ONBOARDING FOR SCHOOL NUTRITION CHEFS

CULINARY TRAINING MANUAL

CICN | CULINARY INSTITUTE OF CHILD NUTRITION

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Time: 13.5 hours

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Institute of Child Nutrition
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ONBOARDING FOR SCHOOL NUTRITION CHEFS

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

Overview

Welcome to the Institute of Child Nutrition's (ICN) *Onboarding for School Nutrition Chefs*. This program is designed to deliver thorough training to chefs actively engaged in preparing meals for school meal programs. The focus is on both operational procedures and compliance with relevant regulations. This program includes practical applications, personalized assessments, and group discussions for an engaging learning experience. Additionally, the program caters to chefs in diverse positions like program directors and menu planners, introducing them to the basics of school nutrition. The program emphasizes the availability of further training resources and programs from the ICN, suitable for various roles chefs may undertake in school meal programs .

The *Onboarding for School Nutrition Chefs* Culinary Training Manual assists trainers in delivering this face-to-face training for school nutrition professionals. All handouts needed for each lesson are included in the *Onboarding for School Nutrition Chefs* Culinary Training Manual. To assist you further in successfully conducting this training, the Training Manual includes the following prompts:

Discuss:
This prompt will be followed by talking points or instructions for the participants. Use these talking points as a guide for the topic of discussion. Following the instructions provided will assist you in having a successful training.

Key Message:
This prompt will provide important information that child nutrition professionals should understand. There are suggested questions to ask participants for discussion purposes. Please ensure the participants have a good understanding of these key messages before continuing with the training.

Class Discussion:
This prompt will suggest questions to ask the participants to start a good discussion amongst the group. For some questions, answers may be provided to help guide the conversation if participants seem reluctant to answer.

Activity:
This prompt will provide clear instructions for conducting the activities, including talking points and guidelines to ensure participants fully engage with the topic. Following these instructions will help facilitate successful activities where learning objectives are effectively met.

Instructor's Note:
This prompt provides instructions or action items for the facilitator.

The lessons in this manual are designed to be versatile in their application. They can be delivered as a comprehensive package under the title *Onboarding for School Nutrition Chefs* or as standalone individual lessons to cater to specific training needs.

Onboarding for School Nutrition Chefs lessons include:

- Effective Goal Setting Using SMART Goals
- Reimbursable School Meals
- Food Production and Operation Management
- CICN Presents: Culinary Training and Facilitating
- Soft Skills for Chefs in Schol Nutrition Programs Roundtable Session

When delivering all the lessons as part of the comprehensive *Onboarding for School Nutrition Chefs* package, adjust the introductions and icebreaker activities for each lesson to ensure they are cohesive and build upon one another. Tailoring these elements will create a more engaging and seamless training experience for participants, fostering a sense of continuity and progression throughout the onboarding process.

This schedule is designed to provide a structured and comprehensive onboarding experience, ensuring that new school nutrition chefs are well-equipped with the knowledge and skills necessary to succeed in their roles. The proposed comprehensive schedule outline for the *Onboarding for School Nutrition Chefs* training package is as follows:

Day 1	
0.5 hour	Introduction
1 hour	Effective Goal Setting Using SMART Goals
2.25 hours	Food Production and Operations Management
Lunch	
4 hours	Reimbursable School Meals
Day 2	
1.25 hour	CICN Presents: Culinary Training and Facilitating
Lunch (plan accordingly based on time)	
4 hours	Soft Skills for Chefs in School Meal Programs Roundtable Session
0.5 hour	Wrap Up, Action Planning, & Networking
Total 13.5 hours	

USDA Professional Standards

General Nutrition – 1300

1310 – Relate the Dietary Guidelines and USDA's food guidance system (such as MyPlate) concepts to the goals of the School Meal Programs.

1320 – Understand general nutrition concepts that relate to school meals, such as whole grains, sodium, etc.

Food Production – 2100

2110 – Understand and effectively prepare food using a standardized recipe.

2120 – Complete a food production record and other required paperwork.

2130 – Develop culinary skills necessary for school meal preparation.

2140 – Properly use and care for equipment.

2150 – Understand CN Labeling, product formulation statements and/or appropriate crediting information for school meal pattern requirements.

Serving Food – 2200

2210 – Identify/serve portions of food items according to USDA school meal pattern requirements and diet restrictions.

2220 – Use Offer Versus Serve correctly.

2230 – Serve food to maintain quality and appearance standards.

Communications and Marketing – 4100

4140 – Develop communications skills.

4150 – Communicate within the school and to the community through multiple approaches to inform and educate stakeholders.

Ground Rules

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

Preparation Checklist

Instructions: The following tasks are necessary for presenting this lesson. Assign each task to a specific person and determine the date that each task must be completed. Keep track of the progress by checking off tasks as they are completed. [Items may vary according to needs of particular lessons.]

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

Introduction
Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
30 minutes	Welcome	Icebreaker	• Culinary Training Manual • Name badges and table tents
0.5 hour			

Introduction

Discuss

Welcome to the Institute of Child Nutrition's (ICN) *Onboarding for School Nutrition Chefs*. This program is designed to deliver thorough training to chefs actively engaged in preparing meals for School Meal Programs. The focus is on both operational procedures and compliance with relevant regulations. This includes practical applications, personalized assessments, and group discussions for an engaging learning experience. Additionally, the program caters to chefs in diverse positions like program directors and menu planners, introducing them to the basics of school nutrition. The program emphasizes the availability of further training resources and programs from the ICN, suitable for various roles chefs may undertake in Child Nutrition programs.

This training provides an extremely thorough overview of what it takes to be successful at your job.

We encourage you to ask questions and network with your peers.

Instructor's Note

There are a few "housekeeping" items to review.

- The restrooms and water fountain are located (point out the location).
- Ensure everyone signed the sign-in sheets.
- Write "Bike Rack" at the top of a chart paper page and post it in a convenient room area. Explain that you will try to answer questions throughout the training; however, sometimes, a question requires research or a longer answer than time allows. Because questions are important, a "Bike Rack" has been posted. Write the question on a sticky note and post it to the Bike Rack.

Activity

ACTIVITY: Icebreaker – Accomplishments

Materials: None

Time: 20 minutes

Instructions:
Participants will begin by reflecting on an accomplishment they have achieved as a chef. Each participant will find a partner they have not met before. Together, they will share their name, where they work, their job title, and their chosen accomplishment. Examples of accomplishments could include increasing participation in meal programs or implementing a grab-and-go breakfast initiative.

After sharing with their partner for approximately five minutes, participants will introduce their partner to the larger group. Each introduction will include the partner's name, job title, place of work, and accomplishment.

This activity serves as an engaging icebreaker to help participants connect. By the end of the training, participants will have built a strong network of friends and colleagues through similar group activities and discussions.

Discuss

Review the ground rules for this training. The ICN Ground Rules are:

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.

Effective Goal Setting Using SMART Goals
Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
Objectives: ● List the terms each letter of SMART represents. ● Explain each characteristic of a SMART goal. ● Critique example goals to determine if they meet the SMART goal criteria.			
30 minutes	● What is a SMART Goal?		● Handout: SMART Goal Development Process ● Pens/pencils
Objectives: ● Use a template to ensure personal/program performance goals are developed using SMART characteristics. ● Develop SMART goals that meet the SMART characteristics. ● Explain at least three benefits of using SMART goals.			
30 minutes	● Develop a SMART Goal	● Let's Set a SMART Goal	● Handout: Develop a SMART Goal ● Pens/pencils
1 hour			

Effective Goal Setting Using SMART Goals

Discuss

Welcome to Effective Goal Setting Using SMART Goals. This lesson focuses on setting SMART goals and emphasizes how this method helps establish a defined path toward achieving an objective. By learning what the acronym SMART stands for, participants will identify the key components necessary to write concise, achievable goals.

A clearly defined path is essential to working smarter, not harder. Without it, individuals may find themselves spinning their wheels, resulting in little to no progress or improvement in their productivity or job performance.

To paraphrase the Cheshire Cat from Lewis Carroll's Alice's Adventures in Wonderland, "If you don't know where you're going, any road will get you there." Success cannot be planned without first knowing the starting point.

The lesson objectives are:

- List the terms each letter of SMART represents.
- Explain each characteristic of a SMART goal.
- Critique example goals to determine if they meet the SMART goal criteria.
- Use a template to ensure personal/program performance goals are developed using SMART characteristics.
- Develop SMART goals that meet the SMART characteristics.
- Explain at least three benefits of using SMART goals.

Key Message

The concept of SMART goals has been around since the late 20th century when educators and experts such as Peter Drucker, Robert Rubin, and Paul J. Meyer began using the criteria to explain an effective way to achieve objectives and goals. To set goals that are clear and achievable, they should be written based on the SMART criteria:

- Specific
- Measurable
- Achievable
- Relevant
- Time-Bound

While there may be slight variations in the wording of the criteria, the characteristics remain consistent when applied to goal setting.

Once the characteristics of a SMART goal are understood and goals that meet these characteristics have been identified, participants will begin developing their own SMART goals. Goals that are clear and concise should always incorporate the SMART characteristics.

To guide participants through this process, a development worksheet will be used to walk them step-by-step. As goals should be relevant, participants will start by deciding which area(s) they will target for improvement.

Class Discussion

ASK: For example, if you identified procurement as a strength, it would not be a SMART goal if you chose to set a goal to increase participation. Why?

FEEDBACK: It would not be a SMART goal because procurement was identified as a strength, and the mission statement focused on customer service. A SMART goal must be RELEVANT, so it should be based on a weakness. Remember, the R in SMART stands for RELEVANT. To qualify as a SMART goal, it must be based on forecasted needs.

Activity

ACTIVITY: Let's Set a SMART Goal

Materials: SMART Goal Development Process handout and Let's Set a SMART Goal worksheet

Time: 15 minutes

Instructions: As a group, review each step of the SMART Goal Development Process handout. After review, have each participant use the Let's Set a SMART Goal worksheet to create a SMART goal for what they would like to accomplish after this course.

Discuss

The group will review each step of the SMART Goal Development Process handout together. Following the review, participants will use the Let's Set a SMART Goal worksheet to create a SMART goal based on what they would like to learn by the end of the course.

SMART Goal Development Process

Target

Let's start by setting your target. Increasing participation will be used as an example to help you work through this process.

The Current Picture

Once you have identified the target area, you are ready to start developing your first goal!

Think about the current state of your program in relation to the area of weakness you have chosen.
Ask yourself, "What key issues need to be addressed?"

In the example, there are three key issues:

1. The students at Park Street Middle School do not like the brand of whole grain-rich pasta that is currently being served.
2. There is a 25% decrease in the number of reimbursable meals sold on days when spaghetti is served as the entrée.
3. We are having difficulty finding a whole grain-rich pasta that meets the meal pattern standards.

What Do You Want?

Thinking about the key issues you just identified, start brainstorming what it is you want to see as an outcome. What type of change would help to address the issue(s)?

SMART Goal Development Process, continued

There are NO right or wrong answers at this point. Dream big, and generate as many ideas as possible. These ideas are all possible goals.

For our example, here are a few ideas we might consider:

1. Remove the pasta from the menu
2. Find a different cooking method
3. Conduct taste tests with students and staff
4. Employee training
5. More nutrition education with students
6. Model behavior by having teachers, student groups (i.e., athletes), administrators, and parents promote food choices
7. Try, try, try, and try again!

What Do You REALLY Want?

After dreaming of all the possible outcomes you would like to see, ask yourself, “Which one(s) is/are the most realistic based on the resources you have and your program’s current situation?”

Drill down and decide what it is that you REALLY want to achieve. From all of your brainstorming ideas, pick the best goal and outcome.

In our example situation, the goal would be to conduct a taste test of different brands of whole grain-rich pasta to identify which ones students prefer.

SMART Characteristics

Now that you have identified the best goal and outcome, it is time to develop the goal into a more specific and concise one using the SMART characteristics.

Let’s look at the example again with a sample Let’s Set a SMART Goal worksheet. The best goal and outcome identified was to taste test different brands of whole grain-rich pasta to identify which ones students prefer.

SMART Goal Development Process, continued

Using the Let's Set a SMART Goal Worksheet

The best goal and outcome identified was to taste test different brands of whole grain-rich pasta to identify which ones students prefer.

We will now walk through each characteristic category of SMART goals.

S (specific) — The goal needs to indicate the five Ws: who, what, when, where, and why.

M (measurable) — There needs to be a quantitative goal line. Think numbers—how many or how much. This characteristic will let us know when the goal has been met.

A (achievable) — It needs to be something that we can actually do. Remember, we need to consider if we are willing to commit to make the necessary changes. We also need to be sure we are not setting the bar too high or too low.

R (relevant) — The goal needs to reference how it relates to our priorities and needs so we can make certain it is based on the forecasted needs of our program.

T (time-bound) — There should be a time frame in the goal that creates a practical sense of urgency for our staff.

SAMPLE SMART GOAL

SPECIFIC: 7th and 8th grade students at Park Hill Middle School will taste test three different whole grain-rich pastas.

MEASURABLE: 65% of the students will prefer the selected whole grain-rich pastas.

ACHIEVABLE: Yes, it is.

RELEVANT: Yes, it relates directly back to the weaknesses and mission statement.

TIME-BOUND: The goal must be completed within the next three months.

My SMART Goal: Over the next three months, 7th and 8th grade students at Park Hill Middle School will taste test three varieties of whole grain-rich pastas that meet the meal pattern standards to select a student-preferred brand for next school year at a 65% student-approval rating.

Let's Set a SMART Goal

Set the Target

Areas of Weakness
1.
2.
3.

The Current Picture

Key Areas
1.
2.

What Do I Want?
Brainstorm possible goals and outcomes.

What Do I REALLY Want?
Drill down to choose the best goal and outcome.

Develop a SMART Goal

Make sure it meets each characteristic.

SPECIFIC How will I do it? ● Who? ● What? ● When? ● Where? ● How?	
MEASURABLE How will I measure it? ● How much? ● How many? ● How will I know it has been accomplished?	
ACHIEVABLE Is this something I can do? ● Am I prepared to make the commitment? ● Am I willing to make major changes? ● Is there a more achievable goal?	
RELEVANT Is this based on forecasted needs? ● Do I have the resources? ● Does it make sense for my program? ● Does it align with my priorities and needs?	
TIME-BOUND Does the time frame create a practical sense of urgency? ● What can I do TODAY to reach my goal? ● What can I do one week from now? ● What can I do one month from now?	

MY SMART GOAL IS:

Key Message

Having completed the process of developing a SMART goal, it becomes clear that there are numerous benefits to using them, all of which ultimately result in personal and/or program improvement.

One of the key benefits of SMART goals is that they create a clear plan that is easy to monitor. Due to the specificity and time frames written into the goals, they clearly identify when and how the goals can be achieved.

For SMART goals to be relevant, they must be based on forecasted needs, which are often identified through self-assessments. In the course of day-to-day operations, it can be easy to overlook personal or program strengths and weaknesses. However, SMART goals require individuals to identify areas that need improvement and the strengths that can be leveraged to achieve the goals successfully.

President John F. Kennedy once said, “Efforts and courage are not enough without purpose and direction.” While he was not specifically referencing SMART goals, the implication remains the same. To be successful, everyone needs a sense of direction, and SMART goals provide this by helping to prioritize key areas for improvement.

By using clear, concise language, each SMART goal establishes what area or issue needs to be addressed, reducing the opportunities to waste time on unimportant or meaningless projects.

