reference materials.

**SHOW SLIDE: Additional Resources**

**SAY:** The section at the end of your Participant's Workbook titled Additional Resources provides links to supplementary handouts and fact sheets with more information on program details.

**SHOW SLIDE: Pre-Assessment**

**DO: Activity:** Pre-Assessment

**Purpose:** Participants will complete the pre-assessment to identify what they know about the requirements for serving reimbursable meals in school meal programs.

**Materials Needed:** Pre-Assessment and pen (or pencil)

**Time:** 10 minutes

**SAY:** A pre-assessment is a training tool that provides the participants' baseline knowledge of the training topic. Please select a unique identifier and write it on the top right corner of the page. You will need to remember your identifier for the post-assessment.

**DO:** Distribute the pre-assessment. Ask participants to write an identifier on the top right corner of the handout. Remind participants they do not need to write their names on the pre-/post-assessments. Collect the assessments when the activity is completed.

**Instructor's Note:** The Pre-/Post-Assessment Form is located in the Appendix.



**National School Lunch Program Meal Pattern**

	<b>Grades K-5</b>	<b>Grades 6-8</b>	<b>Grades 9-12</b>
Food Components	Amount of Food <sup>a</sup> per Week		
	(minimum per day)		
Fruits (cups) <sup>b</sup>	2½ (½)	2½ (½)	5 (1)
Vegetables (cups) <sup>b</sup>	3¾ (¾)	3¾ (¾)	5 (1)
Dark green <sup>c</sup>	½	½	½
Red/Orange <sup>c</sup>	¾	¾	1¼
Beans and peas (legumes) <sup>c</sup>	½	½	½
Starchy <sup>c</sup>	½	½	½
Other <sup>c d</sup>	½	½	¾
Additional Vegetables to Reach Total <sup>c</sup>	1	1	1½
Grains (oz eq) <sup>f</sup>	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz eq)	8-10 (1)	9-10 (1)	10-12 (2)
Fluid milk (cups) <sup>g</sup>	5 (1)	5 (1)	5 (1)
<b>Other Specifications: Daily Amount Based on the Average for a 5-Day Week</b>			
Min-max calories (kcal) <sup>h</sup>	550-650	600-700	750-850
Saturated fat (% of total calories) <sup>h</sup>	<10	<10	<10
Sodium Interim Target 1 (mg) <sup>h</sup>	≤ 1,230	≤ 1,360	≤ 1,420
Sodium Interim Target 1A (mg) <sup>h</sup>	≤ 1,110	≤ 1,225	≤ 1,280
<i>Trans</i> fat <sup>h</sup>	Nutrition label or manufacturer specifications must indicate zero grams of <i>trans</i> fat per serving.		

<sup>a</sup> Food items included in each group and subgroup and amount equivalents. Minimum creditable serving is ⅛ cup.

<sup>b</sup> One-quarter cup of dried fruit counts as ½ cup of fruit; 1 cup of leafy greens counts as ½ cup of vegetables. No more than half of the fruit or vegetable offerings may be in the form of juice. All juice must be 100% full-strength.

<sup>c</sup> Larger amounts of these vegetables may be served.

<sup>d</sup> This category consists of “Other vegetables” as defined in paragraph (c)(2)(iii)(E) of this section. For the purposes of the NSLP, the “Other vegetables” requirement may be met with any

additional amounts from the dark green, red/orange, and beans/peas (legumes) vegetable subgroups as defined in paragraph (c)(2)(iii) of this section.

<sup>c</sup> Any vegetable subgroup may be offered to meet the total weekly vegetable requirement.

<sup>f</sup> At least 80 percent of grains offered weekly must meet the whole grain-rich criteria specified in FNS guidance, and the remaining grain items offered must be enriched.

<sup>g</sup> All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less). Milk may be flavored or unflavored, provided that unflavored milk is offered at each meal service.

<sup>h</sup> Discretionary sources of calories (solid fats and added sugars) may be added to the meal pattern if within the specifications for calories, saturated fat, *trans* fat, and sodium. Foods of minimal nutritional value and fluid milk with fat content greater than 1 percent are not allowed.

<sup>i</sup> Sodium Interim Target 1A must be met no later than July 1, 2023 (SY 2023-2024).

Lunch Menu Planning Form (Grades 9–12)				
Monday	Tuesday	Wednesday	Thursday	Friday
Entrée – M/MA _____ _____ _____ oz eq _____				
Grains _____ _____ _____ oz eq _____				
Vegetables _____ _____ _____ cup _____ cup _____ Subgroups: _____ _____				
Fruits _____ _____ _____ cup _____ cup _____				
Milk _____ _____ _____ cup _____ cup _____				

Lunch Menu Planning Form (Grades 9–12) – Completed				
Monday	Tuesday	Wednesday	Thursday	Friday
Entrée – M/M/A	Entrée – M/M/A	Entrée – M/M/A	Entrée – M/M/A	Entrée – M/M/A
<u>Macaroni &amp; Cheese</u> (see <u>recipe</u> ) <u>2 oz eq meat alternate</u>	<u>Hamburger on Bun</u> <u>2 oz eq meats</u>	<u>Chicken Fajita</u> (see <u>recipe</u> ) <u>2 oz eq meats</u>	<u>Pulled Pork</u> <u>2 oz eq meats</u>	<u>Cheese Pizza</u> (see <u>CN label</u> ) <u>2 oz eq meat alternate</u>
Grains	Grains	Grains	Grains	Grains
<u>2 oz eq macaroni</u> (WGR)	<u>2 oz eq bun</u> (WGR)	<u>1.5 oz eq tortilla</u> (WGR) <u>0.5 oz eq tortilla chips</u>	<u>1 oz eq brown rice</u> <u>1 oz eq white rice</u>	<u>2 oz eq pizza crust</u> (WGR)
Vegetables	Vegetables	Vegetables	Vegetables	Vegetables
<u>½ cup broccoli</u> <u>½ cup baked acorn squash</u> Subgroups: <u>½ c dark green, ½ c red/orange</u>	<u>½ cup baby carrots</u> <u>½ cup oven fries</u> Subgroups: <u>½ c red/orange, ½ c starchy</u>	<u>¾ cup tossed salad</u> (½ c iceberg lettuce, ½ c red pepper & tomatoes) <u>½ cup refried beans</u> Subgroups: <u>¼ c other, ½ c red-orange, ½ c legumes</u>	<u>½ cup cauliflower</u> <u>½ cup green beans</u> Subgroups: <u>1 c other</u>	<u>½ cup celery and jicama sticks</u> <u>½ cup green beans</u> Subgroups: <u>¼ c other, ¼ c starchy, ½ c other</u>
Fruits	Fruits	Fruits	Fruits	Fruits
<u>½ cup apple</u> <u>½ cup sliced peaches</u>	<u>½ cup applesauce</u> <u>½ cup grape juice</u>	<u>½ cup diced pears</u> <u>½ cup apple</u>	<u>½ cup banana</u> <u>½ cup applesauce</u>	<u>½ cup orange wedges</u> <u>½ cup watermelon</u>
Milk	Milk	Milk	Milk	Milk
<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>

# LESSON 1: Milk Component for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 1: Milk Component for the National School Lunch Program*

**SAY:** The first component we will look at is milk.

**SHOW SLIDE:** *Milk Component*

**ASK:** Why is milk important?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SAY:** Milk has many health benefits for school age children. It is especially important for building and maintaining strong bones. Milk also provides nutrients that are vital for the health and maintenance of the body including calcium, potassium, vitamin D, and protein.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the milk component crediting requirements and the daily and weekly minimum serving amounts to meet the meal pattern requirements for the NSLP.

The only food in this component is fluid milk. There are multiple types of fluid milk including unflavored, flavored, lactose-free, cultured buttermilk, ultra-high temperature (UHT) milks to name a few. Other dairy foods that are made from milk, such as yogurt and cheese, are in the Meats/ Meat Alternates meal component.

**Objective:** 1. Identify the fluid milk component choices, serving size requirements, and how to credit fluid milk toward meeting meal pattern requirements for the NSLP.

**SHOW SLIDE:** *Fluid Milk Requirements*

**SAY:** All fluid milk must be pasteurized and contain vitamins A and D at levels specified by the Food and Drug Administration (FDA). We will highlight the specified levels later in this lesson.

Two levels of milk fat are allowed as options for all grade groups:

1. Fat-free milk (also called nonfat or skim)
2. 1% low-fat milk

**SHOW SLIDE: Fluid Milk Requirements (cont'd)**

**SAY:** Current regulations allow that both fat-free and 1% low-fat milk can be:

1. Unflavored (also called plain or white)
2. Flavored

Two different options of milk must be offered, one of which is required to be unflavored.

Note that all flavored milk, including fat-free and 1% (low-fat), cannot be served to preschoolers. Schools serving meals to preschool children (ages 1 – 4) must follow the preschool meal pattern. More information on the [preschool meal pattern](#) can be found on USDA's website.

Additionally, while water must be made available to students during meal service, SFAs shall not promote or offer water or other beverage as an alternative selection to fluid milk. Water is not a meal component or food item for the reimbursable meal (See SP 28-2011 in Additional Resources).

**SHOW SLIDE: Milk Component Daily Required Minimum Serving Size**

**SAY:** The daily required minimum serving size for all grade group meal patterns for NSLP and SBP is the same, 1 cup (8 fl oz or ½ pint). The daily minimum required serving amount also meets the 5-day week minimum required serving amount.

**SHOW SLIDE: Milk Component Requirements and Allowable Options**

**SAY:** Some schools choose unflavored 1% milk and flavored fat-free milk as standard options. Offering an unflavored option at every meal is required and helps limit the added sugars and sodium found in flavored milk.

**SHOW SLIDE: Activity: Milk Component – Menu Planning Form**

**Instructor's Note:** The slide has a blank Menu Planning Form. After discussing the instructions, click for the animation to display the completed form.

**DO: Activity:** Milk Component – Menu Planning Form

**Purpose:** Participants will individually generate lists of currently offered milk options in school programs. As a group, the options are reviewed until all are covered.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 5 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

**SAY:** We are going to complete an activity to help us start planning our menu for milk options.

**DO:** Ask the participants to write down their program's milk options on the Lunch Menu Planning Form.

**SAY:** When you are done, please stand up and remain standing until all are standing. Use this as a quick chance to stretch.

**DO:** When everyone is done, tell participants they may sit. Ask one participant to share one option on their list. Ask participants to raise their hand if they also serve that option. Repeat the name of the option, such as nonfat chocolate milk. Ask everyone to put a check mark next to that milk option if it appears on their list.

Repeat the sharing until all options have been shared (i.e., nonfat unflavored, 1% low-fat unflavored, or flavored milk). Ask for any other options on lists that have not been mentioned. Allow about 2 minutes to review all common options.

**SAY:** Great! Everyone needs to offer two different milk options every day, including unflavored milk. Remember, if you offer flavored milk, you must offer unflavored nonfat or 1% as well.

**Instructor's Note:** If participants ask about 3 or more choices daily, say, "If you routinely offer three options, you can add another at the bottom of the form if it helps make this menu more realistic to your program."

**SAY:** Please keep your Lunch Menu Planning Form handy as you will use it throughout the training. Planning the milk component for breakfast and lunch is the same process. We will review breakfast menus later in the training.

**SHOW SLIDE:** *Milk Component Section of the Food Buying Guide*

**SAY:** The Food Buying Guide (FBG) is also helpful when your standard purchase unit is unavailable. A copy of the chart is in your Participant's Workbook.

**Instructor's Note:** The chart *Section 5 – Milk* from the FBG is located at the end of this lesson.

Let's talk through an example of when your standard order is unavailable. If your standard ½ pint containers were unavailable, you could use the Food Buying Guide to convert ½ pint containers to gallons. If your milk crates contain 48 ½-pint cartons, you know that they contain 48 cups of milk. The Food Buying Guide states that 1 gallon provides 16 cups of milk. Therefore, to replace each crate, you would need to purchase three 1-gallon containers of milk.

**SHOW SLIDE:** *Creditable Types of Milk*

**SAY:** Now that we have our menu planned for milk options, let's explore how to address milk substitute needs/requests. A great resource is the [Crediting Fluid Milk in Child Nutrition Programs Tip Sheet](#) and the link for it is in your Participant's Workbook Additional Resources section.

While most of you serve the same milk options (give two examples from the activity), it is important to know all the creditable types of milk.

Let's take a look at the Food Buying Guide. The Food Buying Guide lists other types of pasteurized milk, such as:

- Lactose-free
- Buttermilk
- Ultra-High Temperature (UHT) milk, both unflavored and flavored, fat-free and 1%, as

acceptable milk options. UHT is often shelf-stable.

You may be wondering about nondairy milk substitutions. The FBG for milk provides additional information regarding these choices.

**SHOW SLIDE: Nondairy Milk Substitutes MUST Be Nutritionally Equivalent**

**SAY:** The fluid milk substitute must meet the milk substitute nutrition standards for nine nutrients to credit toward the milk meal pattern requirement. If the nutrition facts label on a product does not list all these nutrients, request documentation from the product manufacturer to confirm the presence of all the required nutrients at the proper level. You must first verify that the nondairy beverage(s) you offer are allowable fluid milk substitute(s) for meals to be reimbursable.

**SHOW SLIDE: Nondairy Milk Substitute Nutrition Standards**

**SAY:** For reimbursable meals, allowable substitutes for fluid milk must meet these specific nutrition requirements. The nondairy beverage(s) must provide the milk substitute nutrition standards.

Nutrient	Requirement per Cup (8 fl oz)
Protein	8 gm
Calcium	276 mg
Vitamin A	500 IU or 150 mcg
Vitamin D	100 IU or 2.5 mcg
Magnesium	24 mg
Phosphorus	222 mg
Potassium	349 mg
Riboflavin	0.44 mg
Vitamin B12	1.1 mcg
* Q&As – Milk Substitution for Children with Medical or Special Dietary Needs (Non-Disability) Policy Memo SP 07-2010, CACFP 04-2010, SFSP 05-2010, page 4	

**SHOW SLIDE: Offering Nondairy Milk Substitutes**

**SAY:** To offer a nondairy milk substitute for non-disability reasons, you must receive a written request from the child’s medical authority or parent/guardian that identifies the students medical or other special dietary need that precludes the consumption of cow’s milk. It is also a way to meet the preferences of students requesting non-dairy milk menu options.

Be aware that other plant-based beverages, such as almond, oat, rice, or pea, are usually not nutritionally equivalent for all the nutrients listed. Specific processes need to be followed when these substitutions are requested due to diet-related disabilities.

Check with your State agency for information on specific brands of fortified soy milk available in your area that are nutritionally equivalent to fluid milk, including any state or local requirements.

**SHOW SLIDE: [Resources for Accommodating Children with Special Dietary Needs](#)**

**SAY:** When a child has a milk-related disability, as determined by a state licensed healthcare professional, such as a physician, the program regulation [7 CFR 210.10 (m)] requires the school to provide the milk substitute specified by the healthcare professional. The child's parent or legal guardian must provide the school with a medical statement signed by a state-licensed healthcare professional before a milk substitute can be provided. Refer to the manual [Accommodating Children with Disabilities in the School Meal Programs: Guidance for School Food Service Professionals](#) on the USDA website for information on the required content of the physician's statement. For information on special dietary needs, see [ICN training resources on Food Allergies and Special Dietary Needs](#). Please note new information and resources are added frequently, so subscribe to ICN's updates to stay informed.

**CONCLUSION****SHOW SLIDE: [Milk Component Wrap Up](#)**

**SAY:** This brings our review of the milk component to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the milk component?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

**SHOW SLIDE: [Milk Component Summary](#)**

**SAY:** In summary, the milk component meal pattern guidance is:

- Provide 1 cup (8 fl oz) serving size for all grade groups at both lunch and breakfast.
- Include at least two choices at each meal, at least one choice must be unflavored.
- Choose from unflavored or flavored fat-free and 1% milk.
- Follow the [Fluid Milk Substitutions in School Nutrition Programs](#) rule if milk alternates are offered for non-disability reasons.

**Section 5 - Milk**

1. Food As Purchased, AP	2. Purchase Unit	3. Servings per Purchase Unit, EP	4. Serving Size per Meal Contribution	5. Purchase Units for 100 Servings	6. Additional Information
<b>MILK, FLUID</b>					
Milk, fluid <sup>1</sup> <i>Pasteurized Nonfat milk, Low-fat milk (1%), Reduced-fat milk (2%), Whole milk, Lactose-free milk, Lactose-reduced milk, Cultured milk such as Cultured buttermilk, Cultured kefir milk, and Cultured acidophilus milk, Acidified milk such as Acidified kefir milk and Acidified acidophilus milk, and Ultra High Temperature (UHT) Milk; (includes unflavored or flavored)</i>	Gallon	16.00	1 cup milk (1/2 pint milk)	6.30	
	Gallon	21.30	3/4 cup milk	4.70	
	Gallon	32.00	1/2 cup milk	3.20	
	Quart	4.00	1 cup milk (1/2 pint milk)	25.00	
	Quart	5.30	3/4 cup milk	18.90	
	Quart	8.00	1/2 cup milk	12.50	
	1/2 Pint (8 fl oz)	1.00	1 cup milk (1/2 pint milk)	100.00	
	3/4 Cup (6 fl oz)	1.00	3/4 cup milk	100.00	
	1/2 Cup (4 fl oz)	1.00	1/2 cup milk	100.00	

# LESSON 2: Fruits Component for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 2: Fruits Component for the National School Lunch Program*

**SAY:** The next component we will look at is the fruits component.

**ASK:** What are some benefits of serving fruit in the NSLP?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SHOW SLIDE:** *Benefits of Fruits*

**SAY:** The Dietary Guidelines include fruit, especially whole fruits, as an important component of an overall healthy eating pattern. Fruits are sources of many essential nutrients such as potassium, dietary fiber, vitamin C, and folate. Plan on offering a variety of fruit choices, as each fruit differs in nutrient content. Additionally, fruits add various colors and shapes to trays that appeal to students' appetites.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the fruits component crediting requirements and the daily and weekly minimum serving amounts to meet the meal pattern requirements for the NSLP. Particularly, we will cover the different fruit types, how they come in different forms, and good practices for planning menus with fruit.

**Objective:** 2. Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.

**SHOW SLIDE:** *Activity: Favorite Fruits*

**DO: Activity:** Favorite Fruits

**Purpose:** Participants generate a list of favorite fruits as possible suggestions to serve in their program.

**Materials Needed:** Sticky notes (2 per participant) and chart paper labeled "Favorite Fruits"

**Time:** 5 minutes total

**SAY:** Let's generate a list of some of your favorite fruits. Please think of two favorite fruits and write each on a separate sticky note. These can be personal favorites or favorites in your school program or one of each. Then, place your sticky note on the chart paper on the wall. You will have a minute to come up with your favorites and a minute to add to the chart paper.

**DO:** List “Favorite Fruits” on a piece of chart paper and post it on a wall within the training area. Allow participants to complete the activity and give participants any needed prompts to finish the activity quickly. Once the participants have finished, review and generally comment on the variety of choices. Mention that the favorites will be revisited later in the training.

**SHOW SLIDE: Fruits Component Requirements**

**SAY:** The daily required minimum serving size for fruits for the 9–12 grade group is a minimum of 1 cup daily for a total of 5 cups per week. The serving size for fruits for the K–5 and 6–8 grade groups is a minimum of ½ cup daily for a total of 2 ½ cups per week.

**SHOW SLIDE: Crediting Fruits**

**SAY:** Fruits are measured in volume. Fruit amounts must be adequate and recognizable to meet the meal pattern requirements. The minimum creditable amount for fruits is ⅓ cup.

**SHOW SLIDE: Creditable Types of Fruits**

**SAY:** Regulations for the Child Nutrition Programs require that fruit must be offered for a reimbursable meal. The meal pattern requirements are described in the Meal Pattern Chart found in your Participant’s Workbook. Another great resource is the [Crediting Fruits in Child Nutrition Programs Tip Sheet](#) and the link for it is in your Participant’s Workbook Additional Resources section.

There are over 360 entries for creditable types of fruits—fresh, canned, frozen, and dried—in the FBG. The fruits component includes:

- Fresh (apples, bananas, oranges, grapes, etc.)
- Frozen (blueberries, sliced peaches, melon balls, strawberries, etc.)
- Canned in juice, water, or light syrup (applesauce, apricots, pineapple, pears, mixed fruit, etc.)
- Dried (cranberries, raisins, cherries, etc.)
- Pasteurized, full-strength (100%) fruit juices (orange, grapefruit, apple, etc.)

**ASK:** What is the difference between fresh fruit, canned fruit, frozen fruit, and dried fruit?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompts below.

**SHOW SLIDE: Fresh Fruit**

**SAY:** Fresh fruits come in various colors, shapes, and sizes. When planning menus, it is important to understand what the daily required minimum serving amount and communicate that to those who prepare and serve meals. A valuable tool to assist in planning and ordering the proper quantity of fruit is the Food Buying Guide. The FBG shows “as purchased” and “edible portions” for a variety of fruits. Edible portions of fresh fruit do not include inedible peels, cores, and rinds.

