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PARTICIPANT'S WORKBOOK

PLANNING REIMBURSABLE SCHOOL MEALS FOR MENU PLANNERS

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Key Area: 1000 (Nutrition)

USDA Professional Standards Code: 1100 (Menu Planning)

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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 21st 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

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.

[Rules can be found on the ICN website – Ground Rules for Training Mini-Posters.]

Training-at-a-Glance

Time	Objectives	Activity	Materials
20 minutes	• Introduction to lesson	• Pre-Assessment • Ice breaker	• Participant's Workbook • Pre-Assessment • Pen/pencil
Lesson 1: Milk Component for the National School Lunch Program			
15 minutes	• 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).	• Milk Component – Menu Planning Form	• Participant's Workbook • Pen/pencil
Lesson 2: Fruits Component for the National School Lunch Program			
15 minutes	• Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.	• Favorite Fruits • Fruits Component– Menu Planning Form	• Participant's Workbook • Pen/pencil
Lesson 3: Vegetables Component for the National School Lunch Program			
30 minutes	• Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.	• Favorite Vegetables • Vegetables Component– Menu Planning Form	• Participant's Workbook • Pen/pencil
Lesson 4: Grains Component for the National School Lunch Program			
30 minutes	• Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.	• Grains Component– Menu Planning Form	• Participant's Workbook • Pen/pencil
Lesson 5: Meats/Meat Alternates Component for the National School Lunch Program			
30 minutes	• 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.	• Meats/Meat Alternates Component – Menu Planning Form	• Participant's Workbook • Pen/pencil

Time	Objectives	Activity	Materials
Lesson 6: Modifying Menu Offerings for Grade Groups to Meet Meal Pattern Requirements for the National School Lunch Program			
30 minutes	• Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the NSLP.	• Meal Pattern Components (Other Grade Groups) – Menu Planning Form	• Participant's Workbook • Pen/pencil
Lesson 7: School Breakfast Program			
30 minutes	• Identify the meal components and serving size requirements to meet the School Breakfast Program meal pattern requirements.	• Planning a Breakfast Menu	• Participant's Workbook • Pen/pencil
Lesson 8: Nutrient Standards			
20 minutes	• Define nutrient standards in relation to the meal pattern requirements for the National School Lunch Program and School Breakfast Program.	• Think – Pair – Share: Nutrient Standards	• Participant's Workbook • Pen/pencil
Lesson 4: Grains Component for the National School Lunch Program			
10 minutes	• Summarize the lessons.	• Post-Assessment • Evaluation	• Participant's Workbook • Pen/pencil • Post-Assessment • Evaluation
4 hours			

INTRODUCTION

Planning Reimbursable School Meals for Menu Planners

Food Based Menu Planning (FBMP) uses meal patterns and grade groups as planning tools.

- Requires specific meal components to be offered in specific amounts in order to qualify as a reimbursable meal
- Allow school food authorities (SFAs) to serve economical meals that are varied, balanced, safe, wholesome, and health promoting.

Meal Programs

- 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-cost or free 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.

KEY TERMS

Key Terms	Definition
As Purchased (AP)	The form(s) in which a food is purchased.
Child Nutrition (CN) Labeling Program	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. 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.
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 https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutritionprograms
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)	An item that is served as the main dish and is either: • A combination food of meat and/or meat alternates and grains; or • A combination food of vegetables and/or fruit and meat and/or meat alternates; or • 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 • A grain that is served as the main dish of the School Breakfast Program reimbursable meal.
Meal component	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.
Meats/meat alternates component	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.
Minimum Creditable Amount	The smallest portion of food that contributes toward meal component requirements.
MyPlate	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.
National School Lunch Program (NSLP)	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.
Non-creditable foods	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.
Offer Versus Serve (OVS)	A provision that allows students to decline a specific number of meal components/food items depending on the menu planning approach used.
Ounce equivalent (oz eq)	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.
Product Formulation Statement (PFS)	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.

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.

Dietary Guidelines for Americans, 2020–2025

The *Dietary Guidelines for Americans, 2020–2025* provides advice on what to eat and drink to meet nutrient needs, promote health, and help prevent chronic disease. The entire edition can be found at the following link:

https://www.dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials

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 4 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.