Although this is not an exhaustive list of the benefits of using SMART goals, it is evident that they are an invaluable resource. Whether for personal advancement or program improvement, SMART goals offer the specific details needed to plan effectively and achieve greater success.

Class Discussion

ASK: Are there any questions related to Effective Goal Setting Using SMART Goals before we continue to the next lesson?

Reimbursable School Meals
Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
Introduction			
20 minutes	Introduction to lesson		Culinary Training Manual
Objective: 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).			
15 minutes	Fluid Milk Requirements for NSLP	Milk Component – Menu Planning	Handout: Lunch Menu Planning Form
Objective: Identify the fruits component choices, serving size requirements, and how to credit fruits toward meeting meal pattern requirements for the NSLP.			
15 minutes	Fruits Requirements for NSLP	• Favorite Fruits • Fruits Component– Menu Planning	• Chart Paper • Sticky Notes • Markets
Objective: Identify the vegetables component choices, serving size requirements, and how to credit vegetables toward meeting meal pattern requirements for the NSLP.			
30 minutes	Vegetables Requirements for NSLP	• Favorite Vegetables • Vegetables Component – Menu Planning	• Chart Paper • Sticky Notes • Markets • Handout: Lunch Menu Planning Form • Worksheet: Vegetable Subgroup Menu Substitutions • Handout: Vegetable Subgroups
Objective: Identify the grains component choices, serving size requirements, and how to credit grains toward meeting meal pattern requirements for the NSLP.			
30 minutes	Grains Requirements for NSLP	Grains Component – Menu Planning	• Handout: Lunch Menu Planning Form • Exhibit A Chart • USDA Food Fact Sheets for Rice and Tortilla • PFS for Buns
Objective: Identify the meats/meat alternates component choices, serving size requirements, and how to credit meats/meat alternates toward meeting meal pattern requirements for the NSLP.			
30 minutes	Meats/Meat Alternates Requirements for NSLP	Meats/Meat Alternates Component – Menu Planning	• Handout: Lunch Menu Planning Form • USDA Recipes (Mac and Cheese and Chicken Fajita) • CN Label for Pizza • PFS for Hamburger patty, • USDA Foods in Schools Product Information Sheet for Pork Roast

Time Allowed	Topic	Activity	Materials
Objective: Modify menu offerings for grade groups K–5 and 6–8 to meet meal pattern requirements for the NSLP.			
30 minutes	Menu Offerings for Grade Groups	Meal Pattern Components (Other Grade Groups) – Menu Planning	Handout: Lunch Menu Planning Form
Objective: Identify the meal components and serving size requirements to meet the School Breakfast Program (SBP) meal pattern requirements.			
30 minutes	SBP	Planning a Breakfast Menu	Handout: Breakfast Menu Planning Form
Objective: Define dietary specifications in relation to the meal pattern requirements for the NSLP and SBP.			
20 minutes	Dietary Specifications		Culinary Training Manual
Summary and Wrap Up			
10 minutes	Summarize the lessons		Culinary Training Manual
4 hours			

Reimbursable School Meals

Discuss

The lesson will focus on Food-Based Menu Planning (FBMP), which uses meal patterns and grade groups as planning tools. FBMP requires specific meal components to be offered in designated amounts to qualify as a reimbursable meal. This approach enables schools to serve economical meals that are varied, balanced, safe, wholesome, and health-promoting. A complete meal that meets meal pattern and dietary requirements is referred to as a reimbursable meal. Reimbursable meals allow schools to receive benefits, including monetary funds and entitlement dollars.

The School Food Authority (SFA) receives funds for each reimbursable meal served to a student. Therefore, the SFA must plan menus that provide all required components in the minimum quantities specified for each age/grade group to ensure eligibility for reimbursement.

This training will focus on planning reimbursable meals for the National School Lunch Program (NSLP) and the School Breakfast Program (SBP).

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

The School Breakfast Program (SBP) is also a federal food assistance program operating in public and nonprofit private schools and residential child care institutions. The program began as a pilot project in 1966 and became permanent in 1975.

The lesson objectives are:

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

Participants will take a moment to review key terms and definitions relevant to this training. The facilitator will refer to the Key Terms chart and highlight these terms for the group.

Key Terms	Definitions
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 meal 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 meal 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 meal 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.
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."

Key Terms	Definitions
Fluid milk component	The meal component in food-based menu planning 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 Program, School Breakfast Program, Special Milk Program, and other federal 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/fbg
Food item	A specific food offered within one of the five required meal components: fluid milk, fruits, vegetables, grains, and meats/meat alternates. A food item may contribute to one or more meal components. For example, a hamburger patty on a bun is considered one food item that credits toward two components (meats/meat alternates and grains). Under Offer Versus Serve (OVS), a combination food such as a breakfast sandwich may be counted as one or more food items—such as one grain and one meat/meat alternate—depending on how the menu planner designates the item on the menu when determining how many items are offered and selected for a reimbursable meal.
Fruits component	The meal component in food-based menu planning 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 food-based menu planning 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	Definitions
Local education agency	A public board of education or other public or private nonprofit authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public or private nonprofit elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public or private nonprofit elementary schools or secondary schools. The term also includes any other public or private nonprofit institution or agency having administrative control and direction of a public or private nonprofit elementary school or secondary school, including residential child care institutions, Bureau of Indian Affairs schools, and educational service agencies and consortia of those agencies, as well as the State educational agency in a State or territory in which the State educational agency is the sole educational agency for all public or private nonprofit schools.
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 cheese 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 food-based menu planning that includes meats (beef, pork, poultry, fish, etc.) and meat alternates, such as eggs, cheese, yogurt, beans, peas, and lentils, 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.

Key Terms	Definitions
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.
Recognizable food item	The recognizable amount of food principle limits foods from being misrepresented in school meals and snacks. Reimbursable meals and snacks are considered part of the nutrition education students receive in school. Having easily identifiable meal components of the reimbursable meal reinforces nutrition education messages that emphasize selecting healthy choices in healthy amounts for healthy outcomes.
Reimbursable meal or snack	A meal served within one of the federal 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.
State agency	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).

Key Terms	Definitions
Team Nutrition	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 Program, School Breakfast Program, and Special Milk Program for Children.
Vegetable subgroups	The categories of vegetables within the vegetable component required in the National School Lunch Program (NSLP). The five required subgroups are dark green, red/orange, beans, peas, and lentils, starchy, and other vegetables. Each subgroup has a minimum weekly requirement that must be met. Once these minimums are satisfied, any additional vegetables from any subgroup may be offered to help meet the overall weekly vegetable requirement. This flexibility allows menu planners to provide variety while ensuring compliance with USDA meal pattern requirements.
Vegetables component	The meal component in food-based menu planning 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 (WGR)	Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.
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.

Class Discussion

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

FEEDBACK: The meal pattern dictates which meal components and daily and weekly minimum serving amounts must be served for different grade groups to provide adequate calories and nutrients. Meal patterns are the templates to the final menu.

ASK: What are the five meal components?

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

Key Message

National School Lunch Program Meal Pattern
The lesson will now focus on the National School Lunch Program Meal Pattern Chart, examining one meal component at a time. The facilitator will introduce the meal pattern chart and guide participants through a discussion of the five meal components.

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)[6]	8-10 (1)	9-10 (1)	10-12 (2)
Fluid Milk (cups)[7]	5 (1)	5 (1)	5 (1)
Dietary Specifications: Daily Amount Based on the Average for a 5-Day Week[8]			
Minimum-Maximum Calories (kcal)	550-650	600-700	750-850
Saturated Fat (% of total calories)	<10	<10	<10
Added Sugars (% of total calories)	<10	<10	<10
Sodium Limit: In place through June 30, 2027	≤1,110 mg	≤1,225 mg	≤1,280 mg
Sodium Limit: Must be implemented by July 1, 2027	≤935 mg	≤1,035 mg	≤1,080 mg

[1] Food items included in each group and subgroup and amount equivalents.
[2] Minimum creditable serving is ⅛ cup. 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 percent full-strength.
[3] Larger amounts of these vegetables may be served.
[4] This subgroup consists of "Other vegetables" as defined in paragraph (c)(2)(ii)(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 bean, peas, and lentils vegetable subgroups as defined in paragraph (c)(2)(ii) of this section.
[5] Minimum creditable serving is 0.25 oz. eq. At least 80 percent of grains offered weekly (by ounce equivalents) must be whole grain-rich as defined in § 210.2 of this chapter, and the remaining grains items offered must be enriched.
[6] Minimum creditable serving is 0.25 oz. eq.
[7] Minimum creditable serving is 8 fluid ounces. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less) and must meet the requirements in paragraph (d) of this section.
[8] By July 1, 2027, schools must meet the dietary specification for added sugars. Schools must meet the sodium limits by the dates specified in this chart. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

Dietary Guidelines for Americans, 2020-2025

Over the years, meal patterns have evolved to reflect current research. Beginning in 1994, school meals were first required to align with the Dietary Guidelines for Americans (DGAs). The DGAs are updated every five years, and meal patterns may continue to change to align with these guidelines.

Offer versus Serve (OVS)

Offer versus Serve (OVS) is a provision in the NSLP and SBP that allows students to decline some of the food offered. The primary goals of OVS are to reduce food waste in school meal programs while permitting students to decline foods they do not intend to eat. It is important to note that OVS occurs at the point of service, not at the menu planning level. Because this training is designed for menu planners or individuals with menu planning responsibilities, a detailed discussion on OVS will not be included. However, a brief overview of OVS during service times is provided below.

OVS is optional at all grade levels for breakfast and required for high schools at lunch.

At lunch, schools are required to offer all five meal components in at least the minimum required amounts. The five meal components are:

- Meats/Meat Alternates
- Grains
- Fruits
- Vegetables
- Fluid Milk

Under OVS at lunch, students must take at least three components in the required serving sizes. One of these selections must include at least ½ cup from either the fruits or vegetables component.

At breakfast, schools must offer all three required meal components in at least the minimum required amounts. The three components are:

- Combined Grains and Meats/Meat Alternates
- Fruits
- Fluid Milk

Under OVS at breakfast, students must be offered at least four food items from the three required meal components and are required to select at least three food items. One of these selections must include at least ½ cup of fruit and/or vegetables.

For more specific details regarding lunch or breakfast meal pattern requirements under Offer versus Serve, participants are encouraged to refer to the USDA's Offer Versus Serve Materials.

Food Buying Guide for Child Nutrition Programs

The Food Buying Guide for Child Nutrition Programs (FBG) is available online as an interactive web-based tool, or as a mobile app for both iOS and Android platforms, and can be downloaded and saved for future reference. Participants are encouraged to either use the website or download the app for easy reference.

The FBG is designed to assist SFAs in purchasing the correct amounts of food and determining the specific contribution various food items make toward meeting meal pattern requirements. The yield information provided in the guide reflects average yields based on USDA research.

For foods with a standard of identity—such as specific cuts of meat, fruits, and vegetables—the FBG can be used to determine crediting information. Participants unfamiliar with the FBG are encouraged to explore this valuable resource.

Recognizable Amount of Food Principle

The discussion will now focus on recognizable versus unrecognizable meal components. A recognizable food is a food item visible in the breakfast or lunch offered, allowing students to identify the food groups and recommended amounts for consumption at mealtime. Except for noodles made from vegetables, which can credit toward the vegetable component, foods must be recognizable to be creditable in the NSLP and SBP. This recognizable amount of food principle is intended to limit food from being misrepresented in the reimbursable meal or snack. to support nutrition education efforts.

According to USDA Memo SP 05-2022, pureed foods such as fruits or vegetables may contribute to meal pattern requirements if the dish that contains them also includes an adequate amount of recognizable, creditable fruits or vegetables. The minimum recognizable amount is ⅛ cup.

For example, consider macaroni and cheese made with butternut squash cubes and carrot puree. If the macaroni and cheese includes the minimum recognizable amount of vegetables (e.g., ⅛ cup of diced squash), the volume of unrecognizable vegetables (e.g., ⅛ cup of pureed carrots) may also credit. In this case, the dish would provide a total of ¼ cup of red/orange vegetables.

In the example above, both the recognizable and unrecognizable vegetables come from the same vegetable subgroup (red/orange). While this is encouraged for nutrition education purposes, it is not required. The vegetables could be from different subgroups and would still credit accordingly.
However, if the dish does not contain at least ⅛ cup of a recognizable vegetables, then the blended or pureed foods do not contribute toward meeting the meal pattern requirements.

Discuss

During this session, participants will plan weekly menus for breakfast and lunch using the Menu Planning Forms. By the end of the training, participants will have learned how to develop a weekly menu that follows the guidelines for the NSLP and SBP.

As this training serves as a baseline for reimbursable school meals, the ICN has selected common menu items typically seen in schools nationwide. However, ICN recognizes the importance of including a variety of options and encourages participants to incorporate these into their menus.

Participants should keep these forms accessible, as they will be used to plan for each meal component throughout the training.

Lunch Menu Planning Form (Grades 9–12)				
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 _____
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_____

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

Milk Component for the National School Lunch Program

Discuss

In this section, participants will explore the milk component crediting requirements and the daily and weekly minimum serving amounts needed to meet the meal pattern requirements for the NSLP.

Key Message

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)[6]	8-10 (1)	9-10 (1)	10-12 (2)
Fluid Milk (cups)[7]	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 allow both fat-free and 1% low-fat milk to be:

- Unflavored, also called plain or white
- Flavored - Flavored milk may have no more than 10 grams of added sugars per 8 fluid ounces or, for flavored milk sold as a competitive food for middle and high schools, 15 grams of added sugars per 12 fluid ounces.

    - 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 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 patterns 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 beverages as an alternative selection to fluid milk. Water is not a meal component or food item for the reimbursable meal.

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.

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.

Other Creditable Types of Milk

The FBG lists other types of milk, such as:

- Lactose-free
- Buttermilk
- Ultra-High Temperature (UHT) milk

All options must be pasteurized and meet State and local standards.

Nondairy Milk Substitutes

To offer a nondairy milk substitute for non-disability reasons, you must receive a written request from medical authority, this includes includes registered dietitians (RDs/RDNs), or the child's parent/guardian that identifies the medical or other special dietary need that precludes the consumption of cow's milk. The fluid milk substitute must meet the milk substitute nutrition standards for nine nutrients to credit toward the milk meal pattern requirement. If the nutrition facts label on a product does not list all 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.

Nutrient	Requirement per Cup (8 fl oz)
Protein	8 g
Calcium	276 mg
Vitamin A	150 mcg retinol activity equivalents (RAE)
Vitamin D	2.5 mcg
Magnesium	24 mg
Phosphorus	222 mg
Potassium	349 mg
Riboflavin	0.44 mg
Vitamin B12	1.1 mcg

Nondairy beverages that may be offered in place of cow's milk at the discretion of the program operator. For non-disability reasons, a written request from a parent or guardian is required, but a medical statement is not needed. The substitute must meet USDA nutrient standards to be creditable. Schools are not required to provide non-disability substitutions but may choose to do so.

Be aware that some plant-based beverages may not be nutritionally equivalent to fluid milk. 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 non-dairy beverages available in your area that are nutritionally equivalent to fluid milk.

For information on special dietary needs, 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.

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 Meal Programs rule if milk substitutes are offered for non-disability reasons.
- Note the added sugar limits for milk.

Food Buying Guide for Child Nutrition Programs

Section 5

Milk

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	

Activity

ACTIVITY: Milk Component – Menu Planning Form

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

Time: 5 minutes

Instructions:
The facilitator will lead an activity to help participants begin planning their menu for milk options. Participants will be instructed to write down their program's milk options on the Lunch Menu Planning Form. Once participants have completed this step, they will stand up and remain standing until everyone is finished. This serves as a quick opportunity for a stretch.