**SHOW SLIDE: Canned Fruit**

**SAY:** Creditable canned fruit choices may be packed in water, full-strength juice, or light syrup. Fruit canned in 100% fruit juice or water is preferable to limit the amount of added sugar. The Food Buying Guide provides crediting information for canned fruit packed in juice, light syrup, or drained.

**SHOW SLIDE: Frozen Fruit**

**SAY:** Frozen fruit is a wonderful way to offer delicious fruits all year that may not grow in your region or are only available fresh when in season. A serving of thawed frozen fruit consists of fruit plus the juice or liquid that accumulated during thawing.

**SHOW SLIDE: Dried Fruit**

**SAY:** Whole dried fruit and dried fruit pieces credit for twice the volume served. For example,  $\frac{1}{8}$  cup of dried cranberries, the smallest creditable amount of fruits, credits as  $\frac{1}{4}$  cup. Remember,  $\frac{1}{8}$  cup of any fruit is the minimum creditable amount;  $\frac{1}{16}$  cup (1 tablespoon) of dried fruit does not credit as  $\frac{1}{8}$  cup fruit. When possible, choose options with no added sugar to reduce the overall amount of sugar. Dried fruits are naturally high in sugar because they are reduced and dehydrated forms of the fresh fruit.

**SHOW SLIDE: Juice**

**SAY:** If you choose to use juice to meet the fruit requirement, here are some things you need to know:

- Juice products must be pasteurized, 100% fruit juice. Fruit juice is lower in dietary fiber than whole fruit. When consumed in excess, it can contribute extra calories.
- Fruit juice is limited to half or less of the fruits planned for the week. This is a weekly, not daily, limit. No more than  $\frac{1}{2}$  of the total weekly fruits requirements may be met with full-strength juice. For example, your daily 9–12 grade group lunch menu may include a)  $\frac{1}{2}$  cup fruit and  $\frac{1}{2}$  cup 100% fruit juice for a total of 1 cup fruits, or b) 1 cup of fruit 3 days per week and 1 cup of 100% fruit juice 2 days per week. Both examples comply with the weekly juice limit.
- Juice cannot be credited when used as an ingredient in another food or beverage product, except for smoothies.
- Pureed fruits, (fresh, frozen, or canned) when served in a smoothie, credits as juice and are subject to the limitations regarding juice service.

**SHOW SLIDE: Non-Creditable Fruit Products**

**SAY:** Some fruit products do not credit toward the fruits component, including:

- Snack-type food made from fruits, such as drops, leathers, gummies, strips, and fried banana chips
- Relish, jam, or jelly
- Home-canned products (for food safety reasons)

Check with your State agency for specific requirements for your state on fruits that do not credit.

**SHOW SLIDE: Increasing Fruit Consumption**

**ASK:** How can we incorporate more fruits into menus and increase student consumption?

**DO:** Encourage the participants to share how they incorporate fruits into their menus and increase student consumption of fruit.

**FEEDBACK:** Possible answers include:

- Feature locally grown fruit (when in season)
- Farm to school involvement
- Serving presentation
- Taste-testing
- Maybe add some seasoning, like adding cinnamon to baked apples or pears, etc.
- Cooking fruits
- Salad bars
- Provide a variety of different fruits daily
- Avoid offering the same fruits (e.g., oranges, apples, or bananas) repeatedly on the menu.
- Provide fruit that is easy for them to consume – for example, provide orange wedges rather than whole oranges.
- Use the USDA DoD Fresh Fruit and Vegetable Program.

**SAY:** The [MyPlate](http://www.MyPlate.gov) website (www.MyPlate.gov) has suggestions to increase fruit consumption.

Now it is time to choose fruits and serving sizes for the menu you are building. Recall that we are planning a 9–12 grade group lunch menu. Refer to the Meal Pattern Chart to determine serving sizes. All the blanks do not have to be filled in, but the creditable required minimum daily amounts must be met.

**SHOW SLIDE: Activity: Fruits Component – Menu Planning Form**

**Instructor's Note:** The slide has a blank Menu Planning Form. After discussing the instructions, click for the animation to display the completed form.

**DO: Activity:** Fruits Component – Menu Planning Form

**Purpose:** Participants will transfer the serving amount and the fruits listed for each menu day on this slide to your menu.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 5 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

**SAY:** We are going to complete an activity to plan fruits for the menus.

**DO:** Have participants fill in their Lunch Menu Planning Form for the serving amount and names of fruits planned each day.

**SAY:** Please transfer the serving amount and the fruits listed for each menu day on this slide to your menu.

**DO:** Allow 3 minutes for participants to transfer the menu information to their Lunch Menu Planning Form.

**SAY:** When you are done, please stand up and remain standing until all are standing. Use this as a quick chance to stretch.

Everyone is done; you may sit down. Please keep your lunch menu planning form handy as you will use it throughout the training.

## CONCLUSION

### **SHOW SLIDE:** *Fruits Component Wrap Up*

**SAY:** This brings our review of the fruits component to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the fruits component?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

### **SHOW SLIDE:** *Fruits Component Summary*

**SAY:** In summary, the fruits component meal pattern guidance is:

- At lunch, provide at least  $\frac{1}{2}$  cup daily for grades K–5 and 6–8, and 1 cup daily for grades 9–12.
- The smallest creditable amount for the fruits component is  $\frac{1}{8}$  cup.
- Credit dried fruits at twice the volume ( $\frac{1}{8}$  cup credits as  $\frac{1}{4}$  cup).
- Limit 100% fruit juice to half or less of fruits component weekly, including fruits credited in smoothies.

Now that we covered the fruits component, let's move on to the next component, vegetables.

# LESSON 3: Vegetables Component for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 3: Vegetables Component for the National School Lunch Program*

**SAY:** The next component we will look at is the vegetables component.

**ASK:** What are some benefits of serving vegetables in the NSLP?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SHOW SLIDE:** *Benefits of Vegetables*

**SAY:** The Dietary Guidelines specify that healthy eating patterns include a variety of vegetables from all of the five vegetable subgroups—dark green, red and orange, beans and peas (legumes), starchy, and other. The NSLP meal patterns reflect this guidance. Vegetables are important sources of many nutrients, including dietary fiber, potassium, vitamin A, vitamin C, vitamin K, copper, magnesium, vitamin E, vitamin B6, folate, iron, manganese, thiamin, niacin, and choline. There are a variety of vegetable options which can add flavor and interest to menus.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the vegetables component crediting requirements and the minimum serving size to meet the meal pattern requirements for the NSLP. Particularly, we will cover the different vegetable subgroups and good practices for planning menus with vegetables.

**Objective:** Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.

**SAY:** Vegetables are measured by volume and the required minimum daily and weekly serving amounts vary by grade group. Over the course of the week, schools must offer vegetables from five vegetable subgroups – dark green, red and orange, beans and peas (legumes), starchy, and other.

**SHOW SLIDE:** *Activity: Favorite Vegetables*

**DO: Activity:** Favorite Vegetables

**Purpose:** Participants will generate a list of favorite vegetables as possible suggestions to serve in their program.

**Materials Needed:** Sticky notes (2 per participant) and chart paper labeled “Favorite Vegetables”

**Time:** 5 minutes total

**SAY:** Let's generate a list of some of your favorite vegetables. Please think of two favorite vegetables and write each on a separate sticky note. These can be personal favorites, favorites in your school program, or one of each. Then get up and place your sticky note on the chart paper on the wall. You will have a minute to come up with your favorites and a minute to add to the poster.

**DO:** List "Favorite Vegetables" on a piece of chart paper and post it on a wall within the training area. Allow participants 1 minute to complete the activity and give participants any needed prompts to finish the activity quickly.

Provide general comments on the variety of choices and, if the option above is used, the subgroup(s) that seem most popular. Only spend a minute reviewing and then comment that the favorites will be revisited later in the training.

**Instructor's Note:** It is optional to list the vegetable subgroups on the poster and ask participants to place their favorites under the subgroup they believe the vegetable(s) belongs. Let participants know that they can make their best guess if they are not sure of the subgroup.

**SHOW SLIDE: Vegetables Component**

**SAY:** Vegetables must be fresh, frozen, canned, dried (including dried legumes), or 100% full-strength vegetable juice. Examples of creditable vegetables can be found in the [Food Buying Guide for Child Nutrition Programs \(FBG\)](https://foodbuyingguide.fns.usda.gov/) (<https://foodbuyingguide.fns.usda.gov/>). The FBG has over 630 entries for vegetables. You will continue to build your skills in menu planning as we explore the meal pattern requirements for vegetables.

**SHOW SLIDE: Vegetables Component Serving Size**

**SAY:** Like the fruits component, the daily and weekly minimum required serving amounts for the vegetables component are the same as the fruits component, 1 cup daily and 5 cups weekly for grades 9–12. Note the minimum required serving size for grade groups K–5 and 6–8 are different than 9–12. K–8 daily minimum requirement is  $\frac{3}{4}$  cup and a total weekly minimum of 3  $\frac{3}{4}$  cups.

**SHOW SLIDE: Vegetable Subgroups**

**SAY:** The vegetables component contains five subgroups: dark green, red/orange, beans and peas (legumes), starchy, and other vegetables.

Each of the vegetable subgroups contribute different combinations of nutrients, making it important for individuals to consume vegetables from all the subgroups. A variety of vegetables also adds color and interest to weekly menus. The next slide shows the weekly vegetable subgroup requirements for all grade groups. The Vegetable Subgroups handout in your Participant Workbook lists many of the choices for each subgroup. You can refer to this resource during the training.

**SHOW SLIDE: Weekly Vegetable Subgroup Requirements**

**SAY:** Notice that in addition to the subgroup amounts listed, weekly menus need to include additional vegetables to meet the total weekly vegetable requirement, 1 cup for grades K–8 and 1½ cups for grades 9–12. Additional vegetables can be from any subgroup.

Once the menu meets the requirements for dark green, red/orange, and beans and peas

subgroups, any additional servings of these vegetables can be counted toward the other vegetable subgroup.

**SHOW SLIDE: Crediting Vegetables**

**SAY:** An important part of planning vegetable choices that meet the meal pattern is understanding crediting. The Food Buying Guide is an essential resource for crediting fresh, frozen, canned, dried vegetables, and 100% vegetable juice. A helpful feature of the Food Buying Guide is the identification of vegetables by subgroup.

- Raw leafy greens credit at half the volume served—for example, 1 cup of chopped romaine lettuce credits as  $\frac{1}{2}$  cup toward the dark green vegetable subgroup.

**SHOW SLIDE: Crediting Vegetables (cont'd)**

**SAY:** Let's explore this further: Cooked leafy greens, such as collard greens, are credited by volume as served; for example,  $\frac{1}{2}$  cup of cooked collard greens credits as  $\frac{1}{2}$  cup of dark green vegetables.

In our sample menu, the  $\frac{1}{2}$  cup of iceberg lettuce credits as  $\frac{1}{4}$  cup. Combined with the red peppers and tomatoes, the total creditable amount of the tossed salad is  $\frac{1}{2}$  cup even though the serving amount totals  $\frac{3}{4}$  cup.

The minimum creditable serving size for any vegetable offering is  $\frac{1}{8}$  cup. The  $\frac{1}{4}$  cup of red pepper and tomato on this menu could be listed as  $\frac{1}{8}$  cup each red pepper and tomato. The Food Buying Guide shows that about three cherry tomatoes credit as  $\frac{1}{4}$  cup, so about three halves would credit as  $\frac{1}{8}$  cup.

**SHOW SLIDE: Sample Menu for Vegetables Daily & Weekly Required Serving Amounts**

**SAY:** This slide shows one way to meet the vegetable requirements for the 9–12 grade group. First, we will look at the daily and weekly minimum serving requirements.

On this menu,  $\frac{1}{2}$  cup of raw and  $\frac{1}{2}$  cup of cooked vegetables are offered for a total of 1 cup each day. This approach meets the daily and weekly minimum requirements and provides variety. It is one of many correct approaches.

Notice some of the favorite vegetables we listed at the beginning of this section are on this menu. (Point out items that match sticky note choices).

In our sample menu, the  $\frac{1}{2}$  cup of iceberg lettuce credits as  $\frac{1}{4}$  cup. Combined with the red peppers and tomatoes, the total creditable amount of the tossed salad is  $\frac{1}{2}$  cup even though the serving amount totals  $\frac{3}{4}$  cup.

The minimum creditable serving size for any vegetable offering is  $\frac{1}{8}$  cup. The  $\frac{1}{4}$  cup of red pepper and tomato on this menu could be listed as  $\frac{1}{8}$  cup each red pepper and tomato. The Food Buying Guide shows that about three cherry tomatoes credit as  $\frac{1}{4}$  cup, so about three halves would credit as  $\frac{1}{8}$  cup.

**SHOW SLIDE: Activity Vegetables Component – Menu Planning Form**

**Instructor's Note:** The slide has a blank Menu Planning Form. After discussing the instructions, click for the animation to display the completed form.

**DO: Activity:** Vegetables Component – Menu Planning Form

**Purpose:** Participants will transfer the serving amount and the vegetables listed for each menu day on this slide to your menu.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 5 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

**SAY:** We are going to complete an activity to plan our vegetables for our menus.

**DO:** Have participants fill in their lunch menu planning form for the serving amount and names of vegetables planned each day. Note that the section on their lunch menu planning forms for subgroups will be completed a little later in the training once information specific to crediting vegetables is reviewed.

**SAY:** Please transfer the serving amount and the vegetables listed for each menu day on this slide to your menu. By preplanning this part of the menu for you, we can focus on specific information regarding crediting vegetables and the vegetable subgroups

**DO:** Allow 3 minutes for participants to transfer the menu information to their Lunch Menu Planning Form.

**Instructor's Note:** While participants are writing the menu, reorganize the sticky notes from the first activity into subgroups.

**SAY:** When you are done, please stand up and remain standing until all are standing. Use this as a quick chance to stretch.

Everyone is done; you may sit down. Please keep your lunch menu planning form handy as you will use it throughout the training.

**SHOW SLIDE: Food Buying Guide for Vegetables**

**SAY:** Any volume of a vegetable that is less than  $\frac{1}{8}$  cup does not credit toward the vegetables requirement, with these exceptions: tomato paste or tomato purée. Both are concentrated forms of tomatoes typically used as ingredients in a recipe. One tablespoon of tomato paste and two tablespoons tomato purée credit as  $\frac{1}{4}$  cup toward the red/orange subgroup.

**SHOW SLIDE: ICN's iLearn Food Buying Guide Series**

**SAY:** The [Recipe Analysis Worksheet \(RAW\)](#), which is part of the Food Buying Guide, is useful for determining crediting for recipes. [ICN's iLearn](#) offers a three-part series on the Food Buying Guide; the RAW is module 2.2.

**SHOW SLIDE: Crediting Specific to Vegetables**

**SAY:** A great resource is the [Crediting Vegetables in Child Nutrition Programs Tip Sheet](#) and the link for it is in your Participant's Workbook Additional Resources section.

Beans and peas (legumes) require special attention for crediting. This subgroup refers to dry mature beans, lentils, and split peas (canned, dried, or frozen). Wax beans and green peas are not part of this subgroup. Bean and peas (legumes) can credit toward either the vegetables or the meats/meat alternates component. However, they can only credit toward one meal component in a daily menu, not both. You will find beans and peas (legumes) listed in both the vegetables and meats/meat alternates sections of the Food Buying Guide.

**SHOW SLIDE: Crediting Specific to Vegetables (cont'd)**

**SAY:** And, as mentioned earlier, to be creditable, vegetable juice must be pasteurized, 100% vegetable juice. Full-strength vegetable juice blends that contain vegetables from the same subgroup may contribute toward that vegetable subgroup. Vegetable juice blends containing vegetables from more than one subgroup may credit as additional vegetables. Vegetable juice may credit toward up to half of the vegetables at lunch weekly, provided all subgroups are met. Like fruits, vegetables blended in smoothies may credit toward the vegetables component and count toward the weekly juice limit.

**SHOW SLIDE: Activity Menu Sample for Vegetables Daily, Weekly, and Subgroup Weekly Required Serving Amounts**

**DO: Activity:** Vegetables Component – Menu Planning Form

**Purpose:** Participants will categorize vegetables listed for each menu day by their subgroup.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 10 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

**SAY:** Let's look at the sample menu that meets daily and weekly minimum serving requirements for grades 9–12 and review it for meeting weekly subgroup requirements.

I would like each table of participants to review one day's menu of vegetable choices and determine the subgroups. The handout on vegetable subgroups in your participant workbook may be helpful. Please spend 5 minutes making the determinations, including the amount and subgroup, and be ready to tell the group what to write in the subgroups boxes on the menu.

**DO:** Assign each table a day of the menu and allow 1 minute for each table of participants to determine subgroups.

**ASK:** What subgroups are on the menu for Monday?

**DO:** As each table shares answers, advance the information on the slide to display to the entire class. Remind participants to write the subgroups with serving amounts on their lunch menu in the appropriate space for all days.

**FEEDBACK:** Responses should include dark green and red/orange.

**DO:** Repeat for Tuesday through Friday

**SHOW SLIDE:** *Activity Vegetable Subgroups on Menu*

**SAY:** The menu on this slide is color-coded to help you see the different vegetable subgroups. Notice that this menu meets the weekly subgroup  $\frac{1}{2}$  cup requirements for dark green, starchy, and beans/peas (legumes) with choices on Monday through Wednesday. The  $1\frac{1}{4}$  cups of red/orange vegetables are provided when the menu items from that subgroup are totaled for the same days (squash, baby carrots, red pepper, and tomato). The required  $\frac{3}{4}$  cup of the other vegetable subgroup is exceeded by the 1 cup total on Thursday's menu. The vegetable subgroups on Friday's menu bring the weekly total to 5 cups. The vegetable choices this day could be from any subgroup because the first 4 days meet the weekly subgroup requirements.

**DO:** Show the participants their favorite vegetables organized by subgroup. Comment on the variety within each subgroup and vegetables that do not appear on the sample lunch menu.

**FEEDBACK:** Engage participants in a short discussion of the favorites listed, spending 2–3 minutes for their observations or comments.

**SAY:** Our last activity for the vegetables component is to make changes to the menu and maintain the meal pattern requirements for all components, including the vegetable subgroups. The color-coded menu for vegetable subgroups appears on the worksheet for our next activity.

**DO: Activity:** Meeting Subgroups with Menu Substitutions

**Purpose:** Participants will complete the menu with appropriate substitutions in the vegetable subgroups.

**Materials Needed:** Vegetable Subgroup Menu Substitutions worksheet, Vegetable Subgroups handout, pen or pencil for each participant

**Time:** 7 minutes

**Instructor's Note:** The Vegetable Subgroup Menu Substitutions worksheet and the Vegetable Subgroups handout are located at the end of this lesson.

**SAY:** An important part of menu planning is making appropriate substitutions when a food item is not available or unpopular with students. Our next activity provides an opportunity to determine how to change vegetable food items and maintain vegetable subgroup requirements across the menu week.

Turn back to the Vegetable Subgroup Menu Substitutions worksheet we previously worked on. Also, locate the Vegetable Subgroup page for reference.

The Vegetable Subgroup Menu Substitutions worksheet is partially completed. The vegetables that meet the subgroup criteria for dark green, starchy, and beans/peas (legumes) are listed. Select one vegetable from the red/orange subgroup and one vegetable from the other subgroup, and write each on the corresponding sections of the worksheet.

Then, look at the vegetable subgroup list and find two different vegetables you could use on the menu as substitutes. Be sure to specify the vegetable serving size.

The outcome of this activity is for you to answer this question: What could you substitute on the menu to maintain the weekly total for each vegetable subgroup and the total weekly vegetable requirement? For a list of possible answers, refer to the Vegetable Subgroups handout.

Start with two food items on the menu that seem the most realistic for you to change. If you have time, complete the form for all five subgroups and list 2 or 3 choices for each.

**DO:** Give participants 3 minutes total to work on substitutions by filling out the worksheet. Ask participants to share their choices by subgroup and confirm correct substitutions.

**FEEDBACK:** Emphasize that raw leafy greens credit at half the volume served. For example, if substituting chopped romaine for  $\frac{1}{2}$  cup of broccoli, 1 cup of chopped romaine is required to credit as  $\frac{1}{2}$  cup of the dark green subgroup. Limit discussion to about 4 minutes.

**SHOW SLIDE:** *Salad Bar Example*

**SAY:** As mentioned at the beginning of this section, there are many correct ways to meet the meal pattern requirements for the vegetables component. Another approach is offering a salad bar that meets the daily and weekly minimum serving amounts. The handout Salad Bar Example for Meeting Vegetable Subgroups Across the Menu Week in the Participant's Workbook shows another example. We will not be covering that resource in this training; it is provided for your review.