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

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

[a] Food items included in each group and subgroup and amount equivalents. Minimum creditable serving is ⅛ cup.

[b] 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.

[c] Larger amounts of these vegetables may be served.

[d] 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.
[e] Any vegetable subgroup may be offered to meet the total weekly vegetable requirement.
[f] 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.
[g] All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less). Milk may be flavored or flavored, provided that unflavored milk is offered at each meal service.
[h] 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.
[i] Sodium Interim Target 1A must be met no later than July 1, 2023 (SY 2023-2024).

Overview of Offer Versus Serve (OVS)

Offer Versus Serve (OVS) is a provision in the NSLP and SBP. It 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.

OVS at Meal Service

- OVS is optional at all grade levels for breakfast and required at the senior high school level only for lunch.
- 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 omponents in the required serving sizes. One selection must be at least ½ cup from either the fruit or vegetable component.

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 fluid 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. Please refer to USDA's Offer Versus Serve Materials (https://www.fns.usda.gov/tn/offer-versus-serve-national-school-lunch-program-posters) for specific questions related to the lunch or breakfast meal pattern requirements.

Food Buying Guide (FBG)

The Food Buying Guide is available online as the FBG for Child Nutrition Programs Interactive Web-Based Tool or as an 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 school food authorities (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.), the Food Buying Guide can be used to determine crediting information.

Where to Find the FBG

Visit https://foodbuyingguide.fns.usda.gov/ for the Food Buying Guide for Child Nutrition Programs Interactive Web-Based Tool.

Visit https://www.fns.usda.gov/tn/food-buying-guide-mobile-app for the Food Buying Guide Mobile App.

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

LESSON 1: Milk Component for the National School Lunch Program

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups)[b]	3¾ (¾)	3¾ (¾)	5 (1)
Dark green[c]	½	½	½
Red/Orange[c]	¾	¾	1¼
Beans and peas (legumes)[c]	½	½	½
Starchy[c]	½	½	½
Other[c d]	½	½	¾
Additional Vegetables to Reach Total[e]	1	1	1½
Grains (oz eq)[f]	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)[g]	5 (1)	5 (1)	5 (1)

Benefits

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.

Fluid Milk Requirements

All fluid milk must be pasteurized and contain vitamins A and D at levels specified by the Food and Drug Administration (FDA).

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

Current regulations allows 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. For example, if you offer fat-free or 1% low fat flavored milk, you MUST offer fat-free or 1% low fat unflavored milk.

Note that all flavored milk, including fat-free and 1% (low-fat), cannot be served to preschoolers. Schools serving meals to preschool children (ages 2 through 4) must follow the NSLP/SBP regulations, which reflect the Child and Adult Care Food Program (CACFP) meal pattern for this age group.

Offering Water

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).

Daily Required Minimum Serving Size and Allowable Options

The daily required minimum serving size for all age/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 for milk.

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

Milk Component Section of Food Buying Guide

The Food Buying Guide (FBG) is also helpful when your standard purchase unit, such as half-pint cartons, is unavailable. For example, 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. The Food Buying Guide is also useful when the usual way your program purchases milk, such as half-pint cartons, is not available.

Other Creditable Types of Milk

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

Nondairy Milk Substitutes

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. The fluid milk substitute meet milk substitute nutrition standards for nine nutrients creditable. If the nutrition facts label on a product does not list all of 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.

For reimbursable meals, allowable substitutes for fluid milk must meet these specific nutrition requirements. The nondairy beverage(s) must provide the nutrients listed and meet FDA fortification guidelines.

You must first verify that the nondairy beverage(s) you offer are allowable fluid milk substitute(s) for meals to be reimbursable.

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	

You can offer nutritionally equivalent fortified soy milk with other fluid milk options without requiring a non-disability special dietary request for a milk substitute. This can save your program time and additional paperwork. It is also a way to meet the preferences of students requesting non-diary milk 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 is nutritionally equivalent to fluid milk, including any State or local requirements.

For information on special dietary needs, see see USDA's Accommodating Children with Special Dietary Needs and 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 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.