Once all participants are standing, they will be instructed to sit. The facilitator will ask one participant to share one milk option from their list. Participants will raise their hand if they also serve that option. For example, if a participant shares "nonfat chocolate milk," the facilitator will repeat the option aloud and ask everyone to place a check mark next to it if it appears on their list.

This process will continue until all common milk options have been shared, including:

- Nonfat unflavored milk
- 1% low-fat unflavored milk
- Nonfat or 1% low-fat flavored milk (e.g., chocolate or strawberry)

The facilitator will then ask if there are any additional options on participants' lists that have not yet been mentioned.

Fruits Component for the National School Lunch Program

Discuss

This section will focus on the fruits component crediting requirements, including the daily and weekly minimum serving amounts necessary to meet the NSLP meal pattern requirements. The session will also explore the different types of fruits, their various forms, and best practices for planning menus that incorporate fruits effectively.

Class Discussion

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

Allow participants to complete the activity and give participants any needed prompts to finish the activity quickly. Once the participants have finished, review and generally comment on the variety of choices. Mention that the favorites will be revisited later in the training.

Key Message

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)[6]	8-10 (1)	9-10 (1)	10-12 (2)
Fluid Milk (cups)[7]	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 minimum daily requirement for fruits for the 9–12 grade group is 1 cup, and the minimum weekly requirement for fruits is 5 cups. The minimum daily requirement for fruits for the K–5 and 6–8 grade groups is ½ cup, and the minimum weekly requirement is 2 ½ cups.

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. However, schools may offer vegetables in place of fruit at breakfast. The meal pattern requirements are described in the Meal Pattern Chart found in your Culinary Training Manual.

There are over 360 entries for creditable types of fruits—fresh, canned, frozen, and dried—in the FBG, 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. 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 the daily required minimum serving amount and communicate that to those who prepare and serve meals.

Canned Fruit

Creditable canned fruit choices may be packed in water, full-strength juice, or light syrup. The FBG provides crediting information for canned fruit served in liquid 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, or can also be served drained.

Dried Fruit

Whole dried (including freeze 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 offered may be met with full-strength juice.
For example:

- A school (with a 5-day school week) offers the following fruits each day: ½ cup peaches, ½ cup applesauce, ½ cup oranges, and ½ cup grape juice.
- The school instructs students to select 2 out of 4 choices or 1 cup fruit daily = 5 cups fruit weekly.
- The amount of juice offered weekly (2.5 cups) is half of the total amount of fruit offered weekly (5 cups) and, therefore, is compliant. 2.5 cups of juice ÷ 5 cups of fruit = 50%

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, credit 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 and potato 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 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.

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).
- No more than half of the total weekly fruits offered, including fruits credited in smoothies, may be met with 100% fruit juice.

Activity

ACTIVITY: Fruits Component – Menu Planning Form

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

Time: 5 minutes

Instructions:
Participants will now complete an activity focused on planning fruits for their menus.
Using the Lunch Menu Planning Form, participants will fill in the serving amount and the names of fruits planned for each day.

Vegetables Component for the National School Lunch Program

Discuss

This section focuses on the vegetables component crediting requirements and the minimum serving sizes needed to meet the meal pattern requirements for the National School Lunch Program (NSLP). Participants will explore the different vegetable subgroups and learn best practices for planning menus that incorporate vegetables effectively.

Class Discussion

Participants will generate a list of favorite vegetables. Each participant will think of two favorite vegetables and write each on a separate sticky note. These can include personal favorites, favorites in their school program, or a combination of both. Participants will then place their sticky notes on a chart labeled “Favorite Vegetables”, which is posted on the wall within the training area.

The facilitator will allow participants 1 minute to write their responses and an additional 1 minute to place their sticky notes on the chart. Prompts will be provided as needed to ensure the activity progresses quickly.

Once the sticky notes are posted, the facilitator will provide general comments on the variety of choices and, if applicable, highlight the subgroup(s) that appear most popular. Only 1 minute will be spent reviewing the results, and participants will be informed that the favorites will be revisited later in the training.

Optionally, the chart can include the vegetable subgroups, and participants can place their sticky notes under the subgroup they believe the vegetable belongs to. Participants should be encouraged to make their best guess if they are unsure of the correct subgroup.

Key Message

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)

Benefits of Vegetables

The Dietary Guidelines specify that healthy eating patterns include a variety of vegetables from all five vegetable subgroups—dark green; red/orange; beans, peas, and lentils; 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. A variety of vegetable options that can add flavor and interest to menus.

Vegetables Component

Vegetables are measured by volume and the minimum required 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/orange; beans, peas, and lentils; 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) 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 minimum daily and weekly requirements for the vegetables component are: 1 cup daily and 5 cups weekly for grades 9–12. The minimum daily requirement for grade groups K–5 and 6–8 is ¾ cup and the minimum weekly requirement is 3 ¾ cups.

Vegetable Subgroups

The vegetables component contains five subgroups: dark green; red/orange; beans, peas, and lentils; 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 FBG is an essential resource for crediting fresh, frozen, canned, dried vegetables, and 100% vegetable juice. A helpful feature of the FBG 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 based on volume 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 vegetable subgroup.

The Recipe Analysis Workbook, which is part of the FBG, is useful for determining crediting for recipes. Five FBG modules are available on ICN's iLearn; the RAW is module 2.

Beans, peas, and lentils 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. Beans, peas, and lentils 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. When credited as an M/MA, they also count toward the ***weekly*** beans, peas, and lentils vegetable subgroup requirement. You will find beans, peas, and lentils listed in both the vegetables and meats/meat alternates sections of the FBG.

Pasteurized, full-strength (100%) vegetable juice may be offered to meet up to one-half of the vegetables component offered over a week. 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. 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, peas, and lentils; 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, Peas, and Lentils
- 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.
Please Note: This list of examples is not all encompassing.

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.

Monday	Tuesday	Wednesday	Thursday	Friday
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, and Lentils	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 blank sections of the top line with your choices from the menu for the subgroup. Next, write the serving size and vegetable choice to substitute for each vegetable menu item.

Dark Green	Starchy	Beans, Peas, and Lentils	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 grades K–8

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, and Lentils 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 peas, and lentils 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 salad 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 and 6–8, and 1 cup daily for grades 9–12.
- Meet the weekly vegetable subgroup requirements.
- Credit raw leafy greens at half the volume.
- Credit beans, peas, and lentils as a vegetable or as a meats/meat alternates, but not both for the same food item on the menu.
- No more than half of the total weekly vegetables offered, including vegetables credited in smoothies, may be 100% vegetable juice.
- The smallest creditable amount for the vegetables component is ⅛ cup.

Activity

ACTIVITY: Vegetables Component – Menu Planning Form

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

Time: 5 minutes

Instructions:
Participants will now complete an activity to plan the vegetables for their menus. Using the Lunch Menu Planning Form, participants will fill in the serving amounts and the names of vegetables planned for each day.

Grains Component for the National School Lunch Program

Discuss

This section focuses on the grains component crediting requirements and the minimum serving sizes necessary to meet the meal pattern requirements for the NSLP. Participants will learn about the different types of grains and explore best practices for planning menus that effectively incorporate grains.

Key Message

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)[6]	8-10 (1)	9-10 (1)	10-12 (2)
Fluid Milk (cups)[7]	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 * Not allowed in CACFP and NSLP Afterschool Snacks, and GBD with superscript 3 in Exhibit A are not allowable in SBP.

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. We will focus on the grade group 9–12 lunch menu requirements during our activities in this segment of the training.

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.

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 oz eq 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 the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.
    - Bran and germ can be used to meet the enriched grains requirements.
- Of the weekly grains requirement for lunch, up to 2.0 oz eq grains may be in the form of a grain-based dessert.
- Note that non-creditable grains in products at very low levels used as processing aids, such as oat fiber, corn fiber, wheat starch, corn starch, and modified food starch, are limited to 2 percent or less of the product formula by weight or less than 0.25 oz eq.

A great resource for more information on whole grains is Team Nutrition's The Whole Grain Resource for the National School Lunch and Breakfast Programs.

Exhibit A: Grain Requirements for Child Nutrition Programs

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 provides a general guideline for crediting prepared grain items. It is the most important tool for determining how different grain foods contribute to the grains requirement. For this training, we will use Exhibit A, included in this manual, to determine the oz eq of various products.

Other Crediting Information for Grains

Other tools to determine the grains contribution for grain products include Product Formulation Statements (PFS), Child Nutrition (CN) labels, and the Recipe Analysis Workbook.

The CN label and a manufacturer's PFS are documents that provide a way for a manufacturer to demonstrate how a processed food product may contribute to the meal pattern requirements in CNP. Both a CN label and PFS are voluntarily provided by manufacturers at the request of program operators:

- A CN label is approved by USDA and provides a warranty of a product's meal pattern contribution when the product is used according to the manufacturer's instructions.
- A PFS is typically provided for processed products that do not have a CN label.

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

Manufacturers may provide a PFS to demonstrate a processed food product's meal pattern contribution using yield information listed in the FBG. The Culinary Training Manual provides an example of a PFS for a bun, showing that the bun is 56 grams and provides 2 oz eq 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.

The Recipe Analysis Workbook or RAW in the FBG is a tool to use to determine the meal pattern contribution for your program's standardized 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 apply if a school is using these specific USDA Foods. A PFS and CN labels may be used for all Child Nutrition Programs. The Recipe Analysis Workbook (RAW) is used for schools preparing meals through scratch cooking or speed-scratch methods.

Whole Grain-Rich Criteria

Eighty percent of the amount of grains served per week must be whole grain-rich. The term "whole grain-rich" means the grain content of a product is between 50-100% whole grain, with any remaining grains being enriched. 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. For grain items in Groups H and I, the whole-grain content must be at least half of the volume or dry 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.

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).

      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 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. By July 1, 2025, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.

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.

Grain-Based Desserts

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 5.

Grains Component Summary:

- Meet daily and weekly minimums for each grade group.
- At least 80% of weekly grains offered must be whole grain-rich and any remaining grains must be made from enriched or fortified grains.
- Limit grain-based desserts to 2 oz eq or less weekly at lunch for grades K–12. Grain-based desserts are not allowed for preschool aged children.
- The smallest creditable amount for the grains component is 0.25 oz eq.

Activity

ACTIVITY: Grains Component – Menu Planning Form

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

Time: 8 minutes

Instructions:

Participants will now complete an activity to plan the grains for their menus. For the grains servings on the Lunch Menu Planning Form, participants will use the minimum daily and weekly serving amounts for grades 9–12. The grain items to be recorded on the menu are:

- Monday: Pasta
- Tuesday: Bun
- Wednesday: Tortilla
- Thursday: Rice
- Friday: Pizza Crust

Participants will be reminded that if they choose not to offer a 2-ounce equivalent (oz eq) serving of each grain item, they must add another grain item to meet the daily total of 2 oz eq.

Participants will determine the crediting and serving amounts for each grain item using resources provided during the training, including Exhibit A, USDA Foods in School Product Information Sheets for the Rice and Tortilla, and the PFS for the Bun. They will also use the CN Label for the Pizza Crust, which provides a 2 oz eq serving.

Participants must identify which grain items on their menu are whole grain-rich and indicate this on their form.

The facilitator will provide guidance and clarification as needed, allowing time for participants to review resources, decide on serving amounts, identify any additional grains required, and determine which items are whole grain-rich.

After completing the activity, participants will discuss their menu choices. The facilitator will ask:

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

A 3-minute discussion will follow, during which participants will share their decisions.

The facilitator will provide feedback and reinforce menu choices, offering examples such as combining two 1 oz eq servings—for example, a 1.5 oz eq flour tortilla paired with 0.5 oz tortilla chips to reach the required 2 oz eq. Participants will also be reminded that brown rice is 100% whole grain.

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 ¾ oz eq = 17 gm or 0.6 oz ½ oz eq = 11 gm or 0.4 oz ¼ oz eq = 6 gm or 0.2 oz	1 serving = 20 gm or 0.7 oz ¾ serving = 15 gm or 0.5 oz ½ serving = 10 gm or 0.4 oz ¼ 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 ¾ oz eq = 21 gm or 0.75 oz ½ oz eq = 14 gm or 0.5 oz ¼ oz eq = 7 gm or 0.25	1 serving = 25 gm or 0.9 oz ¾ serving = 19 gm or 0.7 oz ½ serving = 13 gm or 0.5 oz ¼ 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 ¾ oz eq = 26 gm or 0.9 oz ½ oz eq = 17 gm or 0.6 oz ¼ oz eq = 9 gm or 0.3 oz	1 serving = 31 gm or 1.1 oz ¾ serving = 23 gm or 0.8 oz ½ serving = 16 gm or 0.6 oz ¼ 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 ¾ oz eq = 42 gm or 1.5 oz ½ oz eq = 28 gm or 1.0 oz ¼ oz eq = 14 gm or 0.5 oz	1 serving = 50 gm or 1.8 oz ¾ serving = 38 gm or 1.3 oz ½ serving = 25 gm or 0.9 oz ¼ serving = 13 gm or 0.5 oz

1 In the NSLP, SBP (grades K–12), and NSLP afterschool snacks (effective July 1, 2025), at least 80 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 grain serving per day must meet the whole grain-rich criteria.

2 For the NSLP, SBP (grades K–12), NSLP afterschool snacks, and CACFP, and NSLP/SBP infant and preschool meals grain quantities are determined using ounce equivalents (oz eq). SFSP may determine grain quantities using grains/breads servings. Some of the following grain items 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 afterschool snacks (effective July 1, 2025), or NLSP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

4 Allowed 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, NSLP afterschool snacks (effective July 1, 2025), or 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), NSLP afterschool snacks, 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 ¾ oz eq = 52 gm or 1.8 oz ½ oz eq = 35 gm or 1.2 oz ¼ oz eq = 18 gm or 0.6 oz	1 serving = 63 gm or 2.2 oz ¾ serving = 47 gm or 1.7 oz ½ serving = 31 gm or 1.1 oz ¼ 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 ¾ oz eq = 62 gm or 2.2 oz ½ oz eq = 41 gm or 1.5 oz ¼ oz eq = 21 gm or 0.7 oz	1 serving = 75 gm or 2.7 oz ¾ serving = 56 gm or 2 oz ½ serving = 38 gm or 1.3 oz ¼ 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 ¾ oz eq = 94 gm or 3.3 oz ½ oz eq = 63 gm or 2.2 oz ¼ oz eq = 32 gm or 1.1 oz	1 serving = 115 gm or 4 oz ¾ serving = 86 gm or 3 oz ½ serving = 58 gm or 2 oz ¼ 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 = ½ cup cooked or 1 ounce (28 gm) dry	1 serving = ½ 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)[6,7,8,9]	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 = ¼ cup or 1 ounce for granola	1 serving = ¾ 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 grain component in CACFP, NSLP afterschool snacks (effective July 1, 2025), or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

4 Allowed 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, NSLP afterschool snacks (effective July 1, 2025), or 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. 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.

8 Effective July 1, 2025, cereals served in NSLP, SBP, and NSLP afterschool snacks must contain no more than 6 grams of added sugars per dry ounce.

9 Effective October 1, 2025, cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of added sugars per dry ounce. Prior to October 1, 2025, breakfast cereals served in the CACFP must contain no more than 6 grams of total sugars per dry ounce.