**Instructor's Note:** The Salad Bar Example for Meeting Vegetable Subgroups Across the Menu Week handout is located at the end of this lesson.

## CONCLUSION

**SHOW SLIDE:** *Vegetables Component Wrap Up*

**SAY:** This brings our review of the vegetables component to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the vegetables component?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

**SHOW SLIDE:** *Vegetables Component Summary*

**SAY:** In summary, the vegetables component meal pattern guidance is

- At lunch, provide at least  $\frac{3}{4}$  cup daily for grades K–5, 6–8, and 1 cup daily for grades 9–12.
- Meet the weekly subgroup requirements.
- Credit raw leafy greens at half the volume.
- Credit beans and peas (legumes) as a vegetable or as a meats/meat alternates, but not both for the same food item on the menu.
- Limit 100% vegetable juice to half or less of vegetables component weekly, including vegetables credited in smoothies.
- The smallest creditable amount for the vegetables component is  $\frac{1}{8}$  cup.

The next component is grains.

### Vegetable Subgroups Handout

Vegetables are nutritional powerhouses! Different vegetables provide different nutrients for good health. To make sure that students receive a variety of vegetables in school meals, the Meal Pattern requires menu planners to offer vegetables from five subgroups: dark green, red/orange, beans and peas, starchy, and other vegetables. The term “additional vegetable” refers to vegetables that help provide weekly totals of the requirement but do not credit toward a subgroup.

<p><b>Dark Green Vegetables</b></p> <ul style="list-style-type: none"> <li>• Bok choy</li> <li>• Broccoli</li> <li>• Collard greens*</li> <li>• Dark green leafy lettuce*</li> <li>• Kale*</li> <li>• Mesclun*</li> <li>• Mustard greens*</li> <li>• Romaine lettuce*</li> <li>• Spinach*</li> <li>• Turnip greens*</li> <li>• Watercress*</li> </ul>	<p><b>Red/Orange Vegetables</b></p> <ul style="list-style-type: none"> <li>• Acorn squash</li> <li>• Butternut squash</li> <li>• Carrots</li> <li>• Hubbard squash</li> <li>• Pumpkin</li> <li>• Red peppers</li> <li>• Sweet potatoes</li> <li>• Tomatoes</li> <li>• Tomato juice</li> </ul>	<p><b>Other Vegetables</b></p> <ul style="list-style-type: none"> <li>• Artichokes</li> <li>• Asparagus</li> <li>• Avocado</li> <li>• Bean sprouts</li> <li>• Beets</li> <li>• Brussels sprouts</li> <li>• Cabbage</li> <li>• Cauliflower</li> <li>• Celery</li> <li>• Cucumbers</li> <li>• Eggplant</li> <li>• Green beans</li> <li>• Green bell peppers</li> <li>• Iceberg (head) lettuce*</li> <li>• Mixed vegetable juice</li> <li>• Mushrooms</li> <li>• Okra</li> <li>• Onions</li> <li>• Turnips</li> <li>• Wax beans</li> <li>• Zucchini</li> </ul>
<p><b>Starchy Vegetables</b></p> <ul style="list-style-type: none"> <li>• Cassava</li> <li>• Corn</li> <li>• Fresh cowpeas, field peas, or black-eyed peas (not dry)</li> <li>• Green bananas</li> <li>• Green peas</li> <li>• Green lima beans</li> <li>• Potatoes</li> <li>• Taro</li> <li>• Water chestnuts</li> </ul>	<p><b>Beans and Peas (Legumes)</b></p> <ul style="list-style-type: none"> <li>• Black beans</li> <li>• Black-eyed peas (mature, dry)</li> <li>• Edamame (immature soy beans)</li> <li>• Garbanzo beans (chickpeas)</li> <li>• Kidney beans</li> <li>• Lentils</li> <li>• Navy beans</li> <li>• Pinto beans</li> <li>• Soy beans</li> <li>• Split peas</li> <li>• White beans</li> </ul>	

\*Raw leafy greens (including iceberg lettuce) credit for half the volume; ½ cup credits as ¼ cup.

### Vegetable Subgroup Menu Substitutions Handout

The menu below meets the vegetable subgroup weekly requirements along with daily and weekly vegetable minimum serving amounts. The purpose of this worksheet is to determine appropriate substitutions on a menu that maintain vegetable subgroup criteria for the menu week.

½ cup Broccoli	½ cup Carrots (baby or sticks)	¾ cup* Tossed Salad (½ cup Iceberg Lettuce and ¼ cup Red Pepper and Tomato)	½ cup Cauliflower Florets	½ cup Celery and Jicama Sticks
½ cup Baked Acorn Squash	½ cup Oven Fries	½ cup Refried Beans	½ cup Green Beans	½ cup Carrot Slices
Subgroups: ½ c Dark Green ½ c R/O	Subgroups: ½ c R/O ½ c Starchy	Subgroups: ¼ c Other ¼ c R/O ½ c Beans/Peas	Subgroups: ½ c Other ½ c Other	Subgroups: ¼ c Other ¼ c Starchy ½ c R/O

\*Raw leafy greens (including iceberg lettuce) credit for half the volume; ½ cup credits as ¼ cup.

**Instructions:** Complete the two blank sections of the top line with your choices from the menu for the subgroup. You can imagine that the food item is not available (supply chain issues or food safety recall), the food item is not popular, or another reason for the need to change the food item. Next, write the serving size and vegetable choice to substitute for each vegetable food item.

Dark Green	Starchy	Beans/Peas	Red/Orange	Other
½ c Broccoli (raw)	½ c Oven Fries	½ c Refried Beans		
Substitutions that would maintain weekly subgroups and daily and weekly minimum serving amounts				

### Salad Bar Example for Meeting Vegetable Subgroups Across the Menu Week

Planned serving amounts for a sample salad bar to meet weekly subgroup requirements for K–8 and 9–12

Subgroup and Requirement per Week by Grade Group	Monday	Tuesday	Wednesday	Thursday	Friday	Planned Weekly Totals of Creditable Vegetables
Dark Green* ½ cup K–8 ½ cup 9–12	¼ cup romaine*	⅛ cup broccoli	¼ cup baby spinach*	⅛ cup broccoli	¼ cup spinach romaine blend*	⅝ cup* (creditable)
Red/Orange ¾ cup K–8 1¼ cup 9–12	¼ cup carrots	¼ cup red pepper	¼ cup grape tomatoes	¼ cup carrots	¼ cup raw sweet potato	1¼ cup
Beans/Peas ½ cup K–8 ½ cup 9–12	⅛ cup black beans	⅛ cup kidney beans	⅛ cup garbanzo beans	⅛ cup black beans	⅛ cup garbanzo beans	⅝ cup
Starchy ½ cup K–8 ½ cup 9–12	⅛ cup jicama	⅛ cup chilled corn	⅛ cup green peas	⅛ cup jicama	⅛ cup potato salad	⅝ cup
Other** ½ cup K–8 ¾ cup 9–12	⅛ cup cucumber	¼ cup iceberg*	⅛ cup cauliflower	¼ cup iceberg*	⅛ cup celery	⅝ cup** (creditable)
Total Creditable Vegetable per Day	¾ cup	¾ cup	¾ cup	¾ cup	¾ cup	3 ¾ cup

\*Raw leafy greens (including iceberg lettuce) credit for half the volume; ¼ cup credits as ⅛ cup.

\*\*Other vegetable subgroup requirements may be met with any additional amounts from the dark green, red/orange, and beans and peas vegetable subgroups.

For the sample salad bar plan above, the last student in the line must have access to at least the minimum planned serving amount of each subgroup each day (or at least 3 days for red/orange at K–8 level). This ensures the bar provides the required weekly subgroup totals across the menu week. Students will select vegetables from the variety available and have the opportunity to create different salad options each day. Staff will record leftovers after the end of meal service on the production record.

This example is one way to use a salad bar to meet vegetable subgroup requirements. You will decide which approach works best for your students, staff, food budget, and menu variety. You may find another approach that meets the guidance, such as:

- Using fewer daily choices with larger planned serving amounts
- Planning a different combination of foods than in the example
- Creating grade group-specific salad bars
- Combining options for some vegetables from the service line and others from a salad bar

Salad bars are a flexible way to meet weekly vegetable subgroup requirements. This flexibility requires that child nutrition staff are trained to recognize creditable amounts and serving volumes that meet requirements, including OVS when implemented.

### **Food Safety Considerations for Salad Bars**

Safe food practices for salad bars focus on preparation and service. Train staff to follow standard operating procedures (SOPs) for handling and preparing fresh produce. A sample SOP for avoiding contamination on salad bars is one of the many SOPs available from the Institute of Child Nutrition (ICN).

# LESSON 4: Grains Component for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 4: Grains Component for the National School Lunch Program*

**SAY:** The next component we will look at is grains.

**ASK:** What are some benefits of serving grains in the NSLP?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SHOW SLIDE:** *Benefits of Grains*

**SAY:** The Dietary Guidelines note the importance of whole grains as part of an overall healthy eating pattern. Whole grains are a source of nutrients, such as dietary fiber, iron, zinc, manganese, folate, magnesium, copper, thiamin, niacin, vitamin B6, phosphorus, selenium, riboflavin, and vitamin A.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the grains component crediting requirements and the minimum serving size to meet the meal pattern requirements for the NSLP. Particularly, we will cover types of grains and good practices for planning menus with grains.

**Objective:** Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.

**SHOW SLIDE:** *Grains Component Requirements*

**SAY:** When planning menus to meet the grains component, there are a few things to consider:

- What types of grains credit toward the grains component?
- What is the minimum amount of creditable grains that need to be served daily and weekly to meet meal pattern requirements for the grains component?
- How much of the creditable grains in the weekly menu must be whole grain-rich?
- Which grain products count as whole grain-rich?

**SHOW SLIDE: Grains: Types of Ingredients**

**SAY:** The following types of ingredients are considered creditable grains in Child Nutrition Programs:

- Whole grains (i.e., whole wheat, whole-wheat meal/flour, brown rice, rolled oats, whole corn)
- Enriched grains (i.e., Enriched wheat meal/flour, enriched rice)
- Bran or germ can be used to meet the enriched grain requirements in Child Nutrition Programs
- Note: nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa, and masa harina are considered whole grain when evaluating products for meal requirements. These ingredients are processed in a way that increases the bioavailability of certain nutrients so they have a nutritional profile similar to whole corn.

**SHOW SLIDE: Grains: Food Examples**

**SAY:** Foods that contribute to the grains requirement in all Child Nutrition Programs include the following items when made from above specified ingredients but are not limited to:

- Breads, biscuits, bagels, rolls, tortillas, crackers, and cereal grains (cooked)
- Ready-to-eat (RTE) breakfast cereals
- Cereals or bread products that are used as an ingredient in another menu item
- Macaroni, pasta, noodle products (cooked)
- Grain-based desserts (limited to 2 oz. eq. per week)
- Non-sweet snack food products, like hard pretzels, hard bread sticks, and tortilla chips

**SHOW SLIDE: Grains: Daily and Weekly Required Minimums**

**SAY:** Grains have both daily and weekly required minimum serving amounts which vary by meal type and grade group. This slide summarizes daily and weekly required minimum serving amounts for grains. We will focus on the grade group 9–12 lunch menu requirements during our activities in this segment of the training.

**SHOW SLIDE: Grain-Based Desserts**

**SAY:** Grain-based desserts can be included at lunch, but not to exceed 2 oz eq total per week. Exhibit A denotes specific grain products that credit as grain-based desserts. A grain-based dessert may be whole grain-rich or made with enriched grains. Grain-based desserts count toward the weekly dietary specifications. Grain-based desserts cannot count toward the grains component in the NSLP/SBP infant and preschool meals. Some examples of grain-based desserts are brownies, cakes, cookies, and pastries.

**SHOW SLIDE: Crediting Criteria for Grains Component**

**SAY:** The following criteria are to be used as a basis for crediting items to meet the grains requirement in the Child Nutrition Programs:

- Creditable grain items are made from grains that are whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or an enriched product, such as enriched bread, or a fortified cereal.
- Some enriched grain products that are being blended with whole-grain ingredients must meet the Food and Drug Administration's Standards of Identity (21 CFR Part 136, Part 137, Part 139) for enriched bread, macaroni and noodle products, rice, or cornmeal.

**SHOW SLIDE: Crediting Criteria for Grains Component (cont'd)**

**SAY:** For School Meal Programs:

- Grains are measured by weight and use ounce equivalent (oz eq) standards to designate the contribution a given serving size makes toward the grains component. Therefore, grain products served must be credited based on oz eq standards. An ounce equivalent is the amount of a grain product that is considered equal to (or contains) 1 ounce creditable toward the grains component. One-quarter ounce equivalent (0.25 oz eq) is the smallest amount allowable to be credited toward the grains requirement as specified in program regulations.

**SHOW SLIDE: Crediting Criteria for Grains Component (cont'd)**

**SAY:**

- At least 80% of the weekly grains offered must meet the whole grain-rich criteria, meaning they are:
  - ▶ 100% whole grain; or contain a blend of whole-grain ingredients and enriched grain ingredients (whole-grain meal and/or whole-grain flour blended with enriched meal and/or enriched flour), of which at least 50% is whole grain.

**SHOW SLIDE: Crediting Criteria for Grains Component (cont'd)**

**SAY:**

- The remaining grain items offered weekly must be made from grains that are bran, germ, or enriched meal and/or flour.
  - ▶ Bran and germ can be used to meet the enriched grains requirements.
- Up to 2.0 oz eq grains per week may be credited in the form of a grain-based dessert.
- Note that non-creditable grains in products at very low levels used as processing aids are limited to 2 percent or less of the product formula by weight or less than 0.25 oz eq.

**SHOW SLIDE: Crediting Grains Example**

**SAY:** For example, for the 9–12 grade group meal pattern, a minimum of 10 oz eq of grains per week are required. If the minimum servings are offered on the menu, 8 of the 10 servings must be whole grain-rich. The other 2 servings must be enriched.

A great resource for even more information on whole grains is Team Nutrition's [The Whole Grain Resource for the National School Lunch and Breakfast Program](#).

**SHOW SLIDE: Food Buying Guide for Child Nutrition Programs Exhibit A**

**SAY:** Breads, cereals, muffins, crackers, pasta, etc. all contribute differently to the grains requirement based on the weight of each product. The *Food Buying Guide for Child Nutrition Programs' Exhibit A* (Attachment A) provides a general guideline for crediting prepared grain items. It is the most important tool for determining how different grain foods contribute to the ounce equivalence requirement. For this training, we will use Exhibit A to determine the ounce equivalents of various products. You have a copy in your Participant's Workbook.

Let's review two foods listed on Exhibit A to recall how ounce equivalents are determined. Exhibit A provides serving information in both grams and ounces. This allows you to use a food label or a kitchen scale to verify the crediting amount of grains product.

**SHOW SLIDE: Exhibit A Group B and Group E Examples**

**SAY:** Our two examples are Bread, which you can find in Group B, and French toast, which you can find in Group E.

An ounce equivalent for bread is 28 grams or 1 ounce. An ounce equivalent for French toast is 69 grams or 2.4 ounces.

**ASK:** How is wheat bread made?

**DO:** Allow participants time to respond.

**FEEDBACK:** Whole grain or enriched wheat flour, yeast, salt, and water are the usual ingredients. By weight, most of the product consists of grains.

**ASK:** How is French toast made?

**DO:** Allow participants time to respond.

**FEEDBACK:** Bread is dipped in an egg and milk mixture; it is cooked on a griddle with a small amount of oil. Part of the product weight includes milk, egg, and oil.

**ASK:** Why is the ounce equivalent product weight different for bread compared to French toast?

**DO:** Allow participants time to respond.

**FEEDBACK:** The weight of the creditable grain in the bread product is only the wheat flour—not the other ingredients (yeast, salt, water, etc.). More French toast needs to be offered to provide the same amount of grains as the piece of bread.

**SHOW SLIDE: Exhibit A Group H and Group I Examples**

**SAY:** Notice that for Groups H and I, a volume measure is included for items usually served by volume. The Food Buying Guide provides information on dry product yields for ounce equivalents for grains.

For grain items in Group H of Exhibit A, the volumes or weights listed in the chart can be used to meet grains requirements. For example, a ½ cup of cooked brown rice or enriched rice is equal to

1.0 oz eq of whole grain or enriched grain, respectively.

As another example, if dry pasta includes a blend of whole-grain flour and enriched flour, the whole-grain content must be at least 14 grams of whole-grain flour out of the standard 28 grams of creditable grains per oz eq. The remaining 14 grams of flour must be enriched. This information may be determined from information provided on the product packaging or by the manufacturer, if available. If any non-whole grains (refined grains) are included, they must be enriched.

**SHOW SLIDE: Other Crediting Information for Grains**

**SAY:** Other tools to determine ounce equivalents for products containing grains include Product Formulation Sheets, Child Nutrition labels, and the Recipe Analysis Worksheet.

USDA Foods in Schools Product Information Sheets: In your materials, there are three USDA Fact Sheets for Brown Rice, Macaroni, and Tortilla. Each fact sheet has a credit contribution, 1 ounce dry or ½ cup cooked rice or macaroni credits as 1 oz eq grains, one 8-inch whole tortilla credits 1.5 oz eq of grains.

Manufacturers often provide a Product Formulation Sheet (PFS) to calculate the crediting contribution for products using the Food Buying Guide. The Participant's Workbook provides an example of a Product Formulation Sheet for a bun, showing that the bun is 56 grams and provides 2 oz eq of grains. The ICN's iLearn portal offers a module on Product Formulation Statements. You can find it in Module 3 of the Food Buying Guide series.

Child Nutrition (CN) labels will be covered in the section on meats/meat alternates.

Note: USDA Foods in Schools Product Information Sheets only applies if a school is using these specific USDA Foods. The PFS and CN Labels apply to all programs; the RAW applies to schools that cook.

The Recipe Analysis Worksheet or RAW in the USDA Food Buying Guide is a tool you can use to determine the component contributions of your program's recipes. As mentioned earlier, ICN's iLearn portal offers a module on the RAW as part of the Food Buying Guide series.

**ASK:** Has anyone used any of these three tools? Would anyone like to share how you have used them?

**DO:** Accept all responses as there are no right or wrong answers.

**SHOW SLIDE: Whole Grain-Rich Criteria**

**SAY:** Eighty percent of the amount of grains served per week must be whole grain-rich. Whole grain-rich foods are those that contain 100% whole grain or at least 50% whole grain meal and/or flour. Any remaining meal/flour must be enriched, bran, or germ.

Any one of the following items can be used to determine if a food meets the whole grain-rich criteria.

**SHOW SLIDE: Whole Grain-Rich Criteria (cont'd)****SAY:**

1) For grain items in Exhibit A, Groups A–G, the whole-grain content per oz eq must be at least 8.0 grams or more. For grain items in Groups H and I, the whole-grain content must be at least half of the volume or weight listed in the chart for the grain item you want to serve. This information may be determined from information provided on the product packaging or by the manufacturer, if available.

Also, if a grain product contains a meat/meat alternate, manufacturers may apply for a Child Nutrition (CN) label to indicate the oz eq of grains in a food product.

**SHOW SLIDE: Whole Grain-Rich Criteria (cont'd)****SAY:**

2) The product includes one of the following FDA approved whole-grain health claims on its packaging:

a) “Diets rich in whole grain foods and other plant foods, and low in total fat, saturated fat, and cholesterol, may reduce the risk of heart disease and certain cancers.”

**OR**

b) “Diets rich in whole grain foods and other plant foods, and low in saturated fat and cholesterol, may help reduce the risk of heart disease.”

**SHOW SLIDE: Whole Grain-Rich Criteria (cont'd)****SAY:**

3) Whole grains are the primary grain ingredient by weight. Specifically:

a) Non-mixed dishes (e.g., breads, cereals): A whole grain is the first ingredient listed on the product ingredient declaration (with the exception of water) or multiple whole grains are the primary ingredient by weight, and non-creditable grains, if any, are present in an insignificant amount (<2% by weight).

Note: ingredients are listed in descending order of predominance by weight, which means that the ingredient that weighs the most is listed first, and the ingredient that weighs the least is listed last.

When a whole grain is not listed as the first ingredient, the primary ingredient by weight may be whole grains if there are multiple whole-grain ingredients and their combined weight is more than the weight of the other ingredients. These products could meet the whole grain-rich criteria with proper manufacturer documentation. For example, a bread item may include three grain ingredients: enriched wheat flour (40% grain), whole-wheat flour (30% grain), and whole oats (30% grain). The Program operator, with the assistance of the manufacturer, could determine that the whole grains are the primary ingredient by weight because the combined 60% whole-grain ingredients (whole-wheat flour and whole oats) are greater than the enriched wheat flour at 40%, even though the enriched flour may be listed first in the ingredient declaration.