Milk Component Summary

- 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
MILK, FLUID					
Milk, fluid[1] *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)*	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

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups)[b]	3¾ (¾)	3¾ (¾)	5 (1)
Dark green[c]	½	½	½
Red/Orange[c]	¾	¾	1¼
Beans and peas (legumes)[c]	½	½	½
Starchy[c]	½	½	½
Other[c d]	½	½	¾
Additional Vegetables to Reach Total[e]	1	1	1½
Grains (oz eq)[f]	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)[g]	5 (1)	5 (1)	5 (1)

Benefits of Fruits

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.

Fruit Component Requirements

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.

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 ⅛ cup.

Types of Fruits

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.

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.)

Fresh Fruit

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.

Canned Fruit

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.

Frozen Fruit

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.

Dried Fruit

Whole dried fruit and dried fruit pieces credit for twice the volume served. For example, ⅛ cup of dried cranberries, the smallest creditable amount of fruits, credits as ¼ cup. If possible, choose options with no added sugar. Remember, ⅛ cup of any fruit is the minimum creditable amount; 1/16 cup (1 tablespoon) of dried fruit does not credit as ⅛ cup fruit.

Fruit Juice

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 ½ 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) ½ cup fruit and ½ 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, with the exception of smoothies. Pureed fruits, (fresh, frozen, or canned) when served in a smoothie, credits as juice and are subject to the limitations regarding juice service.

Non-Creditable Fruit Products

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.

Increasing Fruit Consumption

The MyPlate website (www.MyPlate.gov) has suggestions to increase fruit consumption. Ways to increase fruit consumption:

- 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 repeatedly offering the same fruits (e.g., oranges, apples, or bananas) 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.

Fruits Component Summary

- At lunch, provide at least ½ 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 ⅛ cup.
- Credit dried fruits at twice the volume (⅛ cup credits as ¼ cup).
- Limit 100% fruit juice to half or less of fruits component weekly, including fruits credited in smoothies.

LESSON 3: Vegetables Component for the National School Lunch Program

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups)[b]	3¾ (¾)	3¾ (¾)	5 (1)
Dark green[c]	½	½	½
Red/Orange[c]	¾	¾	1¼
Beans and peas (legumes)[c]	½	½	½
Starchy[c]	½	½	½
Other[c d]	½	½	¾
Additional Vegetables to Reach Total[e]	1	1	1½
Grains (oz eq)[f]	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)[g]	5 (1)	5 (1)	5 (1)

Benefits of Vegetables

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.

Vegetables Component

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.

Vegetables must be fresh, frozen, canned, dried (including dried legumes), or 100% full-strength vegetable juice. Visit the Food Buying Guide for Child Nutrition Programs (FBG) (https://foodbuyingguide.fns.usda.gov/) for examples of creditable vegetables. 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.

Vegetables Component Serving Size

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 ¾ cup and a total weekly minimum of 3 ¾ cups.

Vegetable Subgroups

The vegetables component contains five subgroups: dark green, red/orange, beans and peas (legumes), starchy, and other vegetables. Each of the vegetable subgroups contributes 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.

Crediting Vegetables

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 ½ cup toward the dark green vegetable subgroup.
- Cooked leafy greens, such as collard greens, are credited by volume as served; for example, ½ cup of cooked collard greens credits as ½ cup of dark green vegetables.

Any volume of a vegetable that is less than ⅛ 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 ¼ cup toward the red/orange subgroup.

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.

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.

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. Vegetables blended in smoothies may credit toward the vegetables component and count toward the weekly juice limit.

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.

Dark Green Vegetables

- Bok choy
- Broccoli
- Collard greens*
- Dark green leafy lettuce*
- Kale*
- Mesclun*
- Mustard greens*
- Romaine lettuce*
- Spinach*
- Turnip greens*
- Watercress*

Red/Orange Vegetables

- Acorn squash
- Butternut squash
- Carrots
- Hubbard squash
- Pumpkin
- Red peppers
- Sweet potatoes
- Tomatoes
- Tomato juice

Other Vegetables

- Artichokes
- Asparagus
- Avocado
- Bean sprouts
- Beets
- Brussels sprouts
- Cabbage
- Cauliflower
- Celery
- Cucumbers
- Eggplant
- Green beans
- Green bell peppers
- Iceberg (head) lettuce*
- Mixed vegetable juice
- Mushrooms
- Okra
- Onions
- Turnips
- Wax beans
- Zucchini