USDA United States Department of Agriculture

USDA Foods in Schools

110394 - Tortillas, Whole Grain/Whole Grain-Rich

Category: Grains (Whole Grain)

ChooseMyPlate.gov

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)

Product Description

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

Crediting/Yield

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

Culinary Tips and Recipes

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

Food Safety Information

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

Visit us at www.fns.usda.gov/usda-fis

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

110694 - Tortillas, Whole Grain/Whole Grain-Rich

Category: Grains (Whole Grain)

Product Description

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

Crediting/Yield

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

Culinary Tips and Recipes

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

Food Safety Information

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

Visit us at www.fns.usda.gov/usda-fis

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

3.5” Hamburger Bun made with Whole Grains, Sliced

Material Number: 00000000
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: 0-00-00000-00000-0

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

CONTAINS: WHEAT & SOY

MANUFACTURED ON SHARED EQUIPMENT THAT ALSO PROCESSES PRODUCTS CONTAINING SESAME. MAY CONTAIN 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	1.5 g	2%
Saturated Fat	0 g	0%
Trans Fat	0 g	
Polyunsaturated Fat	1 g	
Monounsaturated Fat	0 g	
Cholesterol	0 mg	0%
Sodium	240 mg	11%
Total Carbohydrate	30 g	11%
Dietary Fiber	2 g	8%
Total Sugars	4 g	
Includes	4 g Added Sugars	8%
Protein	7 g	
Vitamin D	0.6 mcg	2%
Calcium	50 mg	4%
Iron	1.7 mg	10%
Potassium	110 mg	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.

Meats/Meat Alternates Component for the National School Lunch Program

Discuss

This section focuses on the meats/meat alternates component crediting requirements and the minimum serving sizes necessary to meet the meal pattern requirements for the National School Lunch Program (NSLP). Participants will learn about the different types of meats/meat alternates and explore best practices for planning menus that incorporate these components effectively.

USDA United States Department of Agriculture

National School Lunch Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	2 ½ (½)	2 ½ (½)	5 (1)
Vegetables (cups)[2]	3 ¾ (¾)	3 ¾ (¾)	5 (1)
Dark Green Subgroup[3]	½	½	½
Red/Orange Subgroup[3]	¾	¾	1 ¼
Beans, Peas, and Lentils Subgroup[3]	½	½	½
Starchy Subgroup[3]	½	½	½
Other Vegetables Subgroup[3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1 ½
Grains (oz. eq.)[5]	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)[6]	8-10 (1)	9-10 (1)	10-12 (2)
Fluid Milk (cups)[7]	5 (1)	5 (1)	5 (1)

Benefits of Meats/Meat Alternates

The meats/meat alternates (M/MA) 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

M/MA are measured in oz eq. An ounce (oz) equivalent (eq) of meats/meat alternates is the amount of the food that represents 1 ounce of edible portion of lean meat without the bone.
Foods in the meats/meat alternates component include:

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

Daily Required Minimum Serving Amounts

The NSLP has daily minimum requirements for M/MA 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 Food Buying Guide (FBG) to determine the amount of raw meat needed to provide an oz eq cooked meat; 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 meat/meat alternate.

Program operators are encouraged to:

- Serve a variety of lean protein foods, including seafood, lean meats and poultry, eggs, beans, peas, lentils, nuts, seeds, and soy products
- Limit servings of processed meats and poultry to limit sodium and saturated fat 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 grades 9-12, this is the only group that meets the weekly minimum m/ma amount by serving the minimum daily amount (2 oz eq). The other two grade groups (K-5 and 6-8) do not meet the weekly minimum amount by serving the minimum daily amount - they need to serve more on certain days.

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 M/MA 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.

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. 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.

Crediting Nuts and Seeds as Meats/Meat Alternates

Nuts, seeds, and nut and seed butters can provide the full serving of meats/meat alternates in a meal. There are no limits on how often nuts and seeds may be served per week.

Beans, Peas, and Lentils

7 CFR 210.10(c)(2)(ii)(C) Beans, peas, and lentils offered toward the meats/meat alternates meal component may count toward the weekly vegetable subgroup requirement.

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

For example, the beans, peas, and lentils offered on a salad bar may credit toward the vegetables component, while the beans, peas, and lentils in the chili may credit toward the meats/meat alternates (M/MA) component. As the menu planner, you must determine how beans, peas, and lentils will be credited in a meal. When credited as an M/MA, they also count toward the weekly beans, peas, and lentils vegetable subgroup requirement. 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. School menus often feature these food items as entrées.

Food Buying Guide for Meats/Meat Alternatives

The FBG 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 FBG represents average yields based on research conducted by the USDA. For foods that meet USDA Food Safety and Inspection Service (FSIS) standards you can use the Food Buying Guide FBG to determine crediting information.

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 contain more than one meal component, such as pizza, soup, casseroles, burritos, and sandwiches.
- The smallest creditable amount is 0.25 oz eq.

Activity

ACTIVITY: Meats/Meat Alternates Component – Menu Planning Form

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

Time: 8 minutes

Instructions:
Participants will now plan 5 days of meats/meat alternates on the Lunch Menu Planning Form. To assist with crediting information, participants can refer to the resources at the end of this lesson:

- USDA Recipes (Mac and Cheese and Chicken Fajita)
- CN Label for Pizza
- PFS for Hamburger Patty
- USDA Foods in Schools Product Information Sheet for Pork Roast

The facilitator will allow time for participants to complete the meats/meat alternates section of their forms. Menu planning often begins with selecting the meats/meat alternates, as this component often serve as the entrée or the “Center of the Plate” item. Using the Macaroni and Cheese recipe as an example, participants will consider how crediting influences menu planning.

The facilitator will ask: How does the crediting of one serving of Macaroni and Cheese influence your menu choices?

After participants share their responses, the facilitator will provide the following feedback: One serving of Macaroni and Cheese provides 1 oz eq of both meats/meat alternates and grains. However, for grades 9–12, the daily minimum requirement is 2 oz eq of each component.

Participants will then consider strategies to meet the meal pattern requirements. The facilitator will ask: As the menu planner, what choices do you have to meet the meal pattern for grades 9-12?

After participants respond, the facilitator will provide the following feedback: There are two options:
Offer a second 1 oz eq of each component, such as ¼ cup of seasoned beans for a meatless Monday and a 1 oz eq soft whole grain-rich breadstick.

Double the serving size of the Macaroni and Cheese for grades 9–12, ensuring it provides 2 oz eq each of meats/meat alternates and grains.

The facilitator will open the floor for questions about the meats/meat alternates component, particularly for dishes created from scratch or speed scratch methods.

Participants will be asked: If you are creating entrees from scratch or speed scratch, how do you ensure proper crediting?

After participants share their responses, the facilitator will provide possible answers, including:

- Using standardized recipes
- Referring to CN labels
- Consulting the FBG
- Weighing ingredients and yielded portions to ensure compliance

USDA 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.

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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").

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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")

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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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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)	

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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 4⅕ 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.

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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")

2.25 oz. Beef Patty

Nutritional Information	Per Serving	Per 100 Grams
Serving Size (oz.)	2.25	3.53
Serving Size (g)	63.80	100.00
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	6.16
Trans Fatty Acid (g)	0.6	0.90
Cholesterol (mg)	36	57
Vitamin D (mcg)	0	0
Calcium (mg)	25	39
Iron (mg)	1	2
Potassium (mg)	572	898
Sodium (mg)	161	253

Product Specifications

UPC (GTIN)	000000000000000
Case Pack	30.375# 6 Bags
Net Weight	30.375
Gross Weight	33.230
Case Length	23.560
Case Width	12.940
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:0000000

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

CN

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

CN CN CN

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USDA Foods in Schools

100173 - Pork, Leg Roast, Raw, Frozen

Category: Meat/Meat Alternate

MyPlate.gov

Product Description

- This item is individual raw 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
Includes 0g Added Sugars	
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.

December 2024

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

Discuss

This section focuses on modifying menu offerings to meet the meal pattern requirements for grade groups K–5 and 6–8 under the National School Lunch Program (NSLP). Participants will learn how to adjust the menu they planned for the 9–12 grade group requirements to fit the needs of younger grade groups.

Key Message

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, sodium (salt), and added sugars (added sugars requirement effective July 1, 2027). For example, meals served for grades K-5 require fewer calories than those for grades 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, and 9–12 grade groups.

Milk Component

The milk requirement is the same across all grade groups: schools must offer at least two fluid milk options, to include an unflavored choice at every meal.

Fruits Component

The minimum daily requirement for fruits for the 9–12 grade group is 1 cup, and the minimum weekly requirement is 5 cups. The minimum daily requirement for fruits for the K–5 and 6–8 grade groups is ½ cup, and the minimum weekly requirement is 2 ½ cups. 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 minimum daily requirement for vegetables for the 9–12 grade group is 1 cup, and the minimum weekly requirement is 5 cups. The minimum daily requirement for vegetables for the K–5 and 6–8 grade groups is ¾ cup, and the minimum weekly requirement is 3 ¾ cups.

The minimum weekly requirements are the same for the dark green; beans, peas, and lentils; and starchy subgroups for all grade groups—½ cup. The minimum weekly requirement for the red/orange and other vegetables subgroups is different between the 9–12 grade group and the younger grade groups. For the red/orange subgroup, the minimum weekly requirement for the 9–12 grade group is 1¼ cups, whereas the minimum weekly requirement for the K–5 and 6–8 grade groups is ¾ cup. For the other vegetables subgroup, the minimum weekly requirement for the 9–12 grade group is ¾ cup, whereas the minimum weekly requirement for the K–5 and 6–8 grade groups is 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 requirement is 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 10 oz eq of grains across a 5-day school week, 8 oz eq need to be whole grain-rich to meet the 80% requirement.

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

OVS is required for lunches served in high schools, but is optional in middle and elementary schools. Under OVS, students must select three meal components to ensure they get the nutritional benefits of a meal. 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 meal components must be offered for school lunch. Students must select at least three of the five required meal 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.

School Breakfast Program

Discuss

This section focuses on the meal components and serving sizes necessary to meet the meal pattern requirements for the School Breakfast Program (SBP). Participants will explore the three required meal components and learn how to plan a weekly breakfast menu effectively.

Key Message

School Breakfast Program Meal Pattern

The lesson will now focus on the School Breakfast Program Meal Pattern Chart, examining one meal component at a time. The facilitator will introduce the meal pattern chart and guide participants through a discussion of the meal components.

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School Breakfast Program Meal Pattern

	Grades K-5	Grades 6-8	Grades 9-12
Meal Components	**Amount of Food[1] per Week**		
	(minimum per day)		
Fruits (cups)[2]	5 (1)	5 (1)	5 (1)
Vegetables (cups)[2]	0	0	0
Dark Green Subgroup	0	0	0
Red/Orange Subgroup	0	0	0
Beans, Peas, and Lentils Subgroup	0	0	0
Starchy Subgroup	0	0	0
Other Vegetables Subgroup	0	0	0
Grains or Meats/Meat Alternates (oz. eq)[3]	7-10 (1)	8-10 (1)	9-10 (1)
Fluid Milk (cups)[4]	5 (1)	5 (1)	5 (1)
Dietary Specifications: Daily Amount Based on the Average for a 5-Day Week[5]			
Minimum-Maximum Calories (kcal)	350-500	400-550	450-600
Saturated Fat (% of total calories)	<10	<10	<10
Added Sugars (% of total calories)	<10	<10	<10
Sodium Limit: In place through June 30, 2027	≤540 mg	≤600 mg	≤640 mg
Sodium Limit: Must be implemented by July 1, 2027	≤485 mg	≤535 mg	≤570 mg

[1] Food items included in each group and subgroup and amount equivalents.
[2] Minimum creditable serving is ⅛ cup. Schools must offer 1 cup of fruit daily and 5 cups of fruit weekly. Schools may substitute vegetables for fruit at breakfast as described in paragraphs (c)(2)(i) and (ii) of this section.
[3] Minimum creditable serving is 0.25 oz. eq. School may offer grains, meats/meat alternates, or a combination of both to meet the daily and weekly ounce equivalents for this combined component. At least 80 percent of grains offered weekly at breakfast must be whole grain-rich as defined in § 210.2 of this chapter, and the remaining grain items offered must be enriched.
[4] Minimum creditable serving is 8 fluid ounces. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less) and must meet the requirements in paragraph (d) of this section.
[5] By July 1, 2027, schools must meet the dietary specification for added sugars. Schools must meet the sodium limits by the dates specified in this chart. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

School Breakfast Program Compared to National School Lunch Program

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 combined grains and meats/meat alternates. 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 be consistent with the goals 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), grains 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 and/or M/MA 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.

Planning reimbursable meals for the School Breakfast Program (SBP) follows a similar process as planning menus for the National School Lunch Program (NSLP). Like the NSLP, the SBP follows a meal pattern with required components and daily minimum required serving amounts.

School Breakfast Program Menu Crediting Fruit Juice

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

School Breakfast Program Menu Crediting Vegetables for Fruits

Schools can continue to substitute vegetables for fruits in the SBP.

Single Day Offering: Schools substituting vegetables for fruits at breakfast one day per school week have the option to offer any creditable vegetable from any of the vegetable subgroups.

Multiple Days Offering: Schools substituting vegetables for fruits at breakfast on two or more days per school week must offer vegetables from at least two different subgroups.

Schools must choose from the following vegetable subgroups: Dark green; Red/orange; Beans, Peas, and Lentils; Starchy; and Other vegetables.

Vegetables can also be offered as an extra item subject to weekly dietary specifications for calories, saturated fat, sodium and added sugars (weekly added sugars limit is effective July 1, 2027).

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 meal 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 meal component or as an extra on your menu, make the appropriate changes, and provide training for staff. Also, extra foods do count toward the dietary specifications.

School Breakfast Program Combined Grains and Meats/Meat Alternates Component

Schools can offer grains, meats/meat alternates, or a combination of both to meet the combined component requirement at breakfast.

The minimum daily requirement is 1 oz eq and the minimum weekly requirements are 7-9 oz eq, depending on the grade group. Schools have the flexibility to decide the combination of grains and/or meats/meat alternates to offer at breakfast.

At least 80% of the weekly grains offered at breakfast must be whole-grain rich, and the remaining grain items may be whole grain-rich or enriched.

Over versus Serve (OVS) in SBP

OVS is optional for all grade levels in SBP. Under OVS, schools must offer at least four food items from the three required meal components (fruit, combined grains and meats/meat alternates, 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 and/or M/MA, 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 meal component contribution at the beginning of the service so that students can recognize a reimbursable meal.

School Breakfast Program 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 combined grains and meats/meat alternates.
- Meet daily and weekly minimums for each grade group.

Activity

ACTIVITY: Planning a Breakfast Menu

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

Time: 10 minutes

Instructions:
Participants will engage in an activity to plan a breakfast menu. They will begin by selecting one grade group to focus on and complete the Breakfast Menu Planning Form as the training progresses. Materials required include the Breakfast Menu Planning Form and a pen or pencil for each participant.

Participants will circle their selected grade group and start planning with the milk component. The preplanned menu includes two options: 1 cup each of fat-free and 1% milk, with flavored milk also acceptable at breakfast for grades K–12.

The preplanned menu also meets the fruits component requirements. The slide displays one way to meet this requirement, ensuring no more than ½ of the total weekly fruits offered are met with full-strength fruit or vegetable juice.

Class Discussion

- Does your program take a different approach regarding the juice requirement?
- Does your program substitute vegetables for fruits at breakfast?