- b) Mixed dishes (e.g., pizza, corn dogs): A whole grain is the first grain ingredient listed on the product ingredient declaration, or multiple whole grains together are the primary ingredients by weight. For foods prepared by the school food service, the recipe is used as the basis for calculating whether the total weight of whole-grain ingredients exceeds the total weight of non-whole-grain ingredients.

**SHOW SLIDE: Whole Grain-Rich Criteria (cont'd)**

**SAY:**

- 4) Schools can identify a whole grain-rich product by finding the product on any State agency's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)-approved whole-grain food list.

Any grain product found on a State agency's WIC-approved whole-grain food list meets the whole grain-rich criteria for all Child Nutrition Programs. Program operators can obtain a copy of a State agency's WIC-approved whole-grain food list by contacting the WIC State agency. Please refer to [WIC's State agency contacts](https://www.fns.usda.gov/contacts/contact-map?f%5B0%5D=program%3A32) (<https://www.fns.usda.gov/contacts/contact-map?f%5B0%5D=program%3A32>) for a list of contacts.

In the ingredient declaration of some grain products, a flour blend may be grouped together in parentheses, for example: "Ingredients: flour blend (whole-wheat flour, enriched flour), sugar, cinnamon, etc." In order for these grain products to meet the whole grain-rich criteria (a) the whole-grain content must be at least 8.0 grams per oz eq; or (b) the weight of the whole-grain ingredient(s) in the flour blend must be greater than the weight of the first ingredient listed after the flour blend, such as sugar in the example, as well as the enriched flour.

A ready-to-eat (RTE) breakfast cereal must list a whole grain as the primary ingredient and the RTE cereal must be fortified. RTE breakfast cereals that are 100% whole grain and do not contain other refined grains are not required to be fortified.

If the grain product includes enriched ingredients, or the product itself is enriched, the ingredients or the grain product must meet the FDA's Standards of Identity for enrichment (21 Code of Federal Regulations (CFR) Section 137).

Of the weekly grains requirement for lunch, up to 2.0 oz eq grains may be in the form of a grain-based dessert. While there is no specific definition of a grain-based dessert, Program operators should consider how the product is used in the meal and how children consume the product in determining if it is a grain-based dessert. Common grain-based desserts are cakes, cookies, pies, and sweet rolls. Grain-based desserts listed in Exhibit A are designated with a superscript of 3 or 4.

Please refer to Team Nutrition's [The Whole Grain Resource for the National School Lunch and School Breakfast Programs](https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs) (<https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs>) for more information on the whole grain-rich criteria.

**ASK:** Before we complete the grains for the lunch menu planning form, is there any information about grains you need clarified?

**DO:** Allow participants time to respond.

**FEEDBACK:** Provide appropriate responses, review content, and reinforce correct information as needed.

**ASK:** How does your school nutrition program identify whole grain-rich foods on the menu?

**DO:** Allow participants time to respond.

**FEEDBACK:** Accept all responses, such as using the initials WGR or an asterisk with a notation on the menu.

**SAY:** Please use your usual method for identifying whole grain-rich foods as we complete the grains portion of the lunch menu in the next activity.

**SHOW SLIDE:** **Activity: Grains Component – Menu Planning Form**

**Instructor's Note:** The slide has a blank Menu Planning Form. After discussing the instructions, click for the animation to display the completed form.

**DO: Activity:** Grains Component – Menu Planning Form

**Purpose:** Participants will plan grains that meet the daily and weekly minimum serving requirements as well as the whole grain-rich weekly requirement. Participants will notate which items on the menu are whole grain-rich.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 8 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

The chart from Exhibit A, the USDA Food Fact Sheets for Rice and Tortilla along with the Product Formulation Statement for Bun is located at the end of this lesson.

**SAY:** We are going to do an activity to plan our grains for our menus. For the grains servings on your Lunch Menu Planning Form, we will use the minimum daily and weekly serving amounts for grades 9–12. The grain items to record on the menu are pasta, bun, tortilla, rice, and pizza crust in that order Monday to Friday.

**SHOW SLIDE:** **Grains Menu Choices**

**SAY:** If you choose not to offer a 2 ounce equivalent serving of each, you must add another grain item that will bring each daily total to 2 oz eq.

Please use the resources on grains crediting we have reviewed in the training, Exhibit A, the USDA Food Fact Sheets for Rice and Tortilla, and the Product Formulation Statement for Bun to determine crediting and serving amounts. You can use 2 oz eq for the Pizza Crust—you will see a CN Label with that information in the next section.

Remember to indicate which grains on your menu are whole grain-rich.

**DO:** Give participants time to review the resources and assist as needed. Explain that participants need to decide the number of ounce equivalents for each grain item on the menu, identify

any additional grains, serving amounts, and which grain items are whole grain-rich. Provide information and clarification to any questions participants ask.

**ASK:** What grain items did you add to the menu in addition to the five you were provided? Which grain items did you choose to serve as enriched rather than whole grain-rich? Did anyone plan a whole grain-rich version of rice? How did you indicate whole grain-rich on the menu?

**DO:** Allow 3 minutes to discuss options participants used on menus.

**FEEDBACK:** Provide reinforcement for menu choices, using two 1 ounce equivalent servings such as a 1.5 oz eq flour tortilla and 0.5 ounce tortilla chips for a total of 2 oz eq. Note that brown rice is 100% whole grain.

**SHOW SLIDE:** *Whole Grain-Rich Criteria – Special Circumstances*

**SAY:** If you plan menus with more than the minimum required number of servings, you need to ensure the 80% whole grain-rich criteria is maintained. An easy way to ensure menus with additional grains meet the 80% criteria is to menu 2 oz eq of whole grain-rich product each week on the menu.

Working with 0.25 oz eq food serving, the smallest amount of creditable grains, is difficult for menu planners, production, and service staff.

## CONCLUSION

**SHOW SLIDE:** *Grains Component Wrap Up*

**SAY:** This brings our review of the grains component to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the grains component?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

**SHOW SLIDE:** *Grains Component Summary*

**SAY:** In summary, the main points to remember when writing menus for grains are:

- Meet daily minimums for each grade group.
- Determine that at least 80% of credited grains are whole grain-rich and the rest should be enriched.
- Meet weekly minimums for each grade group.
- Limit grain-based desserts to 2 oz eq or less weekly for grades K–12. Grain-based desserts are not allowed for preschool aged children (lunch).
- The smallest creditable amount for the grains component is  $\frac{1}{4}$  oz eq.

Often, food items on the menu will be a combination of grains and meats/meat alternates. Let's move on to the final meal component, meats/meat alternates.

### Exhibit A: Grain Requirements For Child Nutrition Programs<sup>1,2</sup>

Color Key: Footnote 5 = Blue, Footnote 3 or 4 = Red

Food Products per Group	Ounce Equivalent (oz eq)	Minimum Serving Size
<b>Group A</b>	<b>Ounce Equivalent (oz eq) for Group A</b>	<b>Minimum Serving Size for Group A</b>
Bread type coating Bread sticks (hard) Chow Mein noodles Savory Crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) <i>Note: weights apply to bread in stuffing</i>	1 oz eq = 22 gm or 0.8 oz 3/4 oz eq = 17 gm or 0.6 oz 1/2 oz eq = 11 gm or 0.4 oz 1/4 oz eq = 6 gm or 0.2 oz	1 serving = 20 gm or 0.7 oz 3/4 serving = 15 gm or 0.5 oz 1/2 serving = 10 gm or 0.4 oz 1/4 serving = 5 gm or 0.2 oz
<b>Group B</b>	<b>Ounce Equivalent (oz eq) for Group B</b>	<b>Minimum Serving Size for Group B</b>
Bagels Batter type coating Biscuits Breads - all (for example sliced, French, Italian) Buns (hamburger and hot dog) Sweet Crackers <sup>5</sup> (graham crackers - all shapes, animal crackers) Egg roll skins English muffins Pita bread Pizza crust Pretzels (soft) Rolls Tortillas Tortilla chips Taco shells	1 oz eq = 28 gm or 1.0 oz 3/4 oz eq = 21 gm or 0.75 oz 1/2 oz eq = 14 gm or 0.5 oz 1/4 oz eq = 7 gm or 0.25	1 serving = 25 gm or 0.9 oz 3/4 serving = 19 gm or 0.7 oz 1/2 serving = 13 gm or 0.5 oz 1/4 serving = 6 gm or 0.2 oz
<b>Group C</b>	<b>Ounce Equivalent (oz eq) for Group C</b>	<b>Minimum Serving Size for Group C</b>
Cookies <sup>3</sup> (plain - includes vanilla wafers) Cornbread Corn muffins Croissants Pancakes Pie crust (dessert pies <sup>3</sup> , cobbler <sup>3</sup> , fruit turnovers <sup>4</sup> , and meats/meat alternate pies) Waffles	1 oz eq = 34 gm or 1.2 oz 3/4 oz eq = 26 gm or 0.9 oz 1/2 oz eq = 17 gm or 0.6 oz 1/4 oz eq = 9 gm or 0.3 oz	1 serving = 31 gm or 1.1 oz 3/4 serving = 23 gm or 0.8 oz 1/2 serving = 16 gm or 0.6 oz 1/4 serving = 8 gm or 0.3 oz
<b>Group D</b>	<b>Ounce Equivalent (oz eq) for Group D</b>	<b>Minimum Serving Size for Group D</b>
Doughnuts <sup>4</sup> (cake and yeast raised, unfrosted) Cereal bars, breakfast bars, granola bars <sup>4</sup> (plain) Muffins (all, except corn) Sweet roll <sup>4</sup> (unfrosted) Toaster pastry <sup>4</sup> (unfrosted)	1 oz eq = 55 gm or 2.0 oz 3/4 oz eq = 42 gm or 1.5 oz 1/2 oz eq = 28 gm or 1.0 oz 1/4 oz eq = 14 gm or 0.5 oz	1 serving = 50 gm or 1.8 oz 3/4 serving = 38 gm or 1.3 oz 1/2 serving = 25 gm or 0.9 oz 1/4 serving = 13 gm or 0.5 oz

1 In the NSLP and SBP (grades K-12), at least eighty percent of the weekly grains offered must meet the whole grain-rich criteria and the remaining grain items offered must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Please note: State agencies have the discretion to set stricter requirements than the minimum nutrition standards for school meals. For additional guidance, please contact your State agency. For all other Child Nutrition Programs, grains must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Under the CACFP child and adult meal patterns, and in the NSLP/SBP preschool meals, at least one grains serving per day must meet whole grain-rich criteria.

2 For the NSLP and SBP (grades K-12), grain quantities are determined using ounce equivalents (oz eq). All other Child Nutrition Programs determine grain quantities using grains/breads servings. Beginning Oct. 1, 2021, grain quantities in the CACFP and NSLP/SBP infant and preschool meals will be determined using oz eq. Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

3 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K-12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

4 Allowable in NSLP (up to 2.0 oz eq grain-based dessert per week for grades K-12) as specified in §210.10. May count toward the grains component in SBP (grades K-12) and at snack and breakfast meals in SFSP. Considered a grain-based dessert and cannot count toward the grains component in the CACFP and NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

5 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K-12) as specified in §210.10. May count toward the grains component in the SBP (grades K-12), CACFP, NSLP/SBP infant and preschool meals, and SFSP.

<b>Group E</b>	<b>Ounce Equivalent (oz eq) for Group E</b>	<b>Minimum Serving Size for Group E</b>
Cereal bars, breakfast bars, granola bars <sup>4</sup> (with nuts, dried fruit, and/or chocolate pieces) Cookies <sup>3</sup> (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts <sup>4</sup> (cake and yeast raised, frosted or glazed) French toast Sweet rolls <sup>4</sup> (frosted) Toaster pastry <sup>4</sup> (frosted)	1 oz eq = 69 gm or 2.4 oz 3/4 oz eq = 52 gm or 1.8 oz 1/2 oz eq = 35 gm or 1.2 oz 1/4 oz eq = 18 gm or 0.6 oz	1 serving = 63 gm or 2.2 oz 3/4 serving = 47 gm or 1.7 oz 1/2 serving = 31 gm or 1.1 oz 1/4 serving = 16 gm or 0.6 oz
<b>Group F</b>	<b>Ounce Equivalent (oz eq) for Group F</b>	<b>Minimum Serving Size for Group F</b>
Cake <sup>3</sup> (plain, unfrosted) Coffee cake <sup>4</sup>	1 oz eq = 82 gm or 2.9 oz 3/4 oz eq = 62 gm or 2.2 oz 1/2 oz eq = 41 gm or 1.5 oz 1/4 oz eq = 21 gm or 0.7 oz	1 serving = 75 gm or 2.7 oz 3/4 serving = 56 gm or 2 oz 1/2 serving = 38 gm or 1.3 oz 1/4 serving = 19 gm or 0.7 oz
<b>Group G</b>	<b>Ounce Equivalent (oz eq) for Group G</b>	<b>Minimum Serving Size for Group G</b>
Brownies <sup>3</sup> (plain) Cake <sup>3</sup> (all varieties, frosted)	1 oz eq = 125 gm or 4.4 oz 3/4 oz eq = 94 gm or 3.3 oz 1/2 oz eq = 63 gm or 2.2 oz 1/4 oz eq = 32 gm or 1.1 oz	1 serving = 115 gm or 4 oz 3/4 serving = 86 gm or 3 oz 1/2 serving = 58 gm or 2 oz 1/4 serving = 29 gm or 1 oz
<b>Group H</b>	<b>Ounce Equivalent (oz eq) for Group H</b>	<b>Minimum Serving Size for Group H</b>
Cereal Grains (barley, quinoa, etc.) Breakfast cereals (cooked) <sup>6,7</sup> Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice	1 oz eq = 1/2 cup cooked or 1 ounce (28 gm) dry	1 serving = 1/2 cup cooked or 25 gm dry
<b>Group I</b>	<b>Ounce Equivalent (oz eq) for Group I</b>	<b>Minimum Serving Size for Group I</b>
Ready to eat breakfast cereal (cold, dry) <sup>6,7</sup>	1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1.25 cups or 1 ounce for puffed cereal 1 oz eq = 1/4 cup or 1 ounce for granola	1 serving = 3/4 cup or 1 oz, whichever is less

- <sup>3</sup> Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K-12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.
- <sup>4</sup> Allowable in NSLP (up to 2.0 oz eq grain-based dessert per week for grades K-12) as specified in §210.10. May count toward the grains component in SBP (grades K-12) and at snack and breakfast meals in SFSP. Considered a grain-based dessert and cannot count toward the grains component in the CACFP and NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.
- <sup>6</sup> Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP; breakfast served in the SBP, and meals served to children ages 1 through 5 and adult participants in the CACFP. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.
- <sup>7</sup> In the NSLP and SBP, cereals that list a whole grain as the first ingredient must be fortified, or if the cereal is 100 percent whole grain, fortification is not required. For all Child Nutrition Programs, cereals must be whole-grain, enriched, or fortified; cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of sugar per dry ounce.



## USDA Foods in Schools

110694 - Tortillas, Whole Grain/Whole Grain-Rich  
 Category: **Grains (Whole Grain)**



### Product Description

- This item is 8-inch wheat tortillas that are made from whole wheat flour or a combination of whole wheat and enriched wheat flour. This product is delivered frozen in cases containing twelve packages, each with 24 tortillas.

### Crediting/Yield

- One case of product yields 288 tortillas.
- CN Crediting: 1 whole grain tortilla credits as 1.5 ounce equivalent of grains.

### Culinary Tips and Recipes

- Whole grain tortillas can be used for deli wraps, burritos, and quesadillas.
- Whole grain tortillas can also be cut up and baked to make a crunchy topping for soup or salad or a baked chip for dipping.
- For culinary techniques and recipe ideas, visit the [Institute of Child Nutrition](#) or [USDA's Team Nutrition](#).

### Food Safety Information

- For more information on safe storage and cooking temperatures, and safe handling practices, please refer to: [Developing a School Food Safety Program Based on the Process Approach to HACCP Principles](#).

Visit us at [www.fns.usda.gov/usda-fis](http://www.fns.usda.gov/usda-fis)

## Nutrition Facts

Serving size: 8" whole grain tortilla

### Amount Per Serving

**Calories** 120

**Total Fat** 3g

Saturated Fat 1.5g

Trans Fat 0g

**Cholesterol** 0mg

**Sodium** 220mg

**Total Carbohydrate** 21g

Dietary Fiber 2g

Sugars 1g

**Protein** 3g

Source: USDA Foods Vendor Labels

**Allergen Information:** Product contains wheat. Please refer to allergen statement on the outside of the product package for vendor-specific information. For more information, please contact the manufacturer directly.

Nutrient values in this section are from the USDA Food Composition Database or are representative values from USDA Foods vendor labels. Please refer to the product's Nutrition Facts label or ingredient list for product-specific information.

September 2015

USDA is an equal opportunity provider, employer, and lender.



United States Department of Agriculture



**USDA Foods  
in Schools**

**100500 - Rice, Brown, Long-Grain, Parboiled**  
Category: **Grains (Whole Grain)**



**Product Description**

- This item is U.S. No. 1 long grain, parboiled brown rice. This product is available in cases containing twenty-four 2-pound bags.

**Crediting/Yield**

- One case yields about 744 ounce equivalents of grain.
- CN Crediting: 1 ounce dry or ½ cup cooked rice credits as 1 ounce equivalent grains.

**Culinary Tips and Recipes**

- Serve rice as a base for dishes such as stews and stir fry or use rice as an ingredient in main dishes such as casseroles, soups, burritos, or fried rice.
- Add herbs, spices, mixed vegetables, or diced tomatoes to rice to make a flavorful side dish.
- For culinary techniques and recipe ideas, visit the [Institute of Child Nutrition](#) or [USDA's Team Nutrition](#).

**Storage Guidelines**

- Product should be stored in a cool, dry place. Recommend storing in a refrigerator or freezer when possible to maximize the shelf life of the product.

**Food Safety Information**

- For more information on safe storage and cooking temperatures, and safe handling practices, please refer to: [Developing a School Food Safety Program Based on the Process Approach to HACCP Principles](#).

Visit us at [www.fns.usda.gov/usda-fis](http://www.fns.usda.gov/usda-fis)

**Nutrition Facts**

Serving size: 1/2 cup (78 g) cooked parboiled brown rice

Amount Per Serving	
<b>Calories</b>	114
<b>Total Fat</b>	1g
Saturated Fat	0g
Trans Fat	0g
<b>Cholesterol</b>	0mg
<b>Sodium</b>	3mg
<b>Total Carbohydrate</b>	24g
Dietary Fiber	1g
Sugars	0g
<b>Protein</b>	2g
Source: <a href="#">USDA FoodData Central</a>	

**Allergen Information:** Please refer to allergen statement on the outside of the product package for vendor-specific information. For more information, contact the product manufacturer directly.

Nutrient values in this section are from USDA FoodData Central or are representative values from USDA Foods vendor labels. Please refer to the Nutrition Facts label or ingredient list for product-specific information.

May 2020

USDA is an equal opportunity provider, employer, and lender.



United States Department of Agriculture



## USDA Foods in Schools

### 110501 - Pasta, Macaroni, Whole Grain-Rich Category: **Grains (Whole Grain)**



#### Product Description

- This item is whole grain-rich macaroni that is made with 51-65% U.S. No. 1 whole durum wheat flour and the remaining grain is enriched flour. This item is available in a 20 pound case.

#### Crediting/Yield

- One case of whole grain-rich macaroni yields about 340 1/2 cup servings of cooked pasta.
- CN Crediting: 1/2 cup cooked or 1 ounce dry macaroni credits as 1 oz. equivalent grains.

#### Culinary Tips and Recipes

- Whole grain-rich macaroni can be used as the grain component in soups, salads, or casseroles. This product can also be served in a more traditional way topped with tomato sauce or cheese sauce.
- For culinary techniques and recipe ideas, visit the [Institute of Child Nutrition](#) or [USDA's Team Nutrition](#).

#### Food Safety Information

- For more information on safe storage and cooking temperatures, and safe handling practices, please refer to: [Developing a School Food Safety Program Based on the Process Approach to HACCP Principles](#).

Visit us at [www.fns.usda.gov/usda-fis](http://www.fns.usda.gov/usda-fis)

#### Nutrition Facts

Serving size: 1/2 cup (59 g) macaroni, whole grain rich, cooked

##### Amount Per Serving

**Calories** 93

**Total Fat** 1g

Saturated Fat 0g

Trans Fat 0g

**Cholesterol** 0mg

**Sodium** 4mg

**Total Carbohydrate** 18g

Dietary Fiber 3g

Sugars 0g

**Protein** 3g

Source: [USDA FoodData Central](#)

**Allergen Information:** Please refer to allergen statement on the outside of the product package for vendor-specific information. For more information, contact the product manufacturer directly.

Nutrient values in this section are from the USDA FoodData Central or are representative values from USDA Foods vendor labels. Please refer to the Nutrition Facts label or ingredient list for product-specific information.

May 2020

USDA is an equal opportunity provider, employer, and lender.