Starchy Vegetables

- Cassava
- Corn
- Fresh cowpeas, field peas, or black-eyed peas (not dry)
- Green bananas
- Green peas
- Green lima beans
- Potatoes
- Taro
- Water chestnuts

Beans and Peas (Legumes)

- Black beans
- Black-eyed peas (mature, dry)
- Edamame (immature soy beans)
- Garbanzo beans (chickpeas)
- Kidney beans
- Lentils
- Navy beans
- Pinto beans
- Soy beans
- Split peas
- White beans

*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 Baked Acorn Squash	½ cup Carrots (baby or sticks) ½ cup Oven Fries	¾ cup* Tossed Salad (½ cup Iceberg Lettuce and ¼ cup Red Pepper and Tomato) ½ cup Refried Beans	½ cup Cauliflower Florets ½ cup Green Beans	½ cup Celery and Jicama Sticks 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 menu item is not popular, or another reason for the need to change the menu item.

Next, write the serving size and vegetable choice to substitute for each vegetable menu 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).

Vegetables Component Summary

- At lunch, provide ¾ 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 ⅛ cup.

LESSON 4: Grains Component for the National School Lunch Program

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups)[b]	3¾ (¾)	3¾ (¾)	5 (1)
Dark green[c]	½	½	½
Red/Orange[c]	¾	¾	1¼
Beans and peas (legumes)[c]	½	½	½
Starchy[c]	½	½	½
Other[c d]	½	½	¾
Additional Vegetables to Reach Total[e]	1	1	1½
Grains (oz eq)[f]	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)[g]	5 (1)	5 (1)	5 (1)

Benefits of Grains

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.

Grains Component Requirements

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.

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
- Non-sweet snack food products, like hard pretzels, hard bread sticks, and tortilla chips

Daily and Weekly Required Minimum Serving Amounts

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.

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.

Crediting Criteria for Grains Component

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.

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.
- 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.
- 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.

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 much 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.

Food Buying Guide for Child Nutrition Programs Exhibit A

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.

Other Crediting Information for Grains

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.

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.

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.

Whole Grain-Rich Criteria

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.

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. (See page 18 for more information about CN labels.)
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."
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). See page 10 for more information on non-creditable grains.

   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.

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) 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) for more information on the whole grain-rich criteria.

Exhibit A: Grain Requirements For Child Nutrition Programs[1, 2]

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

Food Products per Group	Ounce Equivalent (oz eq)	Minimum Serving Size
Group A	**Ounce Equivalent (oz eq) for Group A**	**Minimum Serving Size for Group A**
Bread type coating Bread sticks (hard) Chow Mein noodles Savory Crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) *Note: weights apply to bread in stuffing*	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
Group B	**Ounce Equivalent (oz eq) for Group B**	**Minimum Serving Size for Group B**
Bagels Batter type coating Biscuits Breads - all (for example sliced, French, Italian) Buns (hamburger and hot dog) Sweet Crackers[5] (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
Group C	**Ounce Equivalent (oz eq) for Group C**	**Minimum Serving Size for Group C**
Cookies[3] (plain - includes vanilla wafers) Cornbread Corn muffins Croissants Pancakes Pie crust (dessert pies[3], cobbler[3], fruit turnovers[4], 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
Group D	**Ounce Equivalent (oz eq) for Group D**	**Minimum Serving Size for Group D**
Doughnuts[4] (cake and yeast raised, unfrosted) Cereal bars, breakfast bars, granola bars[4] (plain) Muffins (all, except corn) Sweet roll[4] (unfrosted) Toaster pastry[4] (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.*