Facilitator Feedback:

- Some programs serve juice twice a week and provide fruit options on the other three days.
- Schools can substitute vegetables for fruits in the SBP.
    - For single-day substitutions, any creditable vegetable may be offered.
    - For multiple-day substitutions (two or more days per week), vegetables from at least two different subgroups must be offered.

Participants will complete the grains and/or M/MA section of their menu based on their program's needs, ensuring:
- Whole grain-rich items are identified.
- At least 80% of the weekly grains are whole grain-rich.

Participants will use the provided materials, including two sample breakfast menus that illustrate how to credit vegetables toward the fruits component and use vegetables as extras.

Class Discussion

- How do participants include meats/meat alternates in their breakfast menus?
- Are there plans to adjust current practices based on the information presented?

Facilitator Feedback:

- The facilitator will allow participants 3 minutes to complete their menus, providing guidance and support as needed.
- Schools can substitute vegetables for fruits in the School Breakfast Program (SBP).
    - For single-day substitutions, any creditable vegetable, including starchy vegetables, may be offered.
    - For multiple-day substitutions (two or more days per week), vegetables from at least two different subgroups must be offered, followed by vegetables from any subgroup for the rest of the week.

Participants will complete the grains and/or M/MA section of their menu based on their program's needs, ensuring:

- Whole grain-rich items are identified.
- At least 80% of the grains are whole grain-rich.

Participants will use the provided materials, including two sample breakfast menus that illustrate how to credit vegetables toward the fruits component and use vegetables as extras.

Class Discussion

- How do participants include meats/meat alternates in their breakfast menus?
- Are there plans to adjust current practices based on the information presented?

Facilitator Feedback:

- The facilitator will allow participants 3 minutes to complete their menus, providing guidance and support as needed.

Breakfast Menu Planning Form				
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Grains and/or M/MA[1]	**Grains and/or M/MA[1]**	**Grains and/or M/MA[1]**	**Grains and/or M/MA[1]**	**Grains and/or M/MA[1]**
___oz eq _____ _____ _____ ___oz eq _____ *M/MA2	___oz eq _____ _____ _____ ___oz eq _____ *M/MA2	___oz eq _____ _____ _____ ___oz eq _____ M/MA2	___oz eq _____ _____ _____ ___oz eq _____ *M/MA2	___oz eq _____ _____ _____ ___oz eq _____ *M/MA2
Fruits[2]	**Fruits[2]**	**Fruits[2]**	**Fruits[2]**	**Fruits[2]**
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 Unflavored 1 cup 1% Unflavored	1 cup FF Unflavored 1 cup 1% Unflavored	1 cup FF Unflavored 1 cup 1% Unflavored	1 cup FF Unflavored 1 cup 1% Unflavored	1 cup FF Unflavored 1 cup 1% Unflavored
Extras	**Extras**	**Extras**	**Extras**	**Extras**
_____ _____	_____ _____	_____ _____	_____ _____	_____ _____

[1] The final rule establishes a combined grains and meats/meat alternates meal component in the SBP and removes the requirement for schools to offer 1.0 ounce equivalent of grains each day at breakfast. Schools may offer grains, meats/meat alternates, or a combination of both to meet the minimum ounce equivalent in this combined meal component requirement.

[2] Schools choosing to offer vegetables at breakfast one day per school week have the option to offer a vegetable from any of the vegetable subgroups. Schools choosing to substitute vegetables for fruits at breakfast on two or more days per school week are required to offer vegetables from at least two different subgroups.

[3] 80% of weekly grains for all groups must be whole grain-rich. The 80% applies only to grains menu items.

[4] Fruits are limited to no more than half (50%) of the total Fruits offered during the weekly can be 100%, pasteurized full-strength juice. Schools choosing to offer vegetables at breakfast one day per school week have the option to offer a vegetable from any of the vegetable subgroups. Schools choosing to substitute vegetables for fruits at breakfast on two or more days per school week are required to offer vegetables from at least two different subgroups. Vegetables may also be served as Extras that do not credit toward the reimbursable meal, but do count in nutrient targets for calories, saturated and *trans* fat limits, and grade group specific sodium targets.

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

[1] The final rule establishes a combined grains and meats/meat alternates meal component in the SBP and removes the requirement for schools to offer 1.0 ounce equivalent of grains each day at breakfast. Schools may offer grains, meats/meat alternates, or a combination of both to meet the minimum ounce equivalent in this combined meal component requirement.

[2] Schools choosing to offer vegetables at breakfast one day per school week have the option to offer a vegetable from any of the vegetable subgroups. Schools choosing to substitute vegetables for fruits at breakfast on two or more days per school week are required to offer vegetables from at least two different subgroups.

[3] 80% of weekly grains for all groups must be whole grain-rich. The 80% applies only to grains menu items.

[4] Fruits are limited to no more than half (50%) of the total Fruits offered during the weekly can be 100%, pasteurized full-strength juice. Schools choosing to offer vegetables at breakfast one day per school week have the option to offer a vegetable from any of the vegetable subgroups. Schools choosing to substitute vegetables for fruits at breakfast on two or more days per school week are required to offer vegetables from at least two different 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.

Dietary Specifications

Discuss

This section focuses on the nutrient standards as they relate to the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). Participants will explore specific standards for calories, saturated fat, sodium, and added sugars and how these align with program requirements.

Key Message

The primary goal of Food Based Menu Planning (FBMP) is to assist School Food Authority (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
    - Added Sugars

Calories

Students need calories to fuel growth, development, learning, and physical activity. However, many American children consume more calories than they need. 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 to 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 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.

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.

Check out ICN's Shaking It Up: Small Changes Lead to Big Flavors series of worksheets and online courses for more sodium reduction strategies.

Added Sugars

Added sugars include sugars added during processing of foods (such as sucrose or dextrose), foods packaged as sweeteners (such as table sugar), sugars from syrups and honey, and sugars from concentrated fruit or vegetable juices. They do not include naturally occurring sugars in milks, fruits, and vegetables.

There is a Two-Step Approach to Reduce Added Sugars in School Meals
Step 1: Implement product-based limits for breakfast cereals, yogurt and flavored milk by SY 2025-2026 (effective date July 1, 2025).

Step 2: Implement a weekly dietary limit for added sugars to less than 10% of calories by SY 2027-2028 (effective date July 1, 2027).

Non-Creditable Foods

Non-creditable foods are foods and beverages that do not 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 count toward the weekly dietary specifications for calories, saturated fat, sodium and added sugars (added sugars limit effective July 1, 2027).

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, vegetable subgroups, and dietary specifications.

Certification of Compliance Worksheets are provided by USDA. You can find them 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 specifications. It shows if calories, sodium, and saturated fat are within ranges. The simplified nutrient assessment is not completely accurate as it only takes into account entree, side dish, and condiment nutrient specifications, 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 or the ICN Help Desk at 1-800-321-3054 or email helpdesk@theicn.org.

Class Discussion

ASK: Are there any questions related to *Reimbursable School Meals* before we continue to the next lesson?

Food Production and Operation Management Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
5 minutes	● Lesson Objectives ● Food Production and Operation Management ● Food Production System	Review Objectives	● Culinary Training Manual
Objective: Describe how the principles of food production impact food quality.			
40 minutes	● Principles of Food Production ● Developing and Using Standardized Recipes	Principles of Food Production	● Culinary Training Manual
Objective: List the principles of developing and using standardized recipes.			
40 minutes	● Benefits of a Standardized Recipe ● Recipe Adjustment	Standardized USDA Recipes	● Culinary Training Manual
Objective: Describe the importance of accurate weights and measurements in food production.			
10 minutes	● Food Production Records ● General Information	● Required Information for School Meals Production ● Food Production Record	● Handout: Weights and Measures ● Handout: Basics at a Glance ● Culinary Training Manual
Objective: List the principles of using cycle menus.			
20 minutes	● Using Cycle Menus	●	● Culinary Training Manual
Objective: Identify the importance of documenting and evaluating the amount of food planned, prepared, and served on food production records.			
10 minutes	● Food Production Records General Information	● Required Information for School Meals Production ● Food Production Record	● Culinary Training Manual

Time Allowed	Topic	Activity	Materials
Objective: State the importance of production scheduling to achieve operation goals.			
15 minutes	● Types of Production Schedules ● Cleaning Schedules	● Daily Work Schedule for Food Production and Service ● Service Line Food Placement Diagram	● Culinary Training Manual
Objective: List food quality standards that ensure quality food production.			
5 minutes	● Food Quality Standards		● Culinary Training Manual
Total: 2 hr 15 minutes			

Food Production and Operation Management

Discuss

The production and service of nutritious, high-quality, economical meals that are both acceptable and enjoyable to student customers remain core functions of school nutrition operations, just as they were in 1946 when President Harry S. Truman signed the National School Lunch Act. Over the years, numerous changes have influenced how food is produced for students in today's school meal programs

The objectives for this lesson are:
- Describe how the principles of food production impact food quality.
- List the principles of developing and using standardized recipes.
- Describe the importance of accurate weight and measurements in food production.
- List the principles of using cycle menus.
- Identify the importance of documenting and evaluating the amount of food planned, prepared, and served on food production records.
- State the importance of production scheduling to achieve operational goals.
- List food quality standards that ensure quality food production.

A successful school nutrition chef must be able to:
- Understand the various elements of the menu.
- Guide the development and daily use of production standards.
- Ensure the implementation of quality standards for food that meet the nutrition goals of the program and the taste preferences of student customers.
- Understand various culinary techniques, recipe development, and modification processes necessary for producing healthful, student-acceptable school meals.

School nutrition chefs face the challenge of leading their teams to prepare more foods onsite, shifting away from serving pre-prepared items. To support this transition, school nutrition chefs must provide:
- Training in food preparation.
- Additional cooking and holding equipment.
- Other operational changes to improve efficiency and quality.

Food Production System

The first topic in this lesson focuses on understanding how food production impacts food quality. The food production system is the core function of school nutrition service operations. It largely determines how food is prepared and should be designed to enhance the nutritive value, quality, and customer acceptance of food. Through this system, schools fulfill the purpose of nutrition programs: safeguarding the health of the nation's children by serving healthy, appealing, safe, and acceptable meals. Additionally, the food production system provides the foundation for schools to produce the desired number of quality meals in a cost-effective manner.

A food production system designed to meet the goals of the CNP should:
- Be efficiently designed and appropriately equipped.
- Have adequate dry storage, refrigerated storage, and freezer space, appropriately located.
- Be capable of maintaining all products at the correct temperature.
- Be staffed by a school nutrition team that is appropriately trained and empowered to maximize their skills and available resources to provide tasty and nutritious foods.

While the quality of food is ultimately in the hands of the site manager and staff, an effective school nutrition chef will understand and implement the fundamental principles of food production. The school nutrition chef must provide the knowledge and leadership necessary to manage an operations system that ensures high standards for quality food production.

Activity

ACTIVITY: Principles of Food Production

Materials: Principles of Food Production worksheet

Time: 10 minutes

Instructions:
Participants will break into groups to complete the Principles of Food Production worksheet found in the Culinary Training Manual.

The facilitator will instruct participants to pause and consider the fundamental principles of food production. The worksheet contains 11 questions related to principles that help ensure the quality production of nutritious food for schoolchildren.

Working in teams, participants will answer each question on the worksheet, selecting the correct answers from the list of key words provided in the box.

Principles of Food Production

Instructions: Work as a team to match each key word with one of the questions that follow. The first letter of each key word has been bolded.

Key Words	
Dietary Guidelines for Americans Freshness Forecasting Herbs and spices Batch cooking Menu	Production schedules Scratch cooking Standard Operating Procedures Standardized recipe Weighed

1. What drives the food preparation process? _____

2. What technique is used to determine the number of food items and meals to prepare? _____

3. What tells School Nutrition Frontline Staff the amount of each food item to prepare, portion sizes, time schedule, and person responsible? _____

4. Ingredients must be selected at the peak of _____ for quality products.

5. All ingredients are _____ or measured accurately.

6. All culinary techniques selected should support preparation consistent with the _____.

7. What is a term that means preparing a menu item in a small enough amounts that it will be at its peak of quality when placed on the serving line? _____

8. What can be used to help develop and enhance flavors of food items? _____

9. What type of cooking allows the user to have control of ingredients contained in the food item? _____

10. What are vital resources for school nutrition staff to prepare healthy and appealing food, maintain equipment, and work in a safe and sanitary manner? _____

11. The meal pattern for National School Lunch Program and School Breakfast Program follows the _____.

Principles of Food Production Answer Key

Instructions: Work as a team to match each key word with one of the questions that follow. The first letter of each key word has been bolded.

Key Words	
Dietary Guidelines for Americans Freshness Forecasting Herbs and spices Batch cooking Menu	Production schedules Scratch cooking Standard Operating Procedure Standardized recipe Weighed

1. What drives the food preparation process? Menu

2. What technique is used to determine the number of food items and meals to prepare? Forecasting

3. What tells School Nutrition Frontline Staff the amount of each food item to prepare, portion sizes, time schedule, and person responsible? Production schedules

4. Ingredients must be selected at the peak of freshness for quality products.

5. All ingredients are weighed or measured accurately.

6. All culinary techniques selected should support preparation consistent with the standardized recipe.

7. What is a term that means preparing a menu item in a small enough amounts that it will be at its peak of quality when placed on the serving line? Batch cooking

8. What can be used to help develop and enhance flavors of food items? Herbs and spices

9. What type of cooking allows the user to have control of ingredients contained in the food item? Scratch cooking

10. What are vital resources for school nutrition staff to prepare healthy and appealing food, maintain equipment, and work in a safe and sanitary manner? Standard Operating Procedures

11. The meal pattern for NSLP and SBP follows the *Dietary Guidelines for Americans*.

Developing and Using Standardized Recipes

To produce high-quality food in the CNP, it is essential for the entire school nutrition staff to understand the principles of developing and using standardized recipes. These recipes serve as the foundation for preparing foods with consistent quality and quantity in any operation.

Definition of a Standardized Recipe: A standardized recipe is one that has been tested, adapted, and re-tested multiple times to ensure it meets the specific needs of a given foodservice operation. Such recipes produce the same results and yield every time, provided the following conditions are met:

- The exact procedure is followed.
- The same type of equipment is used.
- The same quantity and quality of ingredients are utilized.

Often, it is assumed that a recipe has been standardized and is ready for use in a program. However, this is not always the case, as conditions and equipment can vary significantly between different CNPs.

While recipes are typically standardized at the district level, it is the responsibility of the school nutrition chef to oversee the standardization process for individual schools. During this process, the quality of the product must always be checked by tasting it. Additionally, conducting a taste test with customers is essential before the recipe is finalized and accepted.

It is important to remember that even small adjustments—such as adding a little more or less of any ingredient—can make the difference between the success and failure of a recipe. These adjustments can also affect the nutrient content of the final product.

Class Discussion

ASK: What are the benefits of using a standardized recipe?

Possible Responses:

- Cost control
- Portion control
- Quality control

Participants will then be directed to the Benefits of Using Standardized Recipes handout for further reference.

Benefits of Using a Standardized Recipe

Using standardized recipes help ensure:

- The product will be of the same quality each time it is prepared.
- The yield is the same each time the recipe is prepared.
- Both time and money are saved because employees are familiar with recipes.
- Employees will do a better job.
- The cafeteria prepares enough food.
- Food orders are more accurate.
- The food item always tastes the same no matter which employee prepares the recipe.
- The manager can better control costs.