# B4S 3.5" Hamburger Bun made with Whole Grains, Sliced

**Material Number:** 99832050  
**Pack:** 10/12pk  
**Gross Weight:** 18.00 lbs.  
**Net Weight:** 15.00 lbs.  
**Cube:** 2.20  
**Case Dimensions:** 22.375" X 19.375" X 8.750  
**Cases per layer:** TI 4  
**Layers per Pallet:** HI 9  
**Cases per Pallet:** 36  
**Frozen Shelf Life:** 270 days  
**Shelf Life after Thaw:** 5-7 days  
**UPC Code:** 0-00-70210-03205-4

**INGREDIENT LABELING INFORMATION**

WATER, WHOLE WHEAT FLOUR, UNBLEACHED ENRICHED FLOUR (WHEAT FLOUR, MALTED BARLEY FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), SUGAR, WHEAT GLUTEN, YEAST, CONTAINS 2% OR LESS OF EACH OF THE FOLLOWING: SOYBEAN OIL, SALT, CULTURED WHEAT FLOUR, MONOCALCIUM PHOSPHATE, SESAME FLOUR, ENZYMES, ASCORBIC ACID, SOY LECITHIN

CONTAINS: WHEAT, SOY, SESAME

**CLAIMS:**

1 SERVING = 2 CN (16 g) BREAD SERVINGS  
 51% WHOLE GRAIN  
 WHOLE GRAIN RICH  
 16 g OF WHOLE GRAINS PER SERVING  
 NO HIGH FRUCTOSE CORN SYRUP

<b>Nutrition Facts</b>	
12 Servings per container	
<b>Serving Size: 1 Bun (63 g / 2.2 oz)</b>	
Amount per serving	
<b>Calories</b>	<b>150</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 1.5g	2%
Saturated Fat 0g	0%
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 0g	
<b>Cholesterol</b> 0mg	0%
<b>Sodium</b> 240mg	11%
<b>Total Carbohydrate</b> 30g	11%
Dietary Fiber 2g	8%
Total Sugars 4g	
Includes 4g Added Sugars	8%
<b>Protein</b> 7g	
Vitamin D 0.6mcg	2%
Calcium 50mg	4%
Iron 1.7mg	10%
Potassium 110mg	2%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	
Calories per gram:	
Fat 9 - Carbohydrate 4 - Protein 4	

# LESSON 5: Meats/Meat Alternates Component for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 5: Meats/Meat Alternates Component for the National School Lunch Program*

**SAY:** The next component we will look at is meats/meat alternates.

**ASK:** What are some benefits of serving meats/meat alternates in the NSLP?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SHOW SLIDE:** *Benefits of Meats/Meat Alternates*

**SAY:** The meats/meat alternates component includes animal and plant-based foods that are good protein sources. Proteins are the building blocks of life, important for growth and development. Most foods in this group also provide iron, zinc, magnesium, and B-vitamins.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the meats/meat alternates component crediting requirements and the minimum serving size to meet the meal pattern requirements for the NSLP. Particularly, we will cover types of meats/meat alternates and good practices for planning menus with meats/meat alternates.

**Objective:** Identify the meats/meat alternates component choices, serving size requirements, and how to credit meats/meat alternates toward meeting meal pattern requirements for the NSLP.

**SHOW SLIDE:** *Meats/Meat Alternates Component*

**SAY:** Meats/meat alternates are measured in oz eq. An oz eq of meats/meat alternates is the amount of the food that represents 1 ounce of edible portion of lean meat without the bone.

Foods in the meats/meat alternates component include:

- Fresh and frozen meats (lean beef, pork, poultry, fish, shellfish, etc.)
- Processed meats (beef crumbles, chicken tenders/nuggets, deli meats, fish patties/sticks, etc.)
- Canned meats (chicken, tuna, salmon, etc.)
- Meat alternates (cheese, eggs, yogurt, nuts/seeds and their butters, beans and peas (legumes) tofu, etc.)

The NSLP has daily minimum requirements for M/MAs as well as weekly minimums at lunch, depending on the grade level. Like grains, creditable servings of meats/meat alternates are measured by weight using ounce equivalents. Use the FBG to determine the amount of raw meat needed for an oz eq; it may be more than an ounce cooked by weight.

In order for a food to contribute to the meats/meat alternates component, it must contain a minimum of 0.25 oz eq of a meat/meat alternate.

Program operators are encouraged to:

- Serve a variety of lean protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
- Limit servings of processed meats and poultry to limit sodium intake
- Serve only natural cheeses and choose lower sodium low-fat or reduced-fat cheeses.

**SHOW SLIDE: Meats/Meat Alternates Component Serving**

**SAY:** The required minimum serving size varies by grade group. Let's look at the meal pattern chart. For the 9–12 grade group, the daily minimum required serving amount only meets the weekly minimum required serving size.

**ASK:** What would happen if you planned just the required daily serving size of meats/meat alternates for each day on the K–5 menu?

**DO:** Encourage participants to respond.

**FEEDBACK:** Response should be that weekly minimums would not be met.

**SAY:** NSLP has daily minimum requirements for M/MAs as well as weekly minimums and maximums at lunch, depending on grade level. Schools may exceed the weekly maximum for M/MAs, provided that meals (on average) meet the weekly dietary specifications for calories, saturated fat, sodium, and *trans* fat. With the meats/meat alternates component, it is important to plan not just to meet the daily minimum but also the weekly minimums.

**SHOW SLIDE: Crediting Meats/Meat Alternates**

**SAY:** A great resource is the [Crediting Meats/Meat Alternates in Child Nutrition Programs Tip Sheet](#) and the link for it is in your Participant's Workbook Additional Resources section.

For many M/MA choices, cooking losses occur when the raw product is cooked for service. Use the M/MA section of the FBG to find the amount of uncooked product required to yield the cooked amounts needed for food production. The minimum creditable amount for meats/meat alternates is 0.25 oz eq. There are two ways in which you can determine crediting information for meats/meat alternates:

- Use manufacturer's documentation of the product (i.e., Child Nutrition (CN) label, signed Product Formulation Statement, or USDA Foods in Schools Product Information Sheets). Many 1.0 oz meat products do not credit as 1 oz meats/meat alternates because many factors can affect yield, including processing, cooking method and time, and the form in which you serve the food (e.g., added ingredients).

- Use the Food Buying Guide.
  - Some food items containing M/MA may not be listed in the Food Buying Guide for Child Nutrition Programs (FBG); however, they still may be creditable with proper documentation, such as a Child Nutrition (CN) label or Product Formulation Statement (PFS).

**SHOW SLIDE: Crediting Nuts and Seeds**

**SAY:** Nuts and seeds can provide up to half of the meats/meat alternates requirement at a meal, but not the full required serving amount. However, nut and seed butters can provide the full serving amount of meats/meat alternates in a meal.

**SHOW SLIDE: Child Nutrition (CN) Label**

**SAY:** A CN label identifies a product's contribution toward the meal pattern requirements. These are often found on processed food products and combination foods.

The [CN Labeling Program](https://www.fns.usda.gov/cn/labeling-program) is a voluntary Federal labeling program for CNPs. A CN label identifies the contribution of a product toward the meal pattern requirements. Main dishes that contribute at least 0.5 oz eq per serving to the M/MA meal component are eligible for a CN label. Visit <https://www.fns.usda.gov/cn/labeling-program> for more information.

**SHOW SLIDE: Beans & Peas**

**SAY:** Beans and peas, also known as legumes, can credit toward the beans and peas (legumes) subgroup of the vegetables component or the meats/meat alternates component. A food item with beans and peas (legumes) credits toward only one meal component. For example, chili made with black beans and kidney beans can credit toward the beans and peas (legume) vegetable subgroup or meats/meat alternates, but not both. You may credit two distinct servings of beans and peas (legumes) in one meal if they are a part of two distinct dishes.

For example, the legumes offered on a salad bar may credit toward the vegetables component, and the legumes in the chili may credit toward the meats/meat alternates component). As the menu planner, you must determine how beans and peas (legumes) will be credited in a meal. This information needs to be communicated to staff who serve the meal to ensure students select a reimbursable meal.

**SHOW SLIDE: Combination Foods**

**ASK:** What combination foods are offered on your menu, and how do they credit?

**DO:** Allow participants time to list some combination foods served in their programs. Accept all responses as there are no right or wrong answers.

**SAY:** A combination food is a single serving of a food item that contains more than one meal component that cannot be separated, such as pizza, soup, casseroles, burritos, and sandwiches. Some combination foods may be credited for up to three different meal components (meats/meat alternates, grains, vegetables, or fruits). School menus often feature these food items as entrées.

**SHOW SLIDE: Activity: Meats/Meat Alternates Component – Menu Planning Form**

**Instructor's Note:** The slide has a blank Menu Planning Form. After discussing the instructions, click for the animation to display the completed form.

**DO: Activity:** Meats/Meat Alternates Component – Menu Planning Form

**Purpose:** Participants will plan meats/meat alternates that meet the daily and weekly minimum serving requirements.

**Materials Needed:** Lunch Menu Planning Form, two USDA Recipes (Mac and Cheese and Chicken Fajita), CN Label for Pizza, PFS for Hamburger patty, USDA Foods in Schools Product Information Sheet for Pork Roast

**Time:** 8 minutes

**Instructor's Note:** The Lunch Menu Planning Form and a completed menu are located at the end of the Introduction lesson.

Two USDA Recipes (Mac and Cheese and Chicken Fajita), a CN Label for Pizza, PFS for Hamburger Patty, and a USDA Foods in Schools Product Information Sheet for Pork Roast are at the end of this lesson.

**SAY:** It is your turn to plan 5 days of meats/meat alternates on the lunch menu planning form. In the Appendix of your Participant's Workbook, you have copies of two USDA Recipes (Mac and Cheese and Chicken Fajita), a CN Label for Pizza, a PFS for Hamburger Patty, and a USDA Foods in Schools Product Information Sheet for Pork Roast to assist you with crediting information.

**DO:** Allow time to complete the meats/meat alternates section of the Lunch Menu Planning Form.

**SAY:** Menu planning often begins with choosing the meats/meat alternates – as they are a part of the 'entrée' or are the 'Center of the Plate' item. Let's look at the Macaroni and Cheese recipe.

**ASK:** How does the crediting of one serving influence your menu choices for meats/meat alternates?

**DO:** Allow participants time to respond.

**FEEDBACK:** One serving provides 1 oz eq each of meats/meat alternates and grains. However, for grades 9–12, a daily minimum of 2 oz eq of each component is required.

**ASK:** As the menu planner, what choices do you have to meet the meal pattern?

**DO:** Allow participants time to respond.

**FEEDBACK:** You have two options:

- Offer a second 1 oz eq of each, such as ¼ cup seasoned beans for a meatless Monday and a 1 oz eq soft whole grain-rich breadstick or
- Double the 9–12 grade group serving size of the Macaroni and Cheese, so it equals 2 oz eq meats/meat alternates and grains.

Now is an excellent time to ask any questions about the meats/meat alternates component – especially if you are creating this dish from scratch or speed scratch.

**ASK:** If you are creating entrees from scratch or speed scratch, how do you ensure proper crediting?

**DO:** Allow participants time to respond.

**FEEDBACK:** Possible responses may include standardized recipes (resource), CN Labels, FBG, weighing ingredients and yielded portions, etc.

## CONCLUSION

**SHOW SLIDE:** *Meats/Meat Alternates Component Wrap Up*

**SAY:** This brings our review of the meats/meat alternates component to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the meats/meat alternates component?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

**SHOW SLIDE:** *Meats/Meat Alternates Component Summary*

**SAY:** In summary, the main points to remember when writing menus for meats/meat alternates include:

- Meet daily and weekly minimums for each grade group.
- Creditable servings are measured by weight using ounce equivalents.
- Combination foods may be credited for up to three different meal components (meats/meat alternates, grains, vegetables, or fruits).
- The smallest creditable amount is 0.25 oz eq.

Now that we have planned the meal pattern components for the 9–12 grade group, let's modify them to meet the requirements for K–5 and 6–8 grade groups.



# Macaroni and Cheese USDA Recipe for Schools

This Macaroni and Cheese has cauliflower purée, macaroni, milk, cheese, sour cream, pepper, garlic powder, onion flakes, salt, and lemon pepper that are combined and baked.

**NSLP/SBP CREDITING INFORMATION**  
One piece provides 1 oz equivalent meat alternate and 1 oz equivalent grains.

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Water		1 qt 2 cups		3 qt	<b>1</b> Heat water to a rolling boil.
*Fresh cauliflower florets	1 lb 4 oz	1 qt 1 ½ cups 2 Tbsp	2 lb 8 oz	2 qt 3 ¼ cups	<b>2</b> Add cauliflower. Cook uncovered for 2–3 minutes until tender. Place cauliflower in a food processor. Purée on high speed for 30 seconds to 1 minute until cauliflower has a smooth consistency. DO NOT OVERMIX. Set aside for step 5.
Water		1 gal 1 qt 2 cups		2 gal 3 qt	<b>3</b> Heat water to a rolling boil.
Whole-grain elbow macaroni	3 lb 2 oz	2 qt 3 ½ cups	6 lb 4 oz	1 gal 1 qt 3 cups	<b>4</b> Slowly add macaroni. Stir constantly until water boils again. Cook about 8–10 minutes or until al dente. Stir occasionally. DO NOT OVERCOOK. Drain well. Set aside for step 5.



Food and Nutrition Service



## Macaroni and Cheese

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Low-fat (1%) milk		2 qt		1 gal	<p><b>5</b> Combine cauliflower purée, macaroni, milk, cheese, sour cream, pepper, garlic powder, onion flakes, salt, and lemon pepper in a large bowl. Stir well.</p>
Low-fat cheddar cheese, shredded	3 lb 12 oz	3 qt 3 cups	7 lb 8 oz	1 gal 3 qt 2 cups	
Low-fat sour cream	1 lb	1 ½ cups 1 Tbsp	2 lb	3 cups 2 Tbsp	
Nonfat sour cream	1 lb	1 ½ cups 1 Tbsp	2 lb	3 cups 2 Tbsp	
Ground black or white pepper		¼ tsp		½ tsp	
Garlic powder		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
Dried onion flakes		¼ cup	2 ½ oz	½ cup	
Salt		1 tsp		2 tsp	
Lemon pepper		2 Tbsp		¼ cup	
					<p><b>6</b> Pour 1 gal 2 cups (about 9 lb 2 oz) macaroni and cheese mixture into a steam table pan (12" x 20" x 2½") lightly coated with pan-release spray.</p> <p>For 50 servings, use 2 pans. For 100 servings, use 4 pans.</p>
					<p><b>7</b> Bake: Conventional oven: 350 °F for 30–35 minutes. Convection oven: 325 °F for 25–30 minutes.</p>
					<p><b>8</b> Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.</p>





## Macaroni and Cheese

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
					<p><b>9</b> Critical Control Point: Hold for hot service at 135°F or higher.</p>
					<p><b>10</b> Portion: Cut each pan 5 x 5 (25 pieces per pan). Serve 1 piece (about 2<sup>3</sup>/<sub>8</sub>" x 4").</p>





## Macaroni and Cheese

### NUTRITION INFORMATION

For 1 piece.

NUTRIENTS	AMOUNT
<b>Calories</b>	<b>208</b>
<b>Total Fat</b>	<b>4 g</b>
Saturated Fat	2 g
Cholesterol	13 mg
<b>Sodium</b>	<b>412 mg</b>
<b>Total Carbohydrate</b>	<b>27 g</b>
Dietary Fiber	2 g
Total Sugars	4 g
Added Sugars included	N/A
<b>Protein</b>	<b>15 g</b>
Vitamin D	20 IU
Calcium	224 mg
Iron	1 mg
Potassium	178 mg

N/A=data not available.

### SOURCE

USDA Standardized Recipes Project.

### MARKETING GUIDE

Food as Purchased for	50 Servings	100 Servings
Cauliflower	2 lb 2 oz	4 lb 4 oz

### NOTES

\*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredients is available.

Cooking Process #2: Same Day Service.

### YIELD/VOLUME

50 Servings	100 Servings
About 18 lb 2 oz	About 36 lb 4 oz
About 2 gal 1 qt ¼ cup/2 steam table pans (12" x 20" x 2 ½")	About 4 gal 2 qt ¼ cup/4 steam table pans (12" x 20" x 2 ½")





# Chicken Fajitas

## USDA Recipe for Schools

These Chicken Fajitas have diced chicken breast, combined with salsa, vegetables, Mexican spices and lime juice served in a whole grain tortilla.

### NSLP/SBP CREDITING INFORMATION

1 fajita provides 2 oz equivalent meat, 1/8 cup starchy vegetable, 1/8 cup additional vegetable, and 1 oz equivalent grains.

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Frozen chicken strips, cooked, thawed	6 lb 8 oz	1 gal 3 qt	13 lb	3 gal 2 qt	<b>1</b> Combine chicken, pepper, garlic powder, chili powder, cumin, oregano, and ancho chili powder in a large bowl. Stir well. Cover tightly. Allow chicken mixture to marinate for 12–24 hours.
Ground black or white pepper		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
Garlic powder		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
Chili powder		2 Tbsp		1/4 cup	
Ground cumin		2 Tbsp		1/4 cup	
Dried oregano		2 tsp		1 Tbsp 1 tsp	



Food and Nutrition Service



## Chicken Fajitas

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Ancho chili powder		¼ cup	3½ oz	¾ cup	
OR		2 Tbsp			
Mexican seasoning mix (see Notes)		¼ cup	3½ oz	¾ cup	
		2 Tbsp			
					<b>2</b> Critical Control Point: Cool to 41 °F or lower within 4 hours.
					<b>3</b> Critical Control Point: Hold at 41 °F or below.
					<b>4</b> Place marinated chicken in a large stock pot. Cook uncovered over medium–high heat for 2 minutes.
					<b>5</b> Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
					<b>6</b> Set aside for step 9.
*Fresh green bell peppers, diced	8 oz	1½ cups	1 lb	3 cups	<b>7</b> In a medium stock pot, add peppers and onions. Cook uncovered over medium–high heat until onions are translucent. Set aside for step 9.
*Fresh onions, diced	12 oz	2¼ cups 1 Tbsp 1½ tsp	1 lb 8 oz	1 qt ½ cup 3 Tbsp	
Frozen corn, thawed, drained	2 lb 4 oz	1 qt 2 cups 3 Tbsp 2½ tsp	4 lb 8 oz	3 qt ¼ cup 3 Tbsp 2 tsp	<b>8</b> In a medium stock pot, add corn, tomatoes, salsa, sugar, oil, paprika, and lime juice. Simmer uncovered for 5 minutes. Stir occasionally. Set aside for step 9.
Canned no-salt-added diced tomatoes, drained	1 lb	1½ cups 3 Tbsp 2 tsp (approx. ⅛ No. 10 can)	2 lb	3¼ cups 3 Tbsp 1 tsp (approx. ¼ No. 10 can)	





## Chicken Fajitas

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Canned low-sodium salsa	1 lb	1¾ cups 2 Tbsp (approx. ⅛ No. 10 can)	2 lb	3¾ cups (approx. ¼ No. 10 can)	
Sugar		2 Tbsp		¼ cup	
Canola oil		½ cup		1 cup	
Paprika		2 tsp		1 Tbsp 1 tsp	
*Fresh limes OR Fresh lime juice	12 oz	4 each  ½ cup	1 lb 8 oz	8 each  1 cup	
					<b>9</b> Combine chicken, peppers, onions, and corn mixture in a large bowl. Toss well.
Whole-grain tortillas, 8" (1 oz each)	4 lb 11 oz	50 each	9 lb 6 oz	100 each	<b>10</b> Using a rounded No. 8 scoop, portion ½ cup 2⅓ tsp (about 4⅓ oz) chicken mixture on a tortilla. Spread filling on half of tortilla, and fold in other half like a taco. Place 25 fajitas on each steam table pan (12" x 20" x 2½").  For 50 servings, use 2 pan. For 100 servings, use 4 pans.
					<b>11</b> Critical Control Point: Hold for hot service at 135 °F or higher.
					<b>12</b> Serve 1 fajita.



**NUTRITION INFORMATION**

For 1 fajita.

<b>NUTRIENTS</b>	<b>AMOUNT</b>
<b>Calories</b>	<b>267</b>
<hr/>	
<b>Total Fat</b>	<b>6 g</b>
Saturated Fat	2 g
Cholesterol	39 mg
<b>Sodium</b>	<b>415 mg</b>
<b>Total Carbohydrate</b>	<b>28 g</b>
Dietary Fiber	4 g
Total Sugars	2 g
Added Sugars included	N/A
<b>Protein</b>	<b>17 g</b>
<hr/>	
Vitamin D	0 IU
Calcium	12 mg
Iron	0 mg
Potassium	75 mg

N/A=data not available.

**SOURCE**

USDA Standardized Recipes Project.