Group E	**Ounce Equivalent (oz eq) for Group E**	**Minimum Serving Size for Group E**
Cereal bars, breakfast bars, granola bars[4] (with nuts, dried fruit, and/or chocolate pieces) Cookies[3] (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts[4] (cake and yeast raised, frosted or glazed) French toast Sweet rolls[4] (frosted) Toaster pastry[4] (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
Group F	**Ounce Equivalent (oz eq) for Group F**	**Minimum Serving Size for Group F**
Cake[3] (plain, unfrosted) Coffee cake[4]	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
Group G	**Ounce Equivalent (oz eq) for Group G**	**Minimum Serving Size for Group G**
Brownies[3] (plain) Cake[3] (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
Group H	**Ounce Equivalent (oz eq) for Group H**	**Minimum Serving Size for Group H**
Cereal Grains (barley, quinoa, etc.) Breakfast cereals (cooked)[6,7] 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
Group I	**Ounce Equivalent (oz eq) for Group I**	**Minimum Serving Size for Group I**
Ready to eat breakfast cereal (cold, dry)[6,7]	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

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.*

6 *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.*

7 *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 United States Department of Agriculture

USDA Foods in Schools

110694 - Tortillas, Whole Grain/Whole Grain-Rich

Category: Grains (Whole Grain)

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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.

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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 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.

Nutrition Facts

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

Amount Per Serving	
Calories	114
Total Fat	1g
Saturated Fat	0g
Trans Fat	0g
Cholesterol	0mg
Sodium	3mg
Total Carbohydrate	24g
Dietary Fiber	1g
Sugars	0g
Protein	2g

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 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.

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May 2020

USDA United States Department of Agriculture

USDA Foods in Schools

110501 - Pasta, Macaroni, Whole Grain-Rich

Category: Grains (Whole Grain)

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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.

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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 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.

Nutrition Facts

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

Amount Per Serving	
Calories	114
Total Fat	1g
Saturated Fat	0g
Trans Fat	0g
Cholesterol	0mg
Sodium	3mg
Total Carbohydrate	24g
Dietary Fiber	1g
Sugars	0g
Protein	2g

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 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.

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May 2020

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

Nutrition Facts

12 Servings per container
Serving Size: 1 Bun (63 g / 2.2 oz)

Amount per serving

Calories **150**

	% Daily Value*
Total Fat 1.5g	2%
Saturated Fat 0g	0%
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 0g	
Cholesterol 0mg	0%
Sodium 240mg	11%
Total Carbohydrate 30g	11%
Dietary Fiber 2g	8%
Total Sugars 4g	
Includes 4g Added Sugars	8%
Protein 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

Grains Component Summary

- 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 ¼ oz eq.

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

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups)[b]	3¾ (¾)	3¾ (¾)	5 (1)
Dark green[c]	½	½	½
Red/Orange[c]	¾	¾	1¼
Beans and peas (legumes)[c]	½	½	½
Starchy[c]	½	½	½
Other[c d]	½	½	¾
Additional Vegetables to Reach Total[e]	1	1	1½
Grains (oz eq)[f]	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)[g]	5 (1)	5 (1)	5 (1)

Benefits of Meats/Meat Alternates

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.

Meats/Meat Alternates Component

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, salm on, etc.)
- Meat alternates (cheese, eggs, yogurt, nuts/seeds and their butters, beans and peas (legumes) tofu, etc.)

Daily Required Minimum Serving Amounts

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 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.

Meats/Meat Alternates Component Serving Sizes

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. With the meats/meat alternates component, it is important to plan not just to meet the daily minimum but also the weekly minimums.

Crediting Meats/Meat Alternates

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).

Crediting Nuts and Seeds as Meats/Meat Alternates

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.

Child Nutrition (CN) Label

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 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.

Beans & Peas

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.

Combination Foods

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.

Food Buying Guide for Meats/Meat Alternatives

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.

United States Department of Agriculture

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	**1** 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	**2** 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	**3** 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	**4** 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

USDA United States Department of Agriculture

Macaroni and Cheese

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Low-fat (1%) milk		2 qt		1 gal	**5** Combine cauliflower purée, macaroni, milk, cheese, sour cream, pepper, garlic powder, onion flakes, salt, and lemon pepper in a large bowl. Stir well.
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	
					6 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. For 50 servings, use 2 pans. For 100 servings, use 4 pans.
					7 Bake: Conventional oven: 350 °F for 30–35 minutes. Convection oven: 325 °F for 25–30 minutes.
					8 Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.