Activity

ACTIVITY: Principles of Food Production

Materials: Parts of a Standardized Recipe worksheet and Bok Choy Wrappers recipe worksheet

Time: 10 minutes

Instructions:
The parts of a standardized recipe are underlined and bolded on the Bok Choy Wrappers recipe in the Culinary Training Manual. Ask participants to use the Parts of a Standardized Recipe worksheet to match the 15 standardized recipe parts on the USDA's Bok Choy Wrappers recipe to the components on the list. Allow participants to work together to identify the parts.

Parts of a Standardized Recipe

Instructions: Match the standardized recipe parts on the **USDA's Bok Choy Wrappers** recipe handout to the components on the list. Work together to identify the parts of a standardized recipe.

___1. Recipe Name

___2. Meal Components

___3. Recipe Category

___4. Ingredients

___5. Servings per Recipe

___6. Weight and Measure

___7. Preparation and Instructions

___8. Ingredient Amounts

___9. Equipment Needed

___10. Cooking Time and Temperature

___11. CCP (Critical Control Point)

___12. Portioning Utensil

___13. Serving Information

___14. Serving Size and Component Contributions

Adapted from *USDA Recipe Standardization Guide for School Nutrition Programs* (2022)
https://theicn.org/cicn/usda-recipe-standardization-guide-for-school-nutrition-programs/

Meal Components: Meat—Dark Green Vegetable—Fruit—Grains

Bok Choy Wrappers

Sandwiches
F-11r

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Water	1 gal 2 qt		3 gal		1. Boil water
Brown rice, long grain, regular, dry	5 lb	3 qt ½ cup	10 lb	1 gal 2 ¼ qt	2. Place 2 lb 8 oz brown rice in each steam table pan (12” x 20” x 2 ½”). For 50 servings, use 2 pans. For 100 servings, use 4 pans 3. Pour water (3 qt per steam table pan) over brown rice. Stir. Cover pans tightly. 4. Bake: Conventional oven: 350 °F for 40 minutes Convection oven: 325 °F for 40 minutes 5. Remove from oven and let stand covered for 5 minutes.
*Fresh bok choy, sliced ¼“	3 lb 6 oz	1 gal	6 lb 12 oz	2 gal	6. Combine brown rice, bok choy, pineapple, chicken, sweet and sour sauce, and soy sauce. Pour into steam table pans (12” x 20” x 2 ½”). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Canned pineapple tidbits, in 100% juice	6 lb 10 oz	3 qt. (1 No. 10 can)	13 lb 4 oz	1 gal 2 qt (2 No. 10 cans)	
Frozen, cooked chicken strips, thawed	6 lb 2 oz	1 gal 2 qt	3 qt		
Sweet and Sour Sauce		1 qt 2 cups	6 lb 12 oz	2 gal	

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Low-sodium soy sauce		2 Tbsp		¼ cup	1. Bake: Conventional oven: 350 °F for 30 minutes Convection oven: 325 °F for 20 minutes Critical Control Point: Heat to 165 °F or higher for at least 15 seconds. 2. Critical Control Point: Hold for hot service at 135 °F or higher.
*Fresh romaine lettuce, outer leaves, rinsed, dry	5 lb	100 leaves	10 lb	200 leaves	3. Top each romaine leaf with a 6 fl oz spoodle (3/4 cup) filling. Optional: Garnish with diced red peppers. Folds sides of lettuce in toward center; roll up lik a burrito. Place seam side down. Serve immediately.
Two wraps provide 1 oz equivalent meat, ¾ cup dark green vegetable, ¼ cup fruit, and 1 ½ oz equivalent grains. One wrap provides ½ oz equivalent meat, ⅜ cup dark green vegetable, and ¾ oz equivalent grains.					4. Serve two wraps.

Meal Components: Meat—Dark Green Vegetable—Fruit—Grains (2)

Bok Choy Wrappers Answer Key (1)

(3) Sandwiches
(4) F-11r

Ingredients (5)	50 Servings (6)		100 Servings (6)		Directions (8)
	Weight (7)	Measure (7)	Weight (7)	Measure (7)	
Water	1 gal 2 qt		3 gal		1. Boil water
Brown rice, long grain, regular, dry	5 lb (9)	3 qt (9) ½ cup	10 lb (9)	1 gal (9) 2 ¼ qt	2. Place 2 lb 8 oz brown rice in each steam table pan (12” x 20” x 2 ½”). (10) For 50 servings, use 2 pans. For 100 servings, use 4 pans 3. Pour water (3 qt per steam table pan) over brown rice. Stir. Cover pans tightly. 4. Bake: Conventional oven: 350 °F for 40 minutes Convection oven: 325 °F for 40 minutes (11) 5. Remove from oven and let stand covered for 5 minutes.
*Fresh bok choy, sliced ¼“	3 lb 6 oz	1 gal	6 lb 12 oz	2 gal	6. Combine brown rice, bok choy, pineapple, chicken, sweet and sour sauce, and soy sauce. Pour into steam table pans (12” x 20” x 2 ½”). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Canned pineapple tidbits, in 100% juice	6 lb 10 oz	3 qt. (1 No. 10 can)	13 lb 4 oz	1 gal 2 qt (2 No. 10 cans)	
Frozen, cooked chicken strips, thawed	6 lb 2 oz	1 gal 2 qt	3 qt		
Sweet and Sour Sauce		1 qt 2 cups	6 lb 12 oz	2 gal	

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Low-sodium soy sauce		2 Tbsp		¼ cup	1. Bake: Conventional oven: 350 °F for 30 minutes Convection oven: 325 °F for 20 minutes Critical Control Point: Heat to 165 °F or higher for at least 15 seconds. 2. Critical Control Point: Hold for hot service at 135 °F or higher. (12)
*Fresh romaine lettuce, outer leaves, rinsed, dry	5 lb	100 leaves	10 lb	200 leaves	3. Top each romaine leaf with a 6 fl oz spoodle (3/4 cup) filling. Optional: Garnish with diced red peppers. Folds sides of lettuce in toward center; roll up like a burrito. Place seam side down. Serve immediately. (13)
Two wraps provide 1 oz equivalent meat, ¾ cup dark green vegetable, ¼ cup fruit, and 1 ½ oz equivalent grains. (15) One wrap provides ½ oz equivalent meat, ⅜ cup dark green vegetable, and ¾ oz equivalent grains. (15)					4. Serve two wraps. (14)

*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.
Adapted from *What's Cooking? USDA Mixing Bowl*

In some cases, a procedure is used instead of a recipe when preparing food for school meals.

Class Discussion

ASK: What is the difference between a procedure and a recipe?

Feedback:

- A procedure outlines the steps and techniques needed for combining, preparing, or finishing a product. Procedures are commonly found on packages of commercially prepared mixes, entrees, and other products.
- Following a procedure is just as important as following a standardized recipe to achieve a consistent quality product.
- It is equally essential to test procedures in school district kitchens using the available equipment to ensure the desired results.

Recipe Adjustment

USDA standardized recipes provide quantities needed to produce 50, 100, or the desired number of servings required to meet operational needs. However, to address the specific needs of each school, recipes often need to be adjusted to serve the projected number of customers forecast for any given day.

While many school managers use software to adjust recipes automatically, it is still important for staff to understand the process of quantity adjustment. School nutrition chefs should also provide training for staff members to ensure they are proficient in this area.

To support this, the Culinary Training Manual includes formulated steps and a worksheet to help participants learn and practice recipe adjustments effectively.

The following steps can be used to increase the ingredients in a standardized recipe.

Step 1: Determine the increase in the number of servings or yield needed.

Increase:
How many servings does the recipe currently yield? 100
How many servings are needed? 225

Step 2: Determine the multiplying factor for each ingredient.
Divide the number of servings needed divided by the number of servings listed.

$$\text{Increase: } \frac{\text{number of servings needed}}{\text{number of servings listed}} \qquad \frac{225}{100} = 2.25$$

Step 3: Determine the total new quantity needed by multiplying the original weight/measure by the multiplying factor.

Multiply the weight or measure listed on the recipe by the multiplying factor to determine the new quantity needed.
Recipe Weight or Measure (converted) x Factor = Quantity Needed

Example: A recipe that serves 100 calls for 15 lb and 12 oz of ground beef.

Increase: Ground Beef: 15 lb 12 oz (252 oz) x 2.25 = 567 oz (35 lbs 7 oz)

Step 4: Repeat Step 3 for each ingredient in the standardized recipe.

Multiply each ingredient by the multiplying factor.

When adjusting recipes, increasing or decreasing spices or other seasonings may require a different proportion compared to other ingredients. The school nutrition chef and school site manager should train food preparation employees to exercise caution when adjusting seasonings.

General Guidelines for Adjusting Spices and Herbs:
- When increasing from 50 to 100 servings, double the spices and herbs in the recipe.
- For every additional 100 servings, increase the spice or herb by 25%.

Additionally, some ingredients, like eggs, can be challenging to adjust using the factor method. For example, if the adjustment results in 1 ⅔ eggs, rounding up to 2 eggs is typically acceptable.

The following steps can be used to decrease the ingredients in a standardized recipe.

Step 1: Determine the decrease in the number of servings or yield needed.

Decrease:
How many servings does the recipe currently yield? 100
How many servings are needed? 80

Step 2: Determine the multiplying factor for each ingredient.

Divide the number of servings needed divided by the number of servings listed.

Decrease: $\frac{\text{number of servings needed}}{\text{number of servings listed}}$ $\frac{80}{100}$ = 0.80

Step 3: Determine the total new quantity needed by multiplying the original weight/ measure by the multiplying factor.

Multiply the weight or measure listed on the recipe by the multiplying factor to determine the new quantity needed.

Recipe Weight or Measure (converted) x Factor = Quantity Needed

Example: A recipe that serves 100 calls for 15 lb and 12 oz of ground beef.
Decrease: Ground Beef: 15 lb 12 oz (252 oz) x 0.80 = 202 oz (12 lbs 10 oz)

Step 4: Repeat Step 3 for each ingredient in the standardized recipe.

Multiply each ingredient by the multiplying factor.

Weights and Measures

The weight and volume of each ingredient are critical components of a standardized recipe, and accuracy is essential for preparing quality products. Most USDA recipes list both weights and volumes for each ingredient, and training staff to weigh and measure ingredients accurately is key to producing a consistent, high-quality product.

Weighing Ingredients: Weighing ingredients is generally faster, easier, and more accurate than measuring by volume, reducing the chance of errors. Only ounces and pounds are used as measures of weight in cooking, and ingredients are weighed using one of the following types of scales:

- Balance scales
- Spring scales
- Electronic scales

Portioning by Weight vs. Volume: In many districts, portion cups are used; however, there is sometimes concern that ingredients measured in a 2-ounce or 4-ounce portion cup may not equate to 2 or 4 ounces by weight.

Proper Care and Handling of Scales: Scales should be standardized and handled with care. Frequent movement or rough handling can damage scales, leading to inaccurate readings.

As a school nutrition chef, it is your responsibility to ensure that employees, particularly new hires, are trained in proper weighing and measuring techniques.

Training Tools: ICN's Basics at a Glance poster is an excellent training tool for employees and should be available in every kitchen to support quality food production.

The Basics at a Glance poster is a valuable resource for school nutrition staff, offering essential information on:

- Recipe abbreviations
- Volume equivalents for liquids
- Equivalent weights
- Portioning tools
- Measurement conversions
- Steam table pan capacities

Standard Measuring Equipment:

- Measuring Spoons: Used for measuring small amounts of ingredients, such as seasonings, spices, herbs, and flavorings.
- Volume Measurements: Primarily used for liquid ingredients or ingredients in amounts less than 2 ounces.
- Liquid Measures: Designed for measuring large amounts of liquids, these containers include a lip for pouring to prevent spills. They are typically made of aluminum, glass, or plastic and are available in the following sizes:
    - 1 pint
    - 1 quart
    - ½ gallon
    - 1 gallon
- Dry Measuring Containers: Used to measure dry ingredients, these containers lack a lip above the rim line, allowing ingredients to be leveled for accuracy. Dry measures are generally not larger than 1 quart, as it is more accurate to weigh large quantities of dry ingredients.

Basics at a Glance

Recipe Abbreviations

approx.	=	approximate
tsp or t	=	teaspoon
Tbsp or T	=	tablespoon
c	=	cup
pt	=	pint
qt	=	quart
gal	=	gallon
wt	=	weight
oz	=	ounce
lb or #	=	pound (e.g., 3#)
g	=	gram
kg	=	kilogram
vol	=	volume
mL	=	milliliter
L	=	liter
fl oz	=	fluid ounce
No. or #	=	number (e.g., #3)
in. or "	=	inches (e.g., 12")
°F	=	degree Fahrenheit
°C	=	degree Celsius or centigrade

Volume Equivalents for Liquids

60 drops	= 1 tsp	
1 Tbsp	= 3 tsp	= 0.5 fl oz
1/8 cup	= 2 Tbsp	= 1 fl oz
1/4 cup	= 4 Tbsp	= 2 fl oz
1/3 cup	= 5 Tbsp + 1 tsp	= 2.65 fl oz
3/8 cup	= 6 Tbsp	= 3 fl oz
1/2 cup	= 8 Tbsp	= 4 fl oz
5/8 cup	= 10 Tbsp	= 5 fl oz
2/3 cup	= 10 Tbsp + 2 tsp	= 5.3 fl oz
3/4 cup	= 12 Tbsp	= 6 fl oz
7/8 cup	= 14 Tbsp	= 7 fl oz
1 cup	= 16 Tbsp	= 8 fl oz
1/2 pint	= 1 cup	= 8 fl oz
1 pint	= 2 cups	= 16 fl oz
1 quart	= 2 pt	= 32 fl oz
1 gallon	= 4 qt	= 128 fl oz

Equivalent Weights

16 oz	= 1 lb	= 1.000 lb
12 oz	= 3/4 lb	= 0.750 lb
8 oz	= 1/2 lb	= 0.500 lb
4 oz	= 1/4 lb	= 0.250 lb
1 oz	= 1/16 lb	= 0.063 lb

Scoops (Dishers)

Size/No.[1]	Level Measure	Color Code[2]
6	2/3 cup	
8	1/2 cup	
10	3/8 cup	
12	1/3 cup	
16	1/4 cup	
20	3-1/3 Tbsp	
24	2-2/3 Tbsp	
30	2 Tbsp	
40	1-2/3 Tbsp	
50	3-3/4 tsp	
60	3-1/4 tsp	
70	2-3/4 tsp	
100	2 tsp	

[1] Scoops are left or right hand or squeeze-type that can be used for both hands. Number on the scoop indicates how many level scoopfuls make one quart. For example, eight No. 8 scoops = 1 quart.

[2] Use colored dots matching the brand-specific color coding of scoop sizes.

Ladles Portion Servers

Ladle fl oz	Appox. Measure	Portion Server fl oz
1 oz	1/8 cup	1 oz
2 oz	1/4 cup	2 oz
3 oz	3/8 cup	3 oz
4 oz	1/2 cup	4 oz
6 oz	3/4 cup	6 oz
8 oz	1 cup	8 oz
12 oz	1-1/2 cups	—

Ladles and portion servers (measuring-serving spoons that are volume-standardized) are labeled "oz." "Fl oz" would be more accurate since they measure volume, not weight.

Use ladles for serving soups, stews, creamed dishes, sauces, gravies, and other liquid products.

Use portion servers (solid or perforated) for portioning solids and semi-solids such as fruits and vegetables, and condiments.

Cooking or Serving Spoons

Solid Spoons

Perforated Spoons

Slotted Spoons

Spoons vary in length (11", 13", 15", 18", 21") for ease of use in cooking or serving. Spoons can have plastic handles that are heat-resistant. Level scoops, ladles, and portion servers provide more accurate portion control than serving spoons that are not volume-standardized measure.