**MARKETING GUIDE**

<b>Food as Purchased for</b>	<b>50 Servings</b>	<b>100 Servings</b>
Mature onions	14 oz	1 lb 12 oz
Green bell peppers	10 oz	1 lb 4 oz
Limes	12 oz	1 lb 8 oz

**NOTES**

\*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredients is available.

Cooking Process #3: Complex Food Preparation.

**Mexican Seasoning Mix ¾ Cup (About 4½ oz).**

Combine 1 Tbsp dried oregano, 1 Tbsp garlic powder, ¼ tsp ground cinnamon, 2 tsp sugar, 2 Tbsp chili powder, 1 Tbsp ground cumin, 1 Tbsp 2 tsp paprika, 1 Tbsp 2 tsp onion powder, 2 Tbsp dried minced onion, and 2 tsp salt.

**YIELD/VOLUME**

<b>50 Servings</b>	<b>100 Servings</b>
About 13 lb 2 oz (chicken mixture)	About 26 lb 4 oz (chicken mixture)
About 1 gal 2 qt 2¼ cups/2 steam table pans (12" x 20" x 2½")	About 3 gal 1 qt ½ cup/4 steam table pans (12" x 20" x 2½")





**USDA Foods  
in Schools**

**100173 - Pork, Leg Roast, Frozen**  
**Category: Meat/Meat Alternate**



**Product Description**

- This item is individual pork leg roasts in 6-10 pound packages. Each leg roast is netted and vacuum packaged for shipping. This product is delivered frozen in cases that contain 36-42 pounds.

**Crediting/Yield**

- One case of pork leg roasts provides about 311-363 1-ounce portions of cooked meat.
- CN Crediting: 1 ounce of cooked pork leg roast credits as 1 ounce equivalent meat/meat alternate.

**Culinary Tips and Recipes**

- Pork leg roast can be glazed and served as a main entrée or used as a protein component in dishes such as ham and potato soup, split pea soup, or egg dishes.
- Pork leg roast can also be used to add flavor to side dishes, such as collard greens or bean dishes.
- For culinary techniques and recipe ideas, visit the [Institute of Child Nutrition](#) or [USDA's Team Nutrition](#).

**Food Safety Information**

- For more information on safe storage and cooking temperatures, and safe handling practices, please refer to: [Developing a School Food Safety Program Based on the Process Approach to HACCP Principles](#).

Visit us at [www.fns.usda.gov/usda-fis](http://www.fns.usda.gov/usda-fis)

**Nutrition Facts**

Serving size: 1 ounce (28 g)/1 MMA cooked pork leg roast

Amount Per Serving	
<b>Calories</b>	47
<b>Total Fat</b>	1g
Saturated Fat	0g
Trans Fat	0g
<b>Cholesterol</b>	24mg
<b>Sodium</b>	23mg
<b>Total Carbohydrate</b>	0g
Dietary Fiber	0g
Sugars	0g
<b>Protein</b>	8g
Source: <a href="#">USDA FoodData Central</a>	

**Allergen Information:** Please refer to allergen statement on the outside of the product package for vendor-specific information. For more information, please contact the product manufacturer directly.

Nutrient values in this section are from the USDA FoodData Central or are representative values from USDA Foods vendor labels. Please refer to the product's Nutrition Facts label or ingredient list for product-specific information.

August 2015

USDA is an equal opportunity provider, employer, and lender.

# 2.25 oz. Beef Patty

Item Number: CP5682

**Product Title**

FULLY COOKED BEEF PATTIES

Nutritional Information	Per Serving	Per 100 Grams
Serving Size (oz.)	2.25	3.53
Serving Size (g)	63.8	100.0
Servings Per Case	216	138
Calories (kcal)	141	220
Protein (g)	13	20
Carbohydrates (g)	1	2
Dietary Fiber (g)	1	1
Total Sugar (g)	0	0
Added Sugar (g)	0	0
Fat (g)	10	15
Saturated Fat (g)	3.9	6.2
Trans Fatty Acid (g)	0.6	0.9
Cholesterol (mg)	36	57
Vitamin D (mcg)	0	0
Calcium (mg)	25	39
Iron (mg)	1	2
Potassium (mg)	573	898
Sodium (mg)	161	253

**Ingredients**

GROUND BEEF (no more than 20% fat), WATER, TEXTURED SOY PROTEIN CONCENTRATE, CONTAINS LESS THAN 2% OF SEASONING (potassium chloride, flavor [contains maltodextrin]), ENCAPSULATED SALT, DRY BEEF STOCK, ONION POWDER, SPICES.

**CN Statement: CN ID Number:098963**

Each 2.25 oz Fully Cooked Beef Patty provides 2.00 oz equivalent meat/meat alternate for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 07-20.)

**Allergens**

Soy

**Product Specifications**

UPC (GTIN)	10049485056826
Case Pack	30.375# 6 Bags
Net Weight	30.375
Gross Weight	33.230
Case Length	23.530
Case Width	12.910
Case Height	11.190
Case Cube	1.970
TixHi	6x4
Shelf Life	548

**Preparation**

FROM FROZEN (0-10 Degrees): Convection Oven (Preheated to 350 Degrees): Place frozen beef patties flat on a sheet pan lined with parchment paper. Do not overlap or stack patties. Place sheet pan in a 350 degree F preheated oven and set timer for 7-9 minutes. When timers sounds, check for internal temperature of 160 degrees F or higher. Remove from oven. Steamer: Place bag of beef patties in pan. Place pan in steamer and cook for approximately 35-40 minutes until product reaches internal temperature of 160 degrees F. Cook time will depend on amount of product in steamer.

**Pizza**

**Cheese Pizza**

000000\*

Each 5.10 oz. Cheese Pizza provides 2.00 oz. equivalent meat alternate, 2.00 oz. equivalent grains, and 1/8 cup red/orange vegetable for the Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 08-15.)

# LESSON 6: Modifying Menu Offerings for Grade Groups to Meet Meal Pattern Requirements for the National School Lunch Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 6: Modifying Menu Offerings for Grade Groups to Meet Meal Pattern Requirements for the National School Lunch Program*

**SAY:** We have learned how to plan a menu for the 9–12 grade group. Now, let's look at how those requirements differ for the other grade groups.

**ASK:** Why do the serving sizes vary between the grade groups?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Respond with the correct response in the prompt below.

**SHOW SLIDE:** *Why Grade Groups?*

**SAY:** All school lunches provide important nutrients that support learning, growth, and overall health. School lunches also have to meet average weekly amounts for calories (energy), saturated fat, and sodium. For example, K-5 require less calories than 9-12. This is because the different age groups require different amounts of calories. A 9–12 grade group menu can be modified by consulting the Meal Pattern Chart to meet all grade group meal pattern requirements.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore how to modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the National School Lunch Program. Particularly, we will take the menu we planned to follow the 9–12 grade group requirements and adjust it to fit grade groups K–5 and 6–8.

**Objective:** Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the National School Lunch Program.

**SHOW SLIDE:** *Grade Groups*

**SAY:** The NSLP Meal Pattern Chart provides the daily and weekly meal pattern components and serving sizes for K–5, 6–8, 9–12, and K–8 grade groups.

Note that the Preschool grade group has different requirements. Refer to Team Nutrition's [Serving School Meals to Preschoolers](https://www.fns.usda.gov/tn/serving-school-meals-preschoolers) (<https://www.fns.usda.gov/tn/serving-school-meals-preschoolers>) for more information.

You have completed a 5-day menu for the 9–12 grade group. Let's modify this menu to satisfy the meal pattern requirements of the other grade groups.

**SHOW SLIDE: Milk Component**

**DO: Activity:** Milk Component (Other Grade Groups) – Menu Planning Form

**Purpose:** Participants will complete the milk component on the other menu planning sheet by listing the proper serving size for K–5 or 6–8 grade groups in the NSLP.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 2 minutes

**Instructor's Note:** The Lunch Menu Planning Form is located at the end of this lesson.

**SAY:** If you look at the Meal Pattern Chart, you will see that the milk requirement is the same across all grade groups. Let's fill in the milk choices on the blank menu planner. Now, we will do the fruits component.

**SHOW SLIDE: Activity: Fruits Component**

**SAY:** The serving size for fruits for the 9–12 grade group is a minimum of 1 cup daily for a total of 5 cups per week.

**ASK:** Do you see that on the Meal Pattern Chart?

**ASK:** Continuing to look at the Chart, what is the serving size for fruit for the K–5 and 6–8 grade groups?

**DO:** Encourage participants to answer.

**FEEDBACK:**  $\frac{1}{2}$  cup daily for a total of  $2\frac{1}{2}$  cups per week for the K–5 and 6–8 grade groups

**SAY:** The serving size is  $\frac{1}{2}$  cup daily for a total of  $2\frac{1}{2}$  cups per week for the K–5 and 6–8 grade groups. Having the same serving size for this meal component for both grade groups is convenient if you plan one K–8 menu.

Recall that no more than half of the fruit or vegetable servings may be in the form of juice. Now, let's fill in the blank menu planner with the fruits you will offer.

**DO: Activity:** Fruits Component (Other Grade Groups) – Menu Planning Form

**Purpose:** Participants will complete the fruits component on the other menu planning sheet by listing the proper serving size for K–5 or 6–8 grade groups in the NSLP.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 2 minutes

**SAY:** Let's fill in the fruits choices on the Lunch Menu Planning Form. Adjust the required minimum serving amount of the fruits you listed in your 9–12 grade group menu to be the required minimum serving amount for K–5 or 6–8 grade groups in the NSLP. Now, we will do the vegetables component.

**SHOW SLIDE: Activity: Vegetables Component**

**SAY:** Next, let's look at the vegetables component. Recall that we need to plan for the minimum daily and weekly serving amounts while considering the subgroup requirements. Like fruits, the serving size for vegetables for the 9–12 grade group is a minimum of 1 cup daily for a total of 5 cups per week. Looking at the Meal Pattern Chart, you'll notice that the K–5 and 6–8 grade groups require  $\frac{3}{4}$  cup of vegetables daily for a total of  $3\frac{3}{4}$  cups per week.

Three-fourths of a cup is a large serving and an odd amount to divide into two servings.

**ASK:** Do you have suggestions for handling the  $\frac{3}{4}$  cup requirement? How would you plan the menu to satisfy this?

**DO:** Listen to provided answers

**FEEDBACK:**  $\frac{1}{2}$  cup and  $\frac{1}{4}$  cup, OR two  $\frac{1}{2}$  cups, OR a single  $\frac{3}{4}$  cup serving

**SAY:** The weekly minimum requirements are the same for the dark green, beans and peas (legumes), and starchy subgroups for all grade groups,  $\frac{1}{2}$  cup.

However, the weekly minimum requirement for the red/orange and other subgroups is different between the 9–12 grade group and the younger grade groups. The 9–12 grade group requires  $1\frac{1}{4}$  cups of the red/orange subgroup; whereas, the K–5 and 6–8 grade groups require  $\frac{3}{4}$  cup. The 9–12 grade group requires  $\frac{3}{4}$  cup of the other subgroup; whereas, the K–5 and 6–8 grade groups require only  $\frac{1}{2}$  cup.

Recall how the weekly vegetable subgroup requirements were met in the first 4 days of a 5-day week for the 9–12 grade group. For school programs with 4-day menus, you will want to maintain this practice. One way to modify the sample menu's vegetable servings is to keep the  $\frac{1}{2}$  cup serving that meets the full subgroup weekly requirement and make the  $\frac{1}{4}$  cup serving either the red/orange or other subgroup. If you decide to offer a single  $\frac{3}{4}$  cup serving, remember that once the weekly subgroup requirement is met, any additional amounts of vegetables from the subgroups can be used to meet the "additional vegetables" requirement.

**ASK:** What solutions did you use to make sure the weekly vegetable subgroups were met with the lower daily and weekly minimum serving requirements?

**DO:** Accept all answers as there are no right or wrong answers.

**SAY:** Now, let's fill in the blank menu planner with the vegetables you plan to offer.

**DO: Activity:** Vegetables Component (Other Grade Groups) – Menu Planning Form

**Purpose:** Participants will complete the vegetables component on the other menu planning sheet by listing the proper serving size for K–5 or 6–8 grade groups in the NSLP.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 2 minutes

**SAY:** Let's fill in the vegetable choices on the blank menu planner. Adjust the required minimum serving amount of the vegetables you listed in your 9–12 grade group menu to be the proper required minimum serving amount for K–5 or 6–8 grade groups in the NSLP.

**ASK:** What solutions did you use to make sure the weekly vegetable subgroups were met for the K–5 and 6–8 age group?

**DO:** Accept all answers and problem-solve with any participants having difficulty filling out their menu planning form.

**SAY:** Now, we will do the grains component.

**SHOW SLIDE:** *Activity: Grains Component*

**SAY:** For grains, the minimum daily requirement for the 9–12 grade group is 2 oz eq; whereas, it is 1 oz eq for the K–5 and 6–8 grade groups.

The 9–12 grade group minimum weekly grains requirement (10–12 oz eq) can be met by serving the minimum daily requirement (2 oz eq). *That is not the case for the lower grade groups.* More than the daily minimum (1 oz eq) must be offered to reach the required weekly minimums (8–9 oz eq for the K–5 grade group; 8–10 oz eq for the 6–8 grade group).

The whole grain-rich criteria are the same for all grade groups. At least 80% of grains offered weekly on menus must be whole grain-rich; the remaining grain items must be enriched. If serving 8 oz eq of grains across a 5-day school week, 6.5 oz eq need to be whole grain-rich to meet the 80% criteria.

Recall that grain-based desserts are limited to 2 oz eq or less weekly for all grade groups, except for preschoolers.

Now, let's fill in the Lunch Menu Planning Form with the grains you plan to offer. Remember to identify which grain items on the menu are whole grain-rich and double-check that you meet the 80% criteria.

**DO: Activity:** Grains Component (Other Grade Groups) – Menu Planning Form

**Purpose:** Identify grains component choices and serving size to meet meal pattern requirements for K–5 and 6–8 grade groups in the NSLP.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 2 minutes

**Instructions:** Participants will complete the grains component on the other menu planning sheet by listing the proper serving size for K–5 or 6–8 grade groups in the NSLP.

**SAY:** Let's fill in the grains choices on the blank menu planner. Adjust the required minimum serving amounts of the grains you listed in your 9–12 grade group menu to be the required minimum serving amount for K–5 or 6–8 grade groups in the NSLP.

Now, we will do the meats/meat alternates component.

**SHOW SLIDE: Activity: Meats/Meat Alternates Component**

**SAY:** For meats/meat alternates, the minimum daily requirement for the 9–12 grade group is 2 oz eq; whereas, it is 1 oz eq for the K–5 and 6–8 grade groups.

While the 9–12 grade group minimum weekly meats/meat alternates requirement (10–12 oz eq) can be met by serving the minimum daily requirement (2 oz eq), *that is not the case for the lower grade groups*. More than the daily minimum (1 oz eq) must be offered to reach the required weekly minimums (8–10 oz eq for the K–5 grade group; 9–10 oz eq for the 6–8 grade group).

Now, let's fill in the blank menu planner with the meats/meat alternates you plan to offer.

**DO: Activity:** Meats/Meat Alternates Component (Other Grade Groups) – Menu Planning Form

**Purpose:** Participants will complete the meats/meat alternates component on the other menu planning sheet by listing the proper serving size for K–5 or 6–8 grade groups in the NSLP.

**Materials Needed:** Lunch Menu Planning Form, pen or pencil for each participant

**Time:** 2 minutes

**SAY:** Let's fill in the meats/meat alternates choices on the blank menu planner. Adjust the required minimum serving amount of meat/meat alternate you listed in your 9–12 grade group menu to be the required minimum serving amount for K–5 or 6–8 grade groups in the NSLP.

**SHOW SLIDE: Over Versus Serve (OVS) in NSLP**

**SAY:** Under OVS, students must select three meal components to ensure they get the nutritional benefits of a meal. OVS is required for lunches served in high schools, but is optional in middle and elementary schools. OVS is not required for meals offered as part of field trips or for any other meals served away from the school campus.

The required five food components must be offered for school lunch. Students must select at least three of the five required food components, including at least ½ cup of fruit and/or vegetable, to have a reimbursable lunch.

**SHOW SLIDE: OVS in NSLP (cont'd)**

**SAY:** Use this simple checklist to determine if student lunches are reimbursable under OVS:

- Does the meal offered to students include the minimum required amounts of vegetables, fruits, grains, meats/meat alternates, and fluid milk?
- Does the meal selected by the student contain at least three components, including at least ½ cup fruit and/or vegetable?

If the answer to each of these questions is yes, then the school lunch is reimbursable under OVS.

**CONCLUSION****SHOW SLIDE: Other Grade Groups Wrap Up**

**SAY:** Now you have 2 (or 3) completed 5-day menus.

**ASK:** What questions do you have about applying the meal pattern requirements for the multiple grade groups?

**DO:** Respond appropriately to participants' questions. Refer to the ICN Help Desk, if needed. After participants have responded, show the summary slide.

**SAY:** In summary, the main point is to remember when writing menus for other grade groups include meeting the daily and weekly required minimum serving amounts for each grade group.

Now that we have covered the meal pattern requirements for the National School Lunch Program, let's look at the requirements for the School Breakfast Program.

Lunch Menu Planning Form				
Monday	Tuesday	Wednesday	Thursday	Friday
Entrée - M/MA _____ _____ _____ oz eq _____				
Grains _____ _____ _____ oz eq _____ _____ _____ oz eq _____				
Vegetables _____ _____ _____ cup _____ _____ _____ cup _____ Subgroups: _____ _____ _____				
Fruits _____ _____ _____ cup _____ _____ _____ cup _____				
Milk _____ _____ _____ cup _____ _____ _____ cup _____				

Lunch Menu Planning Form (K-8 Grade Group) – Completed				
Monday	Tuesday	Wednesday	Thursday	Friday
Entrée – M/MA	Entrée – M/MA	Entrée – M/MA	Entrée – M/MA	Entrée – M/MA
<u>Macaroni &amp; Cheese (see recipe)</u>	<u>Hamburger on Bun</u>	<u>Chicken Fajita (see recipe)</u>	<u>Pulled Pork</u>	<u>Cheese Pizza (see CN label)</u>
<u>1 oz eq meat alternate</u>	<u>2 oz eq meats</u>	<u>2 oz eq meats</u>	<u>2 oz eq meats</u>	<u>2 oz eq meat alternate</u>
Grains	Grains	Grains	Grains	Grains
<u>1 oz eq macaroni (WGR)</u>	<u>2 oz eq bun (WGR)</u>	<u>1.5 oz eq tortilla (WGR)</u> <u>0.5 oz eq tortilla chips</u>	<u>1 oz eq white rice</u>	<u>2 oz eq pizza crust (WGR)</u>
Vegetables	Vegetables	Vegetables	Vegetables	Vegetables
<u>½ cup broccoli</u> <u>¼ cup baked acorn squash</u> Subgroups: <u>½ c dark green, ¼ c red/orange</u>	<u>¼ cup baby carrots</u> <u>½ cup oven fries</u> Subgroups: <u>¼ c red/orange, ½ c starchy</u>	<u>¾ cup tossed salad (½ c iceberg lettuce, ½ c red pepper &amp; tomatoes)</u> <u>½ cup refried beans</u> Subgroups: <u>¼ c other, ½ c red-orange, ½ c legumes</u>	<u>¾ cup green beans</u> Subgroups: <u>¾ c other</u>	<u>1 cup celery and jicama sticks</u> Subgroups: <u>½ c other, ½ c starchy.</u>
Fruits	Fruits	Fruits	Fruits	Fruits
<u>½ cup apple</u>	<u>½ cup grape juice</u>	<u>½ cup diced pears</u>	<u>½ cup banana</u>	<u>½ cup watermelon</u>
Milk	Milk	Milk	Milk	Milk
<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>	<u>1 cup 1% Unflavored</u> <u>1 cup Fat-Free Choco-late</u>

# LESSON 7: School Breakfast Program

## INTRODUCTION

**SHOW SLIDE:** *Lesson 7: School Breakfast Program*

**SAY:** Now that we know how to plan a menu for the National School Lunch Program, let's look at how to plan a menu for the School Breakfast Program.

**ASK:** What are the three meal pattern components required by the School Breakfast Program?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Fluid milk, fruits, and grains

**SHOW SLIDE:** *SBP Compared to NSLP*

**SAY:** The biggest difference between the lunch and breakfast meal pattern is that the breakfast meal pattern requires only three meal components: milk, fruits (or vegetables), and grains (and/or M/MA). The three grade group meal patterns allow for optional overlapping of the meal component offerings, meaning the same menu and servings can potentially be offered to all three grade groups.

**SHOW SLIDE:** *Lesson Overview and Objective*

**SAY:** In this lesson, we will explore the meal pattern component requirements and the serving size to meet the meal pattern requirements for the SBP. Particularly, we will cover the three meal pattern components required by the School Breakfast Program and how to plan a weekly breakfast menu.

**Objective:** Identify the meal pattern component choices and serving size requirements that meet the School Breakfast Program meal pattern requirements.