United States Department of Agriculture

Macaroni and Cheese

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

USDA United States Department of Agriculture

Macaroni and Cheese

NUTRITION INFORMATION
For 1 piece.

NUTRIENTS	AMOUNT
Calories	**208**
Total Fat	**4 g**
Saturated Fat	2 g
Cholesterol	13 mg
Sodium	**412 mg**
Total Carbohydrate	**27 g**
Dietary Fiber	2 g
Total Sugars	4 g
Added Sugars included	N/A
Protein	**15 g**
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 2 gal 1 qt ¼ cup/2 steam table pans (12" x 20" x 2 ½")	About 36 lb 4 oz About 4 gal 2 qt ½ cup/4 steam table pans (12" x 20" x 2 ½")

USDA United States Department of Agriculture

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, ⅛ cup starchy vegetable, ⅛ 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	1 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		¼ cup	
Ground cumin		2 Tbsp		¼ cup	
Dried oregano		2 tsp		1 Tbsp 1 tsp	

Food and Nutrition Service

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USDA United States Department of Agriculture

Chicken Fajitas

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Ancho chili powder OR Mexican seasoning mix (see Notes)		¼ cup 2 Tbsp ¼ cup 2 Tbsp	3½ oz 3½ oz	¾ cup ¾ cup	
					2 Critical Control Point: Cool to 41 °F or lower within 4 hours.
					3 Critical Control Point: Hold at 41 °F or below.
					4 Place marinated chicken in a large stock pot. Cook uncovered over medium–high heat for 2 minutes.
					5 Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
					6 Set aside for step 9.
*Fresh green bell peppers, diced	8 oz	1½ cups	1 lb	3 cups	**7** 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	**8** 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)	

USDA United States Department of Agriculture

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	
					9 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	**10** 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.
					11 Critical Control Point: Hold for hot service at 135 °F or higher.
					12 Serve 1 fajita.

USDA United States Department of Agriculture

Chicken Fajitas

NUTRITION INFORMATION
For 1 fajita.

NUTRIENTS	AMOUNT
Calories	**267**
Total Fat	**6 g**
Saturated Fat	2 g
Cholesterol	39 mg
Sodium	**415 mg**
Total Carbohydrate	**28 g**
Dietary Fiber	4 g
Total Sugars	2 g
Added Sugars included	N/A
Protein	**17 g**
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		
Food as Purchased for	**50 Servings**	**100 Servings**
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	
50 Servings	**100 Servings**
About 13 lb 2 oz (chicken mixture) About 1 gal 2 qt 2¼ cups/2 steam table pans (12" x 20" x 2½")	About 26 lb 4 oz (chicken mixture) About 3 gal 1 qt ½ cup/4 steam table pans (12" x 20" x 2½")

USDA United States Department of Agriculture

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

Nutrition Facts

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

Amount Per Serving	
Calories	47
Total Fat	1g
Saturated Fat	0g
Trans Fat	0g
Cholesterol	24mg
Sodium	23mg
Total Carbohydrate	0g
Dietary Fiber	0g
Sugars	0g
Protein	8g

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, 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

2.25 oz. Beef Patty

Item Number: CP5682

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

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

Product Title

FULLY COOKED BEEF PATTIES

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.)