Specialty Spoons

A thumb notch on a server or spoon handle prevents the spoon from slipping into the pan and prevents hands from sliding into the food. Triple-edge (solid or perforated) spoons have a flat edge that increases the area where the spoon touches the bottom of the pan when stirring.

Fraction to Decimal Equivalents

1/8	= 0.125
1/4	= 0.250
1/3	= 0.333
3/8	= 0.375
1/2	= 0.500
5/8	= 0.625
2/3	= 0.666
3/4	= 0.750
7/8	= 0.875

Metric Equivalents by Weight

Customary Unit (avoirdupois)	**Metric Unit**
Ounces (oz)	**Grams (g)**
1 oz	= 28.35 g
4 oz	= 113.4 g
8 oz	= 226.8 g
16 oz	= 453.6 g
Pounds (lb)	**Grams (g)**
1 lb	= 453.6 g
2 lb	= 907.2 g
Pounds (lb)	**Kilograms (kg)**
2.2 lb	= 1 kg (1000 g)

Metric Equivalents by Volume

Customary Unit (fl oz)	Metric Unit
1 cup (8 fl oz)	= 236.59 mL
1 quart (32 fl oz)	= 946.36 mL
1.5 quarts (48 fl oz)	= 1.42 L
33.818 fl oz	= 1.0 L

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For more information, please contact helpdesk@theicn.org. 03/29/2019

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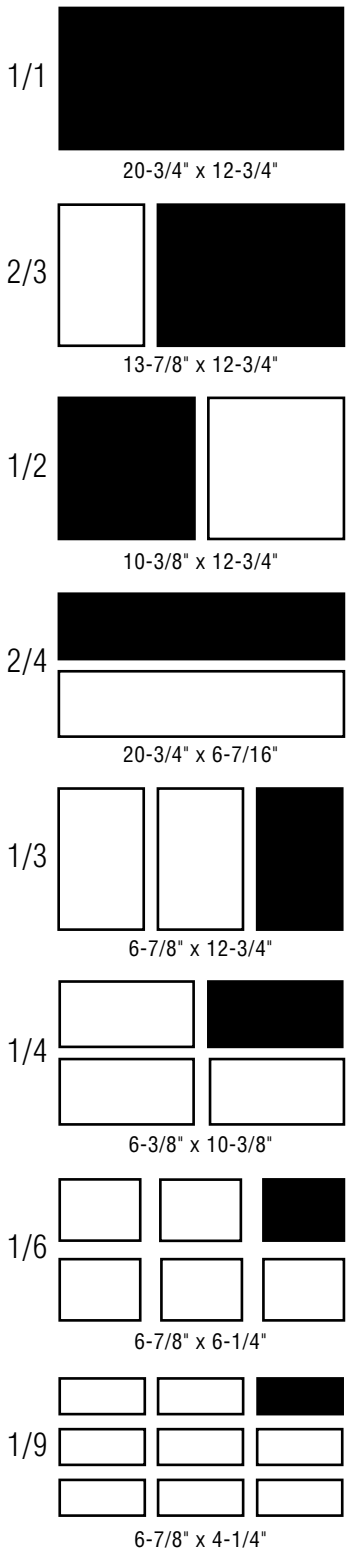
Steamtable Pan Capacity

Pan Size	Approx. Capacity	Serving Size	Ladle (fl oz)	Scoop #	Approx. # Servings
12" x 20" x 2-1/2" 	2 gal	1/2 cup 3/8 cup 1/3 cup 1/4 cup	4 oz 3 oz 2.65 oz 2 oz	8 10 12 16	64 80 96 128
12" x 20" x 4" 	3-1/2 gal	1/2 cup 3/8 cup 1/3 cup 1/4 cup	4 oz 3 oz 2.65 oz 2 oz	8 10 12 16	112 135 168 224
12" x 20" x 6" 	5 gal	1/2 cup 3/8 cup 1/3 cup 1/4 cup	4 oz 3 oz 2.65 oz 2 oz	8 10 12 16	160 200 240 320

Other Pan Sizes



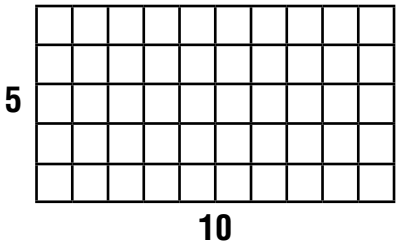
Steamtable or counter pans are available in various sizes. Smaller size pans may require the use of an adapter bar.

Approximate Dimensions of Serving Sizes from Different Pan Sizes

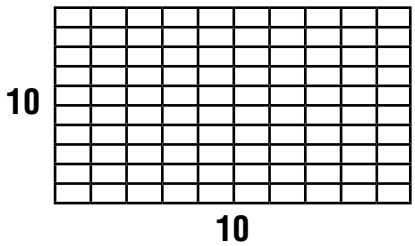
Pan	Approx. Size	No. and Approx. Size Servings per Pan		
		25	50	100
Baking or steamtable	12" x 20" x 2-1/2"	2" x 3-3/4"	2" x 2"	_ _ _ _ _
Sheet or bun	18" x 26" x 1"	3-1/4" x 5"	3-1/4" x 2-1/2"	1-3/4" x 2-1/2"

Cutting Diagrams for Portioning

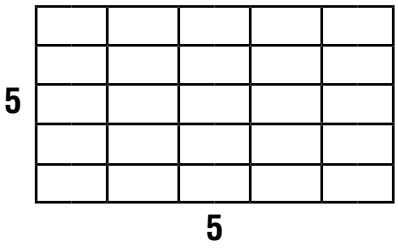
For 50 servings cut 5 x 10



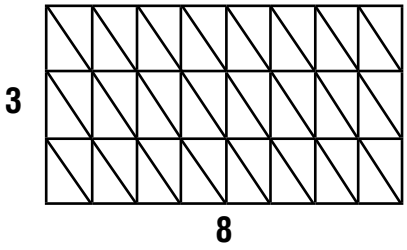
For 100 servings cut 10 x 10



For 25 servings cut 5 x 5



For 48 servings cut 3 x 8 then diagonally



Cycle Menus

A cycle menu operates on a rotating basis, repeating itself over multiple days or weeks while offering different foods each day. Cycle menus should be modified to incorporate seasonal fruits and vegetables as well as available USDA Foods, ensuring freshness and adaptability.

In school meals, cycle menus are typically planned for durations ranging from two weeks to six weeks. They provide several operational advantages, including:

- Time savings
- Food and labor cost control
- The ability for menu planners to offer a variety of selections

Cycle menus also enhance operational efficiency in areas such as:

- Developing procurement specifications
- Forecasting, costing, and purchasing procedures

Additionally, production staff benefit from increased skill and consistency as they become familiar with repetitive menus and standardized procedures.

Food Production Records

Good record-keeping is a vital part of successful food production procedures. Food production records serve as a tool for managers to communicate essential information to staff, including the food items and amounts to prepare and serve. These records answer key questions for staff, such as how much food to prepare for a given day and which recipe to use.

Since Federal CNPs receive reimbursement for meals and snacks that conform to meal pattern requirements, school food authorities (SFAs) must provide documentation to State and Federal agencies regarding the foods and amounts served. Food production records offer this evidence by demonstrating that quantities of prepared and served foods meet meal pattern requirements. Additionally, they serve as a major management tool to:

- Control costs
- Plan the amounts of food to purchase
- Forecast trends

To ensure accurate documentation, it is important for school site staff to understand the guidelines for completing food production records on a daily basis. Although the school nutrition manager is ultimately responsible for the completion of these records, other members of the school nutrition team can assist with this task. Cross-training multiple employees in the process is a good practice to ensure continuity and accuracy.

The ICN's Manager's Corner Production Records is an excellent training resource for staff. It offers quick, 15-minute lessons that include an introduction, discussion questions, and an activity. Managers or chefs can use this resource to train employees effectively.

Key Information for School Meals Production: Participants can refer to the handout in the Culinary Training Manual for an overview of the specific information.

Completing Production Records: The facilitator will emphasize the importance of ensuring that food production records are complete by the end of the day the meal is served. Accuracy diminishes after several hours or the next day, so it is a best practice to complete the records before, during, or immediately after meal service.

Production Record	Information
Basic Information	● Name of school/site ● Grade group ● Date ● Menu ● Menu type (lunch or breakfast) ● Offer Versus Serve (OVS) or Pre-plated (served)
Reimbursable Meals	● Planned (projected) number of student meals—provides an estimate of planned (projected) student meals for the specified grade group ● Actual number of student meals offered (prepared)—provides the total number of student meals offered (prepared) for the specified grade group ● Actual number of student meals selected (served)—provides the total number of student meals selected (served) for the specified grade group
Nonreimbursable Meals	● Planned (projected) number of nonreimbursable meals—the number of staff and guests ● Offered (prepared) number of nonreimbursable meals—the number of staff and guests ● Actual number of nonreimbursable meals selected (served)— provides the total number of nonreimbursable meals selected (served) for the specified school/site
All Menu Items Listed	● Menu/Food Items—all food item choices included on the specified grade group's menu, such as main entrees, vegetable subgroups, fruit, milk, dessert, condiments, and substitutions. For each food item, include product information such as manufacturer item name and code number, USDA Foods information, or specific information to guide preparation ● Planned (projected), offered (prepared), and selected (served) number of milk by type—fat-free unflavored, fat-free chocolate or other flavors, 1% low-fat unflavored, 1% low-fat chocolate or other flavors
Recipe/Product Number	● Recipe ID/product ID number—standardized recipe number or product ID number
Portion Size	● Portion size for the specified grade group—specific unit of measure: scoop number, measuring cup amount, each, ladle or spoodle size, etc.
Reimbursable Meal Components Provided by Portion Size	● Meats/meat alternates in ounce equivalent (oz eq) ● Grains in oz eq (WGR indicates whole grain-rich) ● Fruits—portion offered in volume, (½ cup in sample) ● Vegetables—portion offered in volume (¼ cup in sample) ● Milk—portion offered in volume (1 cup in sample)

Production Record	Information
Meals Planned (Projected), Offered (Prepared), Selected (Served), and Leftover	● Planned (projected) number of servings to prepare—provided by menu planner using forecasting tools (reimbursable and nonreimbursable combined) ● Planned (projected) quantity of food to use in purchase units— forecasted from past production, standardized recipes and the Food Buying Guide for Child Nutrition Programs (FBG). Adjust on day-of-service, if needed ● Actual number of servings offered (prepared)—provides total number of servings prepared with any changes from planned (projected) amounts noted, as needed ● Actual number of servings selected (served)—provides total number of servings selected (served) for each food item on the menu; provides information for forecasting future meal preparation ● Substitutions and leftovers—any substitutions for the planned menu must be recorded. Record the amount of leftovers of each item and planned use (examples: chilled and refrigerated for use in future meal, freeze for future use in cycle menu, or discard)
Verification Signature and Date	● Person in charge of site reviews, verifies, signs and dates the production record, and files for future reference. Your State agency may require signed production records.
Other details you may need or want to record are:	● Food preparation and holding temperatures ● Specific information of value for preparation, service, and future forecasting, such as weather-related school closures, field trips, etc. ● FBG details—source of calculations for purchase units required for total servings planned ● Additional required information by your State agency or school program

Activity

ACTIVITY: Key Information for School Meals Production

Materials: Sample Daily Menu Production Record handout

Time: 5 minutes

Instructions:
Refer participants to the Sample Daily Menu Production Record handout in the Culinary Training Manual. Ask them to identify the key parts of a production record.

Sample Daily Menu Production Record

Instuctions: Identify the required parts of the production record.

Daily Menu Production Record — Food Based Menu Planning

Name of school/state: _____
Grade Group: _____
Date: _____
Menu: _____
_____
_____

☐ Breakfast
☐ Lunch
☐ OVS
☐ Pre-plated (served)

Reimbursable Meals
Number of student meals planned (projected): ____
Number of student meals offered (prepared): ____
Number of student meals selected (served): ____

Nonreimbursable Meals
Number of student meals planned (projected): ____
Number of student meals offered (prepared): ____
Number of student meals selected (served): ____

R = Reimbursable NR = Nonreimbursable T = Total

Menu/Food Item	Recipe ID/ Product ID	Portion Size	Component Contributions Per Portion Size					Planned (Projected) Servings			Planned (Projected) Quantity of Food (in purchase units)	Actual Number Serving Offered (Prepared)			Actual Number Servings Selected (Served)			Substitutions, Leftovers, and Notes
			Meat/Meat Alternates	Grains	Fruits	Vegetables	Milk	R	NR	T		R	NR	T	R	NR	T	

Adapted from *USDA's Anatomy of a Production Record* Appendix 4.A

Verifier Signature Date

Sample Daily Menu Production Record

Daily Menu Production Record — Food Based Menu Planning

1 Name of school/site: Harvey Elementary School
2 Grade Group: K-5
3 Date: January 14, 2022
4 Menu: Grilled cheese sandwich or Chicken nuggets & Rice pilaf, Broccoli, Cherry tomatoes, Celery sticks, Fruit cocktail, Orange wedges Milk: assorted fat-free & 1%

5
- [ ] Breakfast
- [X] Lunch
- [X] OVS
- [ ] Pre-plated (served)

Reimbursable Meals
6 Number of student meals planned (projected): 54
7 Number of student meals offered (prepared): 50
8 Number of student meals selected (served): 48

Nonreimbursable Meals
9 Number of student meals planned (projected): 5
10 Number of student meals offered (prepared): 5
11 Number of student meals selected (served): 4

R = Reimbursable NR = Nonreimbursable T = Total

12 Menu/Food Item	14 Recipe ID/ Product ID	15 Portion Size	Component Contributions Per Portion Size: 16 Meat/Meat Alternates	17 Grains	18 Fruits	19 Vegetables	20 Milk	21 Planned (Projected) Servings R	NR	T	22 Planned (Projected) Quantity of Food (in (purchase units)	23 Actual Number Serving Offered (Prepared) R	NR	T	24 Actual Number Servings Selected (Served) R	NR	T	25 Substitutions, Leftovers, and Notes
Grilled Cheese Sandwich	R#32	1 ea	2 oz eq	2 oz eq WGR				24		24	48 sl WG bread 3lb cheese	20		20	20		20	*No leftovers, all children were offered both choices*
XYZ Chicken Nuggets W/WG, 3.97 oz = 2 oz M/MA, 1 oz WG CN#123456	P#4203	#6 scoop (6 ea)	2 oz eq	1 oz eq WGR				30	5	35	8.7 lb	30	5	35	28	4	32	*3 servings leftover, discarded*
Brown Rice Pilaf, USDA recipe	R#B22	#8 scoop		1 oz eq WGR				32	5	37	1.25 gal	32	5	37	31	3	34	*1 ½ cups leftover, discarded*
Steamed Broccoli Florets (RTU), dark green v		2 fl oz spoodle				¼ C		50	5	55	2	50	5	55	49	4	53	*0.5 cup leftover; chilled and refrigerated for use in soup tomorrow*
Cherry Tomato (3 ea) red orange vegetable	R#18	¼ C				¼ C		30		30	2.5 lb	30		30	24		24	*1 ½ cups cherry tomatoes & 21 cup celery leftover, bagged & refrigerated for use in soup tomorrow*
Celery Sticks (3 ea, RTU) other vegetable		¼ C				¼ C		30		30	2.25 lb	30		30	26		26	
~~Fruit cocktail in light syrup,~~ drained, USDA Foods Diced Peaches, drained	R#3	4 fl oz spoodle			½ C			35	3	38	2.25 #10 cans	35	3	38	25	3	28	*Substituted peaches, 5 cups leftover; refrigerated for use in breakfast tomorrow*
Orange Wedges (138 count)	R#5	4 fl oz spoodle			½ C			15	3	18	5.5 lb	25	2	27	35	2	37	*No leftovers; made 10 more servings, 3 more lb used*
Extra: Ranch dressing ½ oz packets	P#1514	1 ea						54		54	54 ea	50		50	45		45	*5 leftover; returned to inventory*
Milk by type & flavor	Item #																	
13 Fat-free (unflavored)	501	1 ea					1 cup	5		5	5	5		5			5	*No leftovers*
Fat-free (chocolate)	502	1 ea					1 cup	30		30	30	28		28			28	
1% (unflavored)	503	1 ea					1 cup	10		10	10	10		10			10	

Details provided on product CN label

RTU: ready-to-use, cleaned, trimmed florets

Projected quantity based on FBG yield for drained fruit, 2 #10 cans

Projected quantity based on FBG yield for 130 count oranges, 4.5 lb for 15 ½ c portions

MS. Manager *01/14/2022*
26 Verifier Signature Date

Adapted from *USDA's Anatomy of a Production Record* Appendix 4.A

Sample Daily Menu Production Record

Anatomy of a Production Record

You may use any production record format you wish as long as it includes certain key items. These items are summarized and then explained in more detail below.