**SHOW SLIDE:** *School Breakfast Program*

**SAY:** School breakfasts must meet the applicable recommendations of the Dietary Guidelines for Americans and are designed to ensure that students enter the classroom well-nourished and ready to learn. The meal pattern for breakfast includes fruits (or vegetables), whole grain-rich foods and/or meats/meat alternates, and milk. The minimum daily and weekly requirement for milk and fruits (or vegetables) is the same for all grade groups, 1 cup daily and 5 cups weekly. The minimum daily requirement for grains is 1 oz eq for all grade groups; the weekly minimum varies by grade group. The meal pattern overlaps and allows for optional K–8 and K–12 menus.

Meats/meat alternates and vegetables are not required meal components of the breakfast meal pattern but can contribute to a reimbursable meal in some instances. These foods can also be served as extras that are non-creditable and do not contribute to the reimbursable meal; however, they are counted toward the dietary specifications.

Planning reimbursable meals for the School Breakfast Program follows a similar process as planning menus for the National School Lunch Program. Like the National School Lunch Program, the School Breakfast Program follows a meal pattern with required components and daily minimum required serving amounts to meet weekly averages. The same weekly juice and grains requirements apply at breakfast. No more than  $\frac{1}{2}$  of the total weekly fruits (or vegetables) component requirements may be met with full-strength juice. Eighty percent of grains offered at breakfast must be whole grain-rich, the remaining grains must be enriched. Refer to Lesson 4 for an extensive explanation on how to credit grains. Grains credit the same in SBP as in NSLP.

**SHOW SLIDE: School Breakfast Program Meal Pattern**

**SAY:** Now, let's take a look at the School Breakfast Program Meal Pattern chart. We will be looking at one meal component at a time.

**DO:** Introduce the meal pattern chart.

**Instructor's Note:** School Breakfast Program Meal Pattern chart is located at the end of this lesson.

**SAY:** This slide shows the options for planning breakfast menus by grade group and optional grade groups K–8 and K–12.

**ASK:** For what grade groups do you currently plan breakfast menus?

**DO:** Allow about 2 minutes for responses.

**SAY:** For the next activity, you will circle ONE of the breakfast grade groups to plan your menu. The slide shows a K–12 breakfast menu. As you can see, the only difference between the grade groups is the total weekly grains servings.

**SHOW SLIDE: Activity: Planning a Breakfast Menu**

**DO: Activity:** Planning a Breakfast Menu

**Purpose:** Participants will choose one grade group for planning the breakfast menu and complete the menu options as the training progresses.

**Materials Needed:** Breakfast Menu Planning Form, pen or pencil for each participant

**Time:** 10 minutes

**Instructor's Note:** The Breakfast Menu Planning Form and a completed menu are at the end of this lesson.

**SAY:** Please circle the grade group for which you will plan a breakfast menu. We will follow the process we used for planning lunch and start with the milk component. The menu shows the required two options and minimum daily serving amount, 1 cup each of fat-free and 1% milk. Flavored milk is also acceptable at breakfast for grades K–12.

**SHOW SLIDE: School Breakfast Program Menu Crediting Fruits**

**SAY:** The fruits component is also pre-planned. The menu shows ONE way to meet the fruits component requirement: no more than  $\frac{1}{2}$  of the total weekly fruits may be met with full-strength fruit or vegetable juice.

**ASK:** Do any of your programs take a different approach regarding the juice requirement?

**DO:** Encourage participants to respond.

**FEEDBACK:** Some serve juice twice a week and provide fruit options the other 3 days.

**ASK:** Do any of your programs substitute vegetables for fruits at breakfast?

**DO:** Encourage participants to respond.

**FEEDBACK:** Some programs substitute vegetables for fruits while others offer a vegetable once or twice a week as an extra food that does not credit toward the reimbursable meal. Vegetables may be substituted for fruits, but the first two cups per week of any such substitution must be from the dark green, red/orange, beans/peas (legumes), or “Other vegetables” subgroups.

**SHOW SLIDE:** *School Breakfast Program Menu Crediting Vegetables for Fruits*

**SAY:** The slide image shows one way to incorporate vegetables into the menu that could credit toward the fruits component. (Note to trainer: The items are examples of ideas that could meet the vegetable subgroups and be reasonable for the rest of a menu.)

The section in your Participant's Workbook about vegetables and meats/meat alternates in Breakfast Menus summarizes the criteria to follow when including either of these components on breakfast menus.

**SHOW SLIDE:** *School Breakfast Program Menu Offering Vegetables as Extras*

**SAY:** Some opt to include vegetables in their breakfast menu as “extras,” meaning they do not contribute as a reimbursable component. An example of this is a hashbrown. This approach helps line staff recognize the reimbursable meal more easily if vegetables aren't on the breakfast menu daily.

Note, you are not required to include vegetables in your breakfast menu. If you decide to include vegetables, choose whether to offer it as a component or as an extra on your menu, make the appropriate changes, and provide training for staff. Also, extra foods do count toward the calorie and nutrient totals.

**DO:** Allow 2–3 minutes for participants to make changes. Provide support, refer to resources and help problem solve any concerns participants raise during the activity.

**SHOW SLIDE:** *School Breakfast Program Grains Component*

**SAY:** The grains component completes the breakfast meal pattern. The minimum daily requirement for grains is 1 oz eq for all grade groups. However, only offering 1 oz eq per day will not allow you to meet the weekly requirement for grains.

The minimum daily requirement for grains is 1 oz eq for all grade groups; the weekly minimum varies by grade group.

Each day, you can plan to offer additional grains, or you can substitute 1 oz eq of meats/meat alternates for 1 oz eq of grains after the Daily Required Minimum Serving Amount is met. Many

programs substitute meats/meat alternates for additional grains to increase menu variety, meet student preferences, and use readily available and easy to prepare and serve menu items.

**SHOW SLIDE: School Breakfast Program Grains Component with M/MAs**

**SAY:** This slide shows how to include a variety of grains, including one enriched option. A tip for meeting the 80% whole grain-rich criteria for the week is to plan all whole grain-rich items except for 1 oz eq. This menu shows an additional 1 oz eq of either grains or meats/meat alternates crediting as grains daily, for a total of 10 oz eq for the 5-day week. This menu will likely not exceed the average daily calorie range when paired with other healthy food choices.

**ASK:** Based on what you have just learned, do you plan to change how your program includes meats/meat alternates in breakfast menus?

**DO:** Facilitate a short discussion reinforcing that different choices are appropriate for different programs.

**FEEDBACK:** Many programs want to recoup the cost of meats/meat alternates items on the menu; including them as a substitute for grains, rather than as an “extra,” allows it to be reimbursed.

**SAY:** Please complete the grains section of your menu based on your program’s needs at breakfast. You can substitute 1 oz eq of meats/meat alternates for 1 oz eq of grains after the daily required minimum serving amount is met for one or more days. Remember to identify the whole grain-rich items on your menu and double-check that at least 80% of the grains on your menu are whole grain-rich.

**DO:** Allow 3 minutes for participants to complete their menus.

**SAY:** Your participant materials have two sample breakfast menus showing how to credit vegetables toward the fruits component and vegetables as extras on the menu.

**SHOW SLIDE: School Breakfast Program Offer Versus Serve**

**SAY:** Menu planners have one more task regarding breakfast menus. Under Offer Versus Serve (optional at all grade levels for breakfast), the daily breakfast menu must offer at least four food items from the three required meal components (fruit, grains, and fluid milk). Students must select at least three of the four food items, including at least ½ cup of fruit and/or vegetable.

One way to identify food items on the menu is to consistently make a milk choice 1 item, offer fruits in two ½ cup amounts so that each can be a food item, and then depending on the grains, identify the food item as either one or two items as appropriate for serving. For example, if a pre-packaged French toast product is offered, the package may be counted as 1 food item even if it credits as 1 oz eq grains and 1 oz eq meats/meat alternates. Bagels may be offered as either 1 oz eq or 2 oz eq (half or whole) so that each half counts as a food item. Half would be one item; the whole bagel would be 2 food items.

A reimbursable breakfast must include ½ cup of fruit (or vegetable that credits as fruit) and two other items that credit as components. It is critical for service line staff to understand which food items on the menu are creditable and which food items are extras on the menu. The food items,

all of the parts of the reimbursable meal choices, are identified by component contribution at the beginning of the service so that students can recognize a reimbursable meal.

**ASK:** What is a reimbursable breakfast option on your menu?

**DO:** Encourage participants to share different breakfast options.

**FEEDBACK:** Some reimbursable meal combinations include:

- Juice, fruit, and milk
- Juice and a whole bagel that counts as 2 food items
- Milk, fruit, and toast
- English muffin and egg (when meats/meat alternates credits toward additional weekly grains) with onions and peppers (if vegetables credit as fruits)

## CONCLUSION

**SHOW SLIDE:** *School Breakfast Program Wrap Up*

**SAY:** This brings our review of the School Breakfast Program to a close.

**ASK:** What did you learn about planning menus that meet the meal pattern requirements for the School Breakfast Program?

**DO:** Respond appropriately to participants' observations.

**SHOW SLIDE:** *School Breakfast Program Summary*

**SAY:** You have learned how to plan a reimbursable breakfast menu. You can repeat this process multiple times for breakfast:

- The breakfast meal pattern requires only three meal components: milk, fruits, and grains.
- Meet daily and weekly minimums for each grade group.

In the lesson wrap up, we will cover the dietary specifications for calories, saturated fat, *trans* fat, and sodium.

Breakfast Menu Planning Form				
Monday	Tuesday	Wednesday	Thursday	Friday
Grains <sup>1</sup>	Grains <sup>1</sup>	Grains <sup>1</sup>	Grains <sup>1</sup>	Grains <sup>1</sup>
___ oz eq ___	___ oz eq ___	___ oz eq ___	___ oz eq ___	___ oz eq ___
___ oz eq ___	___ oz eq ___	___ oz eq ___	___ oz eq ___	___ oz eq ___
*M/MA <sup>2</sup>	*M/MA <sup>2</sup>	*M/MA <sup>2</sup>	*M/MA <sup>2</sup>	*M/MA <sup>2</sup>
Fruits <sup>3</sup>	Fruits <sup>3</sup>	Fruits <sup>3</sup>	Fruits <sup>3</sup>	Fruits <sup>3</sup>
½ cup Diced Peaches	½ cup Spicy Applesauce	½ cup Orange Wedges	½ cup creditable Raisins (¼ c serving)	½ cup Blueberries
½ cup Mixed Berry Juice	½ cup Orange Juice	½ cup Grape Juice	½ cup Pineapple Juice	½ cup Apple Juice
Milk	Milk	Milk	Milk	Milk
1 cup FF Milk	1 cup FF Milk	1 cup FF Milk	1 cup FF Milk	1 cup FF Milk
1 cup 1% Milk	1 cup 1% Milk	1 cup 1% Milk	1 cup 1% Milk	1 cup 1% Milk
Extras	Extras	Extras	Extras	Extras
___	___	___	___	___
___	___	___	___	___

<sup>1</sup> 80% of grains for all grade groups must be whole grain-rich. The 80% applies only to grains menu items.

<sup>2</sup> M/MA can be credited to additional weekly grains once the daily minimum of grains, 1 oz eq at for all grade groups, is met. If M/MA is credited toward additional weekly grains the 80% whole grain-rich applies only to grains.

<sup>3</sup> Fruits are limited to no more than half (50%) of the total Fruits offered during the weekly can be 100%, pasteurized full-strength juice. Vegetables can be credited toward fruits requirements when specific criteria is met. Vegetables may substitute for fruits at breakfast when the first two cups per week belong to the dark green, red/orange, beans and peas, or other vegetable subgroups. Vegetables may also be served as Extras that do not credit toward the reimbursable meal, but do count in nutrient targets for calories, saturated and trans fat limits, and grade group specific sodium targets.

Breakfast Menu Planning Form (Grade Group 9-12) – Completed				
Monday	Tuesday	Wednesday	Thursday	Friday
Grains	Grains	Grains	Grains	Grains
<b>Bagel Half or Whole</b>	<b>French Toast Sticks</b>	<b>English Muffin w/ Egg</b>	<b>Grains Grits &amp; Toast</b>	<b>Cereal &amp; Yogurt</b>
1 oz eq WW Bagel	1 oz eq WGR Bread	1 oz eq WGR English Muffin	1 oz eq Enriched Grits	1 oz eq WGR Cereal
1 oz eq WW Bagel	1 oz eq (French Toast) MMA	1 oz eq Scrambled Egg MMA	1 oz eq WGR Bread	1 oz eq ½ cup yogurt *M/MMA
Fruits	Fruits	Fruits	Fruits	Fruits
½ cup Diced Peaches	½ cup Spicy Applesauce	½ cup Orange Wedges	½ cup creditable Raisins (¼ c serving)	½ cup Blueberries
½ cup Mixed Berry Juice	½ cup Orange Juice	½ cup Grape Juice	½ cup Pineapple Juice	½ cup Apple Juice
<u>Alternative Vegetable Option (replace one fruit option with):</u>	<u>Alternative Vegetable Option (replace one fruit option with):</u>	<u>Alternative Vegetable Option (replace one fruit option with):</u>	<u>Alternative Vegetable Option (replace one fruit option with):</u>	<u>Alternative Vegetable Option (replace one fruit option with):</u>
½ cup Sweet Potato Bake	1-½ cup serving Hash Brown Patty	½ cup Onions and Peppers	½ cup Breakfast Carrot Salad	½ cup Spiced Roasted Beans
Milk	Milk	Milk	Milk	Milk
1 cup FF Unflavored				
1 cup 1% Unflavored				
Extras	Extras	Extras	Extras	Extras
2 Tbsp Cream Cheese	2 oz Hash Brown Patty	2 Tbsp Salsa	1 tsp sugar cinnamon mix	

# LESSON 8: Nutritional Standards

## INTRODUCTION

### SHOW SLIDE: Lesson 8: Nutrient Standards

**SAY:** Now that we know how to plan a menu for the National School Lunch Program and School Breakfast Program, let's look at the nutrient standards.

**ASK:** What are the nutrients we need to monitor according to the meal pattern regulations?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** calories, saturated fat, *trans* fat, sodium

### SHOW SLIDE: Nutrient Standards

**SAY:** The primary goal of FBMP is to assist SFAs in planning menus that meet the nutrition goals when averaged over a school week. The NSLP and SBP have several nutrition goals for menus, including:

- Approximately one-third of the daily requirements at lunch and one-fourth of the daily requirements at breakfast for total calories and more than 25 key nutrients.
- Limits on calories and nutrients often consumed in excess
- Saturated fat
- Sodium
- *Trans* fat

### SHOW SLIDE: Lesson Overview and Objective

**SAY:** In this lesson, we will explore the nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program. Particularly, we will cover the calories, saturated fat, *trans* fat, and sodium.

**Objective:** Define nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program.

### SHOW SLIDE: Meal Pattern Chart

**SAY:** Today, we used the National School Lunch Program and School Breakfast Program Meal Pattern Charts to plan daily and weekly lunch and breakfast menus.

**ASK:** Is everyone comfortable reading the Meal Pattern Charts – understanding how to read specific grade group requirements and daily and weekly minimum requirements?

**DO:** Encourage participants to respond. Listen and answer any question appropriately.

**FEEDBACK:** Respond with the correct responses to any questions.

**SAY:** Next, we are going to look at the section of the Meal Pattern Charts called “Other Specifications.”

**SHOW SLIDE:** *Calories*

**SAY:** We will start with calories. Students need calories to fuel growth, development, learning, and physical activity. However, many American children consume more calories than they need. Often, the calories they consume are not rich in nutrients. School meals are designed to provide abundant nutrients with sufficient calories. The amounts listed on the Meal Pattern Chart are a range of calories to be offered each day **when averaged over the 5-day week**. Follow the meal pattern guidelines, and the meals you plan are likely to meet the calorie range goals. Good menu planning includes balance and a variety of foods; the meal patterns are built on the principles of good menu planning. The calorie ranges are on the screen. Locate them on your Meal Pattern Chart.

**ASK:** What is the difference between the minimum daily calories (by average) between the K–5 and the 9–12 grade groups?

**DO:** Encourage participants to respond. Listen and accept all responses.

**FEEDBACK:** Different ages require different amounts of calories.

**SHOW SLIDE:** *Tips for Calorie Management*

**SAY:** If you discover that weekly menus are too high in calories, consider these tips. Choose lean meats. Choose fewer processed foods. Limit condiments or use ones that are lower in calories. Prepare scratch or speed-scratch condiments and spice blends help limit sodium and calories. Offer a rainbow of vegetables and fruits with no added sugars. Limit grain-based desserts.

For menus too low in calories, they should offer the higher end of weekly ounce equivalents for grains and meats/meat alternates.

**SHOW SLIDE:** *Saturated Fat*

**SAY:** Saturated fat is often found in forms that are solid at room temperature – examples include milk fat, butter, or the fat inside or around meat. A few food products such as coconut oil, palm oil, or whole milk remain as liquids at room temperature but are high in saturated fat. Limiting saturated fat and *trans* fats in school meals helps reduce the risk of children developing heart disease later in life. The meal patterns emphasize foods that are naturally low in or free of saturated fats. To limit the amount of saturated fats in your menu, choose lower-fat and lean dairy, meat, and poultry options—like skim milk, lean beef, grilled chicken breast without the skin, or plant-based meals, like veggie burgers.

Calories from saturated fat must average less than 10% of the total calories of the weekly menu.

For example, a weekly K–5 breakfast menu that averages 350 calories and 3.5 grams of saturated fat contributes less than 10% calories from saturated fat.

**SHOW SLIDE: Trans Fat**

**SAY:** *Trans* fat is a specific type of fat that is formed when liquid oils are turned into solid fats, such as shortening or stick margarine. During this process called ‘hydrogenation’, hydrogen is added to vegetable oil to increase the shelf life and flavor stability of foods. *Trans* fats are not allowed unless naturally occurring. All Nutrition labels or manufacturer specifications for purchased products must indicate “zero grams *trans* fat per serving” to meet this requirement.

Small amounts of trans fats occur naturally in some meat and dairy products, including beef, lamb and butterfat. There have not been sufficient studies to determine whether these naturally occurring trans fats have the same bad effects on cholesterol levels as trans fats that have been industrially manufactured.

**SHOW SLIDE: Sodium/Salt**

**SAY:** Sodium is a mineral that is essential in small quantities. It helps control your body’s fluid balance, sends nerve impulses, and affects muscle function. However, most people—including children—consume too much sodium.

**SHOW SLIDE: Tips for Sodium Management**

**SAY:** Planning menus that are lower in sodium means choosing fewer processed foods and incorporating the use of fresh or frozen vegetables. When planning for canned vegetables, choose ones with lower salt content. USDA Foods provides a variety of low sodium and no salt added canned vegetables and other products.

Select sauces and condiments with care. For example, soy sauce, bottled salad dressings, dips, ketchup, jarred salsas, mustard, pickles, olives, and relish can be high in sodium. Look for reduced- or lower-sodium versions. You can also prepare your own sauces and condiments to help reduce sodium. Choose recipes that enhance flavor with a variety of spices rather than salt. See the resource in your materials Sodium Content by Meal component (excerpt from the Menu Planner for School Meals) to review how each component may contribute to the total sodium of a meal.

Check out ICN’s [Shaking It Up: Small Changes Lead to Big Flavors](#) series of worksheets and online courses for more sodium reduction strategies.

**SHOW SLIDE: Non-Creditable Foods**

**SAY:** Non-creditable foods are foods and beverages that cannot credit in USDA’s meal patterns for Child Nutrition Programs. They include foods and beverages in amounts too small to credit (i.e., less than the minimum creditable amount) and foods and beverages that do not belong to the meal pattern components. Examples include potato chips, pudding, ice cream, gelatin, cream cheese, bacon, and condiments.

**SHOW SLIDE: Non-Creditable Foods (cont’d)**

**SAY:** SFAs may serve non-creditable foods in addition to the meal components to add variety, help improve acceptability in the meal, and satisfy appetites. Examples include maple syrup on pancakes, salad dressing on tossed greens, and condiments such as ketchup or mustard on sandwiches and other entrees. Non-creditable foods typically contain few nutrients and are higher

in added sugars, saturated fats, and sodium. Menu planners should read labels, be aware of the ingredients in foods, and limit the frequency and amount of less nutritious choices.

Non-creditable foods offered as part of reimbursable meals for grades K–12 must count toward the weekly nutrient standards for school meals. They must contain zero *trans* fat, and their inclusion cannot cause the menu to exceed the average weekly limits for calories, saturated fat, and sodium.

## CONCLUSION

### SHOW SLIDE: *Nutrient Standards Wrap Up/Summary*

**SAY:** This brings our review of the nutrient standards to a close.

**DO: Activity:** Think – Pair – Share

**Purpose:** Participants will think of three to five main points they learned or relearned about the nutrient standards or write them down if they prefer. Pair with another person at their table or a table close to them. Share a main point with their partner, who will share one of their main points. Continue sharing until all main points are exchanged.