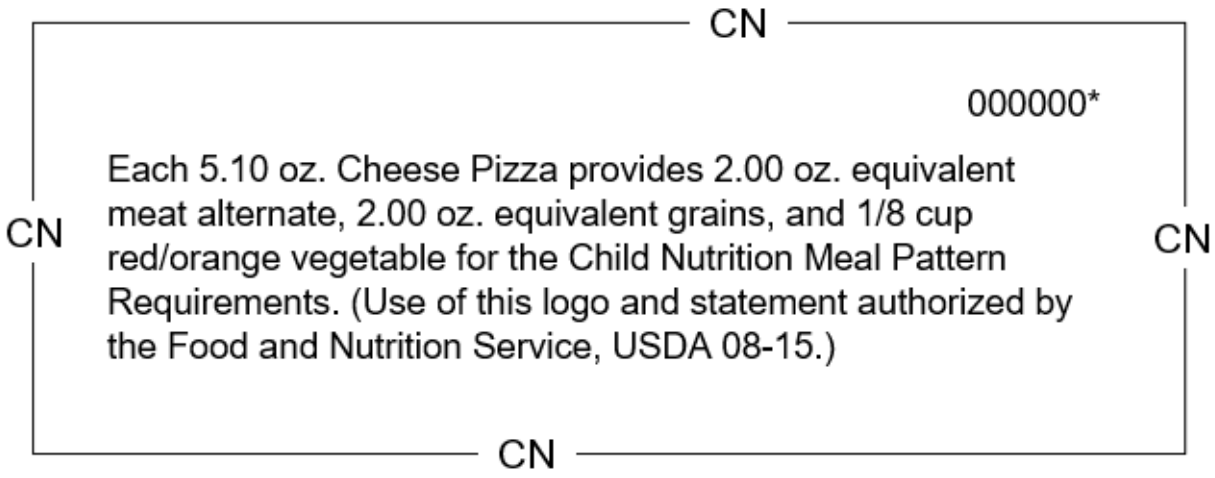
Allergens

Soy

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



Meats/Meat Alternates Component Summary

- 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.

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

Grade Groups

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 (salt). 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.

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

Milk Component

The milk requirement is the same across all grade groups.

Fruits Component

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. The serving size is ½ cup daily for a total of 2 ½ 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.

Vegetables Component

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. The K–5 and 6–8 grade groups require ¾ cup of vegetables daily for a total of 3 ¾ cups per week.

The weekly minimum requirements are the same for the dark green beans and peas (legumes) and starchy subgroups for all grade groups—½ cup. 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 1¼ cups of the red/orange subgroup, whereas the K–5 and 6–8 grade groups require ¾ cup. The 9–12 grade group requires ¾ cup of the other subgroup, whereas the K–5 and 6–8 grade groups require only ½ cup.

Grains Component

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. For example, 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.

Meats/Meat Alternates Component

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).

Over Versus Serve (OVS) in NSLP

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.

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.

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

LESSON 7: School Breakfast Program

USDA United States Department of Agriculture

School Breakfast Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Food Components	Amount of Food[a] per Week		
	(minimum per day)		
Fruits (cups)[b c]	5 (1)	5 (1)	5 (1)
Vegetables (cups)[b c]	0	0	0
Dark green	0	0	0
Red/Orange	0	0	0
Beans and peas (legumes)	0	0	0
Starchy	0	0	0
Other	0	0	0
Grains (oz eq)[d]	7-10 (1)	8-10 (1)	9-10 (1)
Meats/Meat Alternates (oz eq)[e]	0	0	0
Fluid milk[f] (cups)	5 (1)	5 (1)	5 (1)

SBP Compared to NSLP

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.

School Breakfast Program

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.

Optional Components

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 ½ 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.

School Breakfast Program Menu Crediting Fruit Juice

No more than half of the total weekly fruits may be met with full-strength fruit or vegetable juice.

School Breakfast Program Menu Crediting Vegetables for Fruits

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.

School Breakfast Program Menu Offering Vegetables as Extras

Some programs 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 and make the appropriate changes and provide training for staff. Also, extra foods do count toward the calorie and nutrient totals.

School Breakfast Program Grains Component

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.

SBP and OVS

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.

School Breakfast Program Summary

In summary, the main points to remember when writing menus for the School Breakfast Program:

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

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

[1] 80% of grains for all grade groups must be whole grain-rich. The 80% applies only to grains menu items.

[2] 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.

[3] 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.

LESSON 8: Nutritional Standards

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

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.

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, offer the higher end of weekly ounce equivalents for grains and meats/meat alternates.

Saturated Fat

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.

Trans Fat

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.

Sodium

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.

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* (https://theicn.org/shaking-it-up/) series of worksheets and online courses for more sodium reduction strategies.

Non-Creditable Foods

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. 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.

Nutrient Analysis

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 components, subgroups, and nutrient specifications.

Certification of Compliance Worksheets are 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.

Technical Assistance & Guidance

If you need additional help with food based menu planning, contact your State agency. Email helpdesk@theicn.org or call the ICN Help Desk at 1-800-321-3054.

ADDITIONAL RESOURCES

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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

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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

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