BASIC INFORMATION

1 Name of school/site
2 Grade group
3 Date
4 Menu
5 Menu type (lunch or breakfast) and Offer Versus Serve (OVS) or Preplated (served)

REIMBURSABLE MEALS

6 Planned (projected) number of student meals; provides an estimate of planned (projected) student meals for the specified grade group
7 Actual number of student meals offered (prepared); provides the total number of student meals offered (prepared) for the specified grade group
8 Actual number of student meals selected (served); provides the total number of student meals selected (served) for the specified grade group

NONREIMBURSABLE MEALS

9 Planned (projected) number of nonreimbursable meals—the number of staff and guests
10 Offered (prepared) number of nonreimbursable meals—the number of staff and guests
11 Actual number of nonreimbursable meals selected (served); provides the total number of nonreimbursable meals selected (served) for the specified school/site

ALL MENU ITEMS LISTED

12 Menu/food Items—all food item choices included on the specified grade group's menu, such as main entrees, vegetable subgroups, fruit, milk, dessert, condiments, and substitutions. For each food item, include product information such as manufacturer item name and code number, USDA Foods information, or specific information to guide preparation
13 Planned (projected), offered (prepared), and selected (served) number of milk by type—fat-free unflavored, fat-free chocolate or other flavors, 1% low-fat unflavored, 1% low-fat chocolate or other flavors

RECIPE/PRODUCT NUMBER

14 Recipe ID/product ID number—standardized recipe number or product ID number

PORTION SIZE

15 Portion size for the specified grade group—specific unit of measure: scoop number, measuring cup amount, each, ladle or spoodle size, etc.

REIMBURSABLE MEAL COMPONENTS PROVIDED BY PORTION SIZE

16 Meats/meat alternates in ounce equivalent (oz eq)
17 Grains in oz eq (WGR indicates whole grain-rich)
18 Fruits—portion offered in volume (½ cup in sample)
19 Vegetables—portion offered in volume (¼ cup in sample), note that subgroup is identified in column #12
20 Milk—portion offered in volume (1 cup in sample)

MEALS PLANNED (PROJECTED), OFFERED (PREPARED), SELECTED (SERVED) AND LEFTOVER

21 Planned (projected) number of servings to prepare—provided by menu planner using forecasting tools (reimbursable and nonreimbursable combined)
22 Planned (projected) quantity of food to use in purchase units—forecasted from past production, standardized recipes and the *Food Buying Guide for Child Nutrition Programs* (FBG). Adjust on day-of-service, if needed
23 Actual number of servings offered (prepared)—provides total number of servings prepared with any changes from planned (projected) amounts noted, as needed
24 Actual number of servings selected (served)—provides total number of servings selected (served) for each food item on the menu; provides information for forecasting future meal preparation
25 Substitutions and leftovers—any substitutions for the planned menu must be recorded. Record the amount of leftovers of each item and planned use *(examples: chilled and refrigerated for use in future meal, freeze for future use in cycle menu, or discard)*

VERIFIER SIGNATURE AND DATE

26 Person in charge of site reviews, verifies, signs and dates the production record, and files for future reference. Your State agency may require signed production records.

OTHER DETAILS YOU MAY NEED OR WANT TO RECORD ARE:

- Food preparation and holding temperatures
- Specific information of value for preparation, service, and future forecasting, such as weather-related school closures, field trips, etc.
- FBG details—source of calculations for purchase units required for total servings planned
- Additional required information by your State agency or school program

Work Production Schedule

Types of Production Schedules:
- Work Production Schedule
- Cleaning Schedule
- Service Line Food Placement Diagram

The daily production of CNP meals must be well-organized to ensure efficiency and quality. It is essential for the school nutrition chef to collaborate with school sites to develop detailed plans for the production and service of quality meals for children. A work production schedule, sometimes called a production schedule, is a valuable tool to help employees stay on task. This schedule is distinct from the production record, which documents the amount of food prepared.

Importance of a Work Production Schedule: A work production schedule provides school nutrition employees with all the necessary information to prepare for meal service. This includes:
- Preparation tasks for the current day's meals.
- Pre-preparation tasks for the following day.
- A time standard for completing each task.

The school nutrition chef works closely with school site managers to determine the approximate time required for each task, ensuring schedules are both realistic and efficient.

By using these schedules, CNP operations can maintain a high level of organization and ensure the smooth preparation and delivery of meals.

Class Discussion

Activity

ACTIVITY: Daily Work Schedule for Food Production and Service

Materials: Daily Work Schedule for Food Production and Service handout

Time: 5 minutes

Instructions:
Participants will review the Daily Work Schedule for Food Production and Service handout in the Culinary Training Manual.
In your table group, discuss any recommended modifications, additions, or deletions to the schedule.

Participants will review the Daily Work Schedule for Food Production and Service handout in the Culinary Training Manual.

ASK: The facilitator will call on one person from each table to share their group's suggestions.

Feedback: Common observations and recommendations include:
- BBQ preparation is listed twice: May at 8:00 am and Bob at 9:30 am.
- No one is assigned to bake the pizza.
- Someone might be needed in the dish room prior to 1:00 pm.
- Breaks should be included in the schedule.

This discussion allows participants to critically evaluate the schedule, ensuring all tasks are assigned appropriately and effectively.

Daily Work Schedule for Food Production and Service

Instructions: Identify any modifications, additions, or deletions to the schedule you would recommend.

Time	Janie (Manager)	May	Bob	Anna
7:00 AM	Breakfast	Breakfast	Make Cookies	Breakfast Cashier
7:30 AM			Dish Room	
8:00 AM	Paper Work	Prepare BBQ	Make Rolls Bake Cookies	Salad Preparation
8:30 AM	Supervision			
9:00 AM		Wash Apples		Prep Corn
9:30 AM		Dish Peaches	Make BBQ/Buns	Pan Pizza
10:00 AM	Supervision/Line Set-Up	Set Up Line	Set Up Line	
10:30 AM - 12:30 PM	Lunch	Lunch	Lunch	Lunch
1:00 PM	Paper Work	Clear/Clean Line	Clean Kitchen	Dish Room
1:30 PM	Count Money			Count Money
1:45 PM	Place Orders	Check in Milk Delivery		
2:00 PM	Supervise	Breakfast Prep	Next Day Prep	Dining Area Check
2:30 PM	Close Up			

Cleaning Schedules

Cleaning schedules are essential for organizing daily, weekly, and special cleaning tasks in CNP operations. The school nutrition chef should develop standardized blank schedules for each category and distribute them to school sites for customization and completion.

Participants can refer to the Culinary Training Manual for an example of a weekly cleaning schedule. This format can be easily adapted for daily or seasonal tasks.

Many school sites have seasonal cleaning tasks related to food production. For example, pantry areas that are difficult to access may need to be cleared of food items and thoroughly cleaned and reorganized before the start of each school year.

Cleaning schedules should be posted at the time the designated task is to be performed, ensuring clarity and accountability among staff.

Weekly/Daily Cleaning Schedule

Instructions: Identify other cleaning tasks that can be added to the list for weekly and daily cleaning.

Employee:		
Day to Clean	**Cleaning Task**	**Initials – Complete**
Monday	Pantry	
Tuesday	Service Line 1 and Milk Bin	
Wednesday	Bathroom	
Thursday	Refrigerator – Service Line 1	
Friday	Back Porch, Dock, and Garbage Cans	
Employee:		
Day to Clean	**Cleaning Task**	**Initials – Complete**
Monday	Bathroom	
Tuesday	Service Line 2, Milk Bin, and Ice Cream Freezer	
Wednesday	Dish room	
Thursday	Refrigerator – Service Line 2	
Friday	Windows on Service Line	
Employee:		
Day to Clean	**Cleaning Task**	**Initials – Complete**
Monday	Bread Rack/Storage Bin	
Tuesday	Mixers and Area	
Wednesday	Convection Ovens	
Thursday	Bathroom	
Friday	Refrigerator – Kitchen	
Employee:		
Day to Clean	**Cleaning Task**	**Initials – Complete**
Monday	Back Porch, Dock, and Garbage Cans	
Tuesday	Deep Fryers, Clean/Rotate Stove Top, and Milk Bin	
Wednesday	Tables and Stools	
Thursday	Freezer – Walk-In	
Friday	Bathroom	

Employee:

Day to Clean	Cleaning Task	Initials – Complete
	ood	
Tuesday	Bathroom	
Wednesday	Convection Ovens and Food Carts	
Thursday	Freezer – Walk-In	
Friday	Stainless Steel Tables	

School Nutrition Frontline Staff will be responsible for surfaces of equipment and mopping and sweeping floors in their assigned areas. The manager will inspect all areas of the kitchen at least once a week.

Date of kitchen inspection:

Briefly go over the Weekly/Daily Cleaning Schedule worksheet with participants.

Class Discussion

ASK: What other cleaning tasks can be added to the list for weekly cleaning? What about daily cleaning?

FEEDBACK:
- Drain and clean the icemaker.
- Put enzymes in floor drains.
- Add daily: clean the bathrooms, service line, dish room, and kitchen surfaces.

Service Line Food Placement Diagram

A Service Line Food Placement Diagram is a valuable scheduling tool often used to maintain organization and efficiency during meal service. It visually communicates how the service line should be arranged, ensuring that employees understand the placement of food items for smooth operation.

The school nutrition chef is encouraged to collaborate with school site managers to design a service line food placement diagram. This diagram can either be:
- Standardized for a set period of time, or
- Individualized to match specific menu requirements.

Customizing or designing a diagram in partnership with managers ensures that all employees receive clear instructions on how the service line should be set up. This approach promotes consistency, reduces errors, and enhances the overall efficiency of meal service.

Activity

ACTIVITY: Service Line Food Placement Diagram

Materials: Service Line Food Placement Diagram worksheet

Time: 10 minutes

Instructions:
Participants will use the Service Line Food Placement Diagram worksheet in the Culinary Training Manual to complete the following task: Using the provided menu, participants will draw a service line layout for menu item placement, including pan openings and counter space that corresponds to the service line setup.

Service Line Food Placement Diagram

Date: _____ Service Line Time: _____

Meal: (Breakfast, Lunch, Other) _____

Roasted Chicken

Baked Sweet Potato

Green Salad

Orange Smiles

Fresh Strawberries

Whole Grain Roll

Choice or Milk

Instructions: Draw service line with food placement. Design with the pan openings and other serving counter space so the diagram corresponds to your service line.

Pan Sizes:

Portion:

Tools:

Server:

The facilitator will allow time for participants to complete their drawings and discuss potential areas for improvement.

Class Discussion

ASK: What can be done to make the service line an inviting area?

Feedback: Decorate the service line with seasonal or themed items. Place posters or signs on the line to enhance visual appeal and provide helpful information.

Food Quality Standards

Foods that look appealing can encourage students to choose healthy school meals. Proper training for school nutrition staff in food preparation is critical to the success of any quality assurance program. A well-trained food production staff should be able to:

- Prepare foods of high quality to meet established standards.
- Understand the relationship between time and temperature to maintain food quality during service.
- Take appropriate measures to ensure the quality meets customer and program expectations.

For example, preparing cold foods first and hot foods last minimizes the time hot foods spend in warmers, reducing the likelihood of overcooking or drying out.

School nutrition chefs cannot supervise every school every day, but they are ultimately responsible for the program's integrity. Reviewing completed production records helps ensure:

- The menu is being followed.
- High-quality meals that meet students' nutritional needs and preferences are being served.
- Fiscal accountability is maintained.

The Food Quality and Performance Assessment Template in the Culinary Training Manual serves as a tool to monitor school sites effectively. School nutrition chefs should use this template during unannounced visits to evaluate food production programs.

Using the Assessment Template:

- Mark Yes: When the food meets the district's standards.
- Mark No: When the food does not meet standards.
- Use the Comments section to explain why a standard was not met and what actions are required for improvement.

After completing the evaluation, discuss the results with the school site manager to ensure clarity and improvement.

Food Quality and Performance Assessment Template

School: _____

Date: _____

Manager: _____

Meal Service: Breakfast _____ Lunch _____ Snack _____

Food Quality/Quantity

1. Is the district menu plan being followed? Yes ____ No ____
2. Are USDA and/or standardized recipes being followed? Yes ____ No ____
3. Is batch cooking being done? Yes ____ No ____
4. Are correct portion sizes for the reimbursable meal being offered? Yes ____ No ____
5. Do salads and fresh fruit look fresh and appealing? Yes ____ No ____
6. Are all food items palatable and appealing to the eye? Yes ____ No ____
7. Is the work area safe? Yes ____ No ____
8. Are hand wash sinks easily accessible? Yes ____ No ____

Food Temperatures/Food Safety Program

1. Is a food safety program in place to ensure correct temperatures? Yes ____ No ____
2. Hot Entrée #1 _____

    Is the holding temp > 135°F? Yes ____ No ____

3. Hot Entrée #2 _____

    Is the holding temp > 135°F? Yes ____ No ____

4. Hot Vegetable _____

    Is the holding temp > 135°F? Yes ____ No ____

5. Cold Food Item _____

    Is the holding temp < 41°F? Yes ____ No ____

6. Cold Beverage _____

    Is the holding temp < 41°F? Yes ____ No ____

Food Temperatures/Food Safety Program, continued

7. Are internal cooking temperatures recorded? Yes ____ No ____

8. Are there any menu substitutions? Yes ____ No ____

Production Records

Are production records:

1. Accurate? Yes ____ No ____

2. Legible? Yes ____ No ____

3. Up-to-date? Yes ____ No ____

4. Accurately completely? Yes ____ No ____

5. Are substitutions recorded? Yes ____ No ____

6. Are portion sizes correct? Yes ____ No ____

Presentation Marketing and Merchandising

1. Is the food attractively displayed (no foil or film, correct pan size, etc.)? Yes ____ No ____

2. Is the serving line clean during service? Yes ____ No ____

3. Are staff neatly dressed and following the school's dress code? Yes ____ No ____

4. Is the serving line decorated to enhance the atmosphere of serving area? Yes ____ No ____

Comments:

Manager: _____

Director/Supervisor: _____

ICN and CICN Resources

The Institute of Child