**Materials Needed: (Optional)** note paper, pen, or pencil for each participant

**Time:** 5 minutes

**SAY:** To conclude this section on the nutrient standards, we will do a quick Think – Pair – Share activity.

1. Think of three to five main points you learned or relearned about nutrient standards; write them down if you prefer.
2. Pair with another person at your table or a table close to you.
3. Share a main point with your partner, who will share one of their main points after listening to you. Continue sharing until all main points are exchanged.

**DO:** Ask the group if there were any main points they wanted to share. Finally, the end of this lesson brings us to our summary and wrap up.

# SUMMARY AND WRAP UP

## Show Slide: *Does It Add Up?*

**SAY:** Today, you learned how to plan daily and weekly reimbursable lunch and breakfast menus. There are different ways to analyze the week's menu. You can choose your preferred method, which includes USDA-approved nutrient analysis software, spreadsheets, or paper and pen counts. Whatever you use, you are annually required to attest that your menu meets all the component, subgroup, and nutrient specifications.

## SHOW SLIDE: *Certification of Compliance Worksheets: 5-Day Schedule*

**SAY:** This worksheet is provided by USDA. You can find it on the USDA website and most likely on your state agency's website. You simply enter your daily menus, and it calculates the meal component requirements. It is color-coded; green shows requirements that are met, and red shows requirements that are over or under. The simplified nutrient assessment tab (last one in the worksheet) calculates weekly averages for dietary specs. It shows if calories, sodium, sat fat are within ranges. The simplified nutrient assessment is not completely accurate as it only takes into account entree, side dish, and condiment nutrient specs, but it's a good estimate of dietary specifications. Your district may have access to meal planning software that performs the same function.

**ASK:** Have any of you used the USDA Compliance Worksheet?

**DO:** Respond appropriately to participants' observations. Accept all responses as there are no right or wrong answers.

## SHOW SLIDE: *Technical Assistance & Guidance*

**SAY:** If you need additional help with food-based menu planning, contact your State agency.

## SHOW SLIDE: *Questions?*

**SAY:** If you have questions about planning a reimbursable menu, now is the time to ask.

## SHOW SLIDE: *Post-Assessment*

**DO: Activity:** Post-Assessment

**Purpose:** Participants will complete the post-assessment to identify what they learned about the requirements for serving reimbursable meals in school meal programs.

**Materials Needed:** Post-Assessment and pen (or pencil)

**Time:** 10 minutes

**SAY:** Thank you for your active participation and attention in the training. If there are no more questions, we will proceed with the training post-assessment and evaluation. Remember to place your unique identifier on the top right corner of the post-assessment.

**DO:** Distribute the post-assessment and the evaluation form. Review the assessment answers. Distribute certificates. If this is an ICN training, distribute and collect the evaluations.

# APPENDIX

## Planning Reimbursable School Meals for Menu Planners

### Pre-/Post-Assessment Form

- 1) What is a reimbursable meal?
  - a) Any meal served at school offered during the scheduled lunch time.
  - b) A single priced meal unit that offers at least one of the USDA daily required meal pattern components for each age/grade group served in the minimum required amounts.
  - c) A single priced meal unit that offers all of the USDA daily required meal pattern components for each age/grade group served in the minimum required amounts.
  
- 2) What are the 5 components of meal planning in the National School Lunch Program?
  - a) Grain, Fruits, Vegetables, Milk, Meat/Meat Alternate
  - b) Meat/Meat Alternate, Grain, Fruits, Vegetables, Dairy
  - c) Bread, Fruits, Vegetables, Dairy, Grain Based Dessert
  
- 3) Acceptable choices in the milk component include all except:
  - a) Pasteurized plain and flavored 1% low-fat milk
  - b) Pasteurized plain and flavored fat free milk
  - c) Pasteurized plain 2% milk
  
- 4) Which item credits under the fruits component?
  - a) Grape Jelly
  - b) Smoothies made with 100% fruit juice
  - c) Fruit gummies
  
- 5) Vegetables are organized by subgroups. The subgroups are
  - a) Red, Blue, Green, Yellow, and White
  - b) Beans/Peas, Cruciferous, Leafy Greens, Red/orange, and Starchy
  - c) Dark Green, Red/Orange, Beans/Peas, Starchy and Other Vegetables
  
- 6) The Vegetable meal patterns for all grade groups
  - a) Have daily and weekly minimum servings amounts including weekly minimum servings of subgroups
  - b) Are identical for minimum daily serving requirements and weekly subgroups
  - c) Have 80% criteria for subgroups servings daily.
  
- 7) Tools for determining grains components and serving amounts include
  - a) USDA Food Fact Sheets, Food Buying Guide, and Exhibit A
  - b) Product Formulation Statements that use different crediting methods for each manufacturer after review and approval by USDA
  - c) CN Labels when grains are the only component in the product.
  - d) All of the above

- 8) What is a CN Label used for?
- a) To see that stock is rotated following FIFO
  - b) To identify the contribution of a product toward the meal pattern requirements
  - c) To assure the product was produced in a food safe facility.
- 9) What is a combination food?
- a) Items that pair well together – like spicy foods and mild fruits
  - b) A single serving of a food item that contains more than one food item from different food components that cannot be separated
  - c) The complete combo meal
- 10) The grade group meal patterns for breakfast:
- a) Are the same as lunch and include an additional K-12 overlap option.
  - b) Are separate for each grade group with no overlap
  - c) Are the same as lunch, separate for each grade group with an overlap for grades K-8

## Planning Reimbursable School Meals for Menu Planners

### Pre-/Post-Assessment Form WITH ANSWERS

- 1) What is a reimbursable meal?
  - a) Any meal served at school offered during the scheduled lunch time.
  - b) A single priced meal unit that offers at least one of the USDA daily required meal pattern components for each age/grade group served in the minimum required amounts.
  - c) **A single priced meal unit that offers all of the USDA daily required meal pattern components for each age/grade group served in the minimum required amounts.**
  
- 2) What are the 5 components of meal planning in the National School Lunch Program?
  - a) **Grain, Fruits, Vegetables, Milk, Meat/Meat Alternate**
  - b) Meat/Meat Alternate, Grain, Fruits, Vegetables, Dairy
  - c) Bread, Fruits, Vegetables, Dairy, Grain Based Dessert
  
- 3) Acceptable choices in the milk component include all except:
  - a) Pasteurized plain and flavored 1% low-fat milk
  - b) Pasteurized plain and flavored fat free milk
  - c) **Pasteurized plain 2% milk**
  
- 4) Which item credits under the fruits component?
  - a) Grape Jelly
  - b) **Smoothies made with 100% fruit juice**
  - c) Fruit gummies
  
- 5) Vegetables are organized by subgroups. The subgroups are
  - a) Red, Blue, Green, Yellow, and White
  - b) Beans/Peas, Cruciferous, Leafy Greens, Red/orange, and Starchy
  - c) **Dark Green, Red/Orange, Beans/Peas, Starchy and Other Vegetables**
  
- 6) The Vegetable meal patterns for all grade groups
  - a) **Have daily and weekly minimum servings amounts including weekly minimum servings of subgroups**
  - b) Are identical for minimum daily serving requirements and weekly subgroups
  - c) Have 80% criteria for subgroups servings daily.
  
- 7) Tools for determining grains components and serving amounts include
  - a) USDA Food Fact Sheets, Food Buying Guide, and Exhibit A
  - b) Product Formulation Statements that use different crediting methods for each manufacturer after review and approval by USDA
  - c) CN Labels when grains are the only component in the product.
  - d) **All of the above**
  
- 8) What is a CN Label used for?
  - a) To see that stock is rotated following FIFO
  - b) **To identify the contribution of a product toward the meal pattern requirements**
  - c) To assure the product was produced in a food safe facility.

- 9) What is a combination food?
- a) Items that pair well together – like spicy foods and mild fruits
  - b) **A single serving of a food item that contains more than one food item from different food components that cannot be separated**
  - c) The complete combo meal
- 10) The grade group meal patterns for breakfast:
- a) **Are the same as lunch and include an additional K-12 overlap option.**
  - b) Are separate for each grade group with no overlap
  - c) Are the same as lunch, separate for each grade group with an overlap for grades K-8

# KEY TERMS

Key Terms	Definition
As Purchased (AP)	The form(s) in which a food is purchased.
Child Nutrition (CN) Labeling Program	<p>A program that provides manufacturers the option to include a standardized food crediting statement on their product label. CN Labels must be authorized by USDA, Agricultural Marketing Service (AMS) prior to being used. Manufacturers must have an approved quality control (QC) program and inspection oversight that meet FNS, Child Nutrition Programs requirements. CN Labeled products are generally purchased by providers for USDA meal programs. Benefits of CN Labels are that they clearly identify the contributions of the product toward the meal pattern requirement and provide a warranty against audit claims if the CN Label is used according to manufacturer's directions.</p> <p>It is important to know, the CN Logo (the box with CN on each side that surrounds the meal pattern contribution statement) is one of the four integral parts of a label, which includes the product name, ingredient statement, and inspection legend. All four parts must be on the product carton in order for the CN Label to be valid.</p>
Creditable (and non-creditable)	Describes if a food contributes toward one of the five food components in Child Nutrition Programs. Non-creditable foods are either portions of components too small to count toward crediting or foods that do not fit into one of the five food components.
Cycle menu	A series of menus that is repeated over a specific period of time, such as 4 weeks.
Daily required minimum serving amount	The minimum amount of a food component that must be offered/served for a specific meal. Amounts differ for meal patterns, components, and by grade group at lunch and breakfast.
Dietary Guidelines for Americans	Science-based recommendations issued every 5 years by the U.S. Departments of Agriculture and Health and Human Services which serve as the cornerstone for all Federal nutrition education and program activities; they are based on scientific evidence on health-promoting diets in people who represent the general U.S. population, including those who are healthy, those at risk for diet-related diseases, and those living with these diseases.
Edible Portion (EP)	The amount of a food that can actually be eaten after trimming and cooking.

Key Terms	Definition
Enriched Grains	Refined grains that have been processed in a way that removes the nutrient-rich bran and germ, then have thiamin, riboflavin, niacin, folic acid, and iron added after processing, as required by the Federal standard of identity for products labeled as “enriched.”
Fluid milk component	The meal component in Nutrition Standards for School Meals that includes pasteurized unflavored or flavored fat-free and 1% (low-fat) milk.
Food and Nutrition Service (FNS)	The agency under the United States Department of Agriculture responsible for administering the National School Lunch, School Breakfast, Special Milk, and other nutrition and food assistance programs.
Food Based Menu Planning (FBMP)	The method for meal planning for the National School Lunch Program and School Breakfast Program that includes required quantities from specific meal components for daily and weekly meal patterns. These components are fluid milk, fruits, vegetables (including subgroups), grains, and meats/meat alternates. Minimum portion sizes are established by ages and grade groups.
Food Buying Guide for Child Nutrition Programs (FBG)	The authoritative guide developed by USDA to help child nutrition professionals determine purchase amounts of foods for crediting meal components in food-based menu planning. The FBG and related resources are available at <a href="https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutritionprograms">https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutritionprograms</a>
Food item	A specific food offered within the five meal components: fluid milk, fruits, vegetables, grains, and meats/meat alternates. For example, a hamburger patty on a bun is one food item with two of the five meal components (meats/meat alternates and grains).
Fruits component	The meal component in Nutrition Standards for School Meals that is comprised of fruits (fresh, frozen, canned, dried, and pasteurized full-strength juice). Up to half of fruit offerings may be in the form of full-strength juice.
Grade group (age/grade group)	USDA-established groupings used for menu planning that reflect the grade structure of the majority of schools: K–5 (ages 5–10), 6–8 (ages 11–13), and 9–12 (ages 14–18).
Grains component	The meal component in Nutrition Standards for School Meals that is comprised of cereal grains and products made from their flours. 80% of foods credited toward grains in school meals must be whole grain-rich, and the remaining 20% must be enriched.

Key Terms	Definition
Main Dish (Entrée)	<p>An item that is served as the main dish and is either:</p> <ul style="list-style-type: none"> <li>• A combination food of meat and/or meat alternates and grains; or</li> <li>• A combination food of vegetables and/or fruit and meat and/or meat alternates; or</li> <li>• A meat or meat alternate alone with the exception of yogurt, low-fat or reduced-fat cheese, nuts, seeds, nut or seed butters, and meat snacks (such as dried beef jerky); or</li> <li>• A grain that is served as the main dish of the School Breakfast Program reimbursable meal.</li> </ul>
Meal component	<p>One of the five groups which comprises reimbursable meals. The five meal components to be offered to students are fluid milk, fruits, vegetables, grains, and meats/meat alternates.</p>
Meats/meat alternates component	<p>The meal component in Nutrition Standards for School Meals that includes meats (beef, pork, poultry, fish, etc.) and meat alternates, such as eggs, cheese, yogurt, beans and peas (legumes), nuts, and seeds.</p>
Minimum Creditable Amount	<p>The smallest portion of food that contributes toward meal component requirements.</p>
MyPlate	<p>A nutrition education tool intended to help consumers make healthier food choices. The graphic represents the five food groups that are the building blocks for a healthy plate.</p>
National School Lunch Program (NSLP)	<p>The program authorized under the National School Lunch Act that allows participating schools to operate a nonprofit lunch program in accordance with 7 CFR 210. General and special cash assistance and donated food assistance are made available to schools in accordance with 7 CFR 210.</p>
Non-creditable foods	<p>Portions of meal components too small to count toward crediting or foods that do not fit into one of the meal components, such as jams, gelatins, salad dressings, etc.</p>
Offer Versus Serve (OVS)	<p>A provision that allows students to decline a specific number of meal components/food items depending on the menu planning approach used.</p>
Ounce equivalent (oz eq)	<p>A weight-based unit of measure for grains and meats/meat alternate components that takes into account dry versus cooked grains and variations in meats/meat alternates.</p>
Product Formulation Statement (PFS)	<p>A document that provides specific information about a food product and shows how the food credits toward the child nutrition meal pattern citing Child Nutrition Program resources and/or regulations.</p>

Key Terms	Definition
Recognizable Food Item	A recognizable food is a food item visible in the breakfast or lunch offered that allows students to identify the food groups and amounts recommended for consumption at mealtime. Except for noodles made from vegetables that credit toward the vegetable component, foods must be recognizable to be creditable in the National School Lunch and School Breakfast Programs.
Reimbursable meal	A meal served within one of the Federal nutrition or food assistance programs that meets the USDA meal pattern requirements, served to an eligible student, and priced as an entire meal rather than based on individual food items. Such a meal qualifies for reimbursement with Federal funds.
School Breakfast Program (SBP)	The program authorized by Section 4 of the Child Nutrition Act of 1966, which provides meals to children in the morning hours served at or close to the beginning of the child's day at school and which meet the nutritional requirements set out in 7 CFR 220.8.
School Food Authority (SFA)	The governing body that is responsible for the administration of one or more schools and has the legal authority to operate the program therein or be otherwise approved by Food and Nutrition Service to operate the program.
School week	The period of time used to determine compliance with the meal requirements.
State agency (SA)	The State educational agency or any other agency of the State that has been designated by the Governor or other appropriate executive or legislative authority of the State and approved by the Department to administer the program in schools, as specified in 7 CFR 210.3(b); or the Food and Nutrition Service Regional Office (FNSRO), where the FNSRO administers the program as specified in 7 CFR 210.3(c).
Team Nutrition (TN)	An initiative of the USDA Food and Nutrition Service to support the Child Nutrition Programs through training and technical assistance for food service, nutrition education for children and their caregivers, and school and community support for healthy eating and physical activity.
United States Department of Agriculture (USDA)	The Federal entity designated by Congress to administer the National School Lunch, School Breakfast, and Special Milk Programs.
Vegetable subgroups	The five categories of vegetables within the vegetables component required in school lunches across the menu week: dark green, red/orange, beans and peas (legumes), starchy, and other vegetables.

Key Terms	Definition
Vegetables component	The meal component in Nutrition Standards for School Meals is comprised of vegetables (fresh, frozen, canned, dried, pasteurized full-strength juice) and includes five subgroups (see vegetable subgroups). Up to half of vegetable offerings may be in the form of full-strength juice.
Whole Grain-Rich	The term designated by FNS in which at least 50% of the grain in the product is whole grain. Any remaining grains in the product are enriched. Whole grain-rich products must conform to USDA FNS guidance to contribute toward the grains component.
Whole Grains	Grains that consist of the intact, ground, cracked or flaked grain seed whose principal anatomical components—the starchy endosperm, germ, and bran—are present in the same relative proportions as they exist in the intact grain seed.

# ADDITIONAL RESOURCES

- Institute of Child Nutrition. (n.d.). *Education and training resources for school nutrition programs*. <https://theicn.org/school-nutrition-programs/>
- U.S. Department of Agriculture, Food and Nutrition Service. (2008). *History of the national school lunch program*. <https://www.fns.usda.gov/nslp/program-history>
- U.S. Department of Agriculture, Food and Nutrition Service. (2010). *Q&As – Milk substitution for children with medical or special dietary needs (non-disability)*. <https://www.fns.usda.gov/cn/gas-milk-substitution-children-medical-or-special-dietary-needs>
- U.S. Department of Agriculture, Food and Nutrition Service. (2011). *Water availability during NSLP meal service*. <https://www.fns.usda.gov/cn/water-availability-during-nslp-meal-service>
- U.S. Department of Agriculture, Food and Nutrition Service. (2017). *SBP fact sheet*. <https://www.fns.usda.gov/sbp/sbp-fact-sheet>
- U.S. Department of Agriculture, Food and Nutrition Service. (2019). *National school lunch program (NSLP) fact sheet*. <https://www.fns.usda.gov/nslp/nslp-fact-sheet>
- U.S. Department of Agriculture, Food and Nutrition Service. (2019). *Offer versus serve materials*. <https://www.fns.usda.gov/tn/offer-versus-serve-national-school-lunch-program-posters>
- U.S. Department of Agriculture, Food and Nutrition Service. (2019). *Serving school meals to preschoolers*. <https://www.fns.usda.gov/tn/serving-school-meals-preschoolers>
- U.S. Department of Agriculture, Food and Nutrition Service. (2021). *Offering smoothies as part of reimbursable school meals*. <https://www.fns.usda.gov/tn/offering-smoothies-part-reimbursable-school-meals>
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Crediting fruits in child nutrition programs tip sheet*. <https://www.fns.usda.gov/tn/crediting-fruits-child-nutrition-programs-tip-sheet>
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Crediting meats/meat alternates in child nutrition programs tip sheet*. <https://www.fns.usda.gov/tn/crediting-meats-meat-alternates-child-nutrition-tip-sheet>
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Crediting vegetables in child nutrition programs tip sheet*. <https://www.fns.usda.gov/tn/crediting-vegetables-child-nutrition-programs-tip-sheet>
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Meal requirements under the NSLP & SBP: Q&A for program operators updated to support the transitional standards effective July 1, 2022*. <https://www.fns.usda.gov/cn/sp052022-questions-answers-program-operators>
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Nutrient analysis protocols: How to analyze menus for USDA's school meals programs*. <https://www.fns.usda.gov/tn/Nutrient-Analysis-Protocols-Manual>

- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *The whole grain resource for the national school lunch and breakfast programs*. <https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs>
- Department of Agriculture, Food and Nutrition Service. (n.d.). *Food buying guide for child nutrition programs*. <https://foodbuyingguide.fns.usda.gov/Appendix/DownloadFBG>
- U.S. Department of Agriculture, Food and Nutrition Service. (n.d.). *Team nutrition*. <https://www.fns.usda.gov/team-nutrition>
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020). *Dietary guidelines for Americans, 2020–2025*. 9th Edition. <https://www.dietaryguidelines.gov>
- HYPERLINK “<https://www.fns.usda.gov/tn/menu-planner>”<https://www.fns.usda.gov/tn/crediting-meats-meat-alternates-child-nutrition-tip-sheet><https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs><https://www.fns.usda.gov/tn/-serving-school-meals-preschoolers><https://www.fns.usda.gov/cn/water-availability-during-nslp-meal-service>

## REFERENCES

### References

- Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium Final Rule, 7 C.F.R. § 210, 215, 220, and 226 (2022).
- U.S. Department of Agriculture, Food and Nutrition Service. (2022). *Meal requirements under the NSLP & SBP: Q&A for program operators updated to support the transitional standards effective July 1, 2022*. <https://www.fns.usda.gov/cn/sp052022-questions-answers-program-operators>
- Nutrition Standards in the National School Lunch and School Breakfast Programs, 7 C.F.R. § 210, 220 (2012).
- U.S. Department of Agriculture, Food and Nutrition Service. (n.d.). *Food buying guide for child nutrition programs*. <https://foodbuyingguide.fns.usda.gov/Appendix/DownloadFBG>



The University of Mississippi

School of Applied Sciences

800-321-3054

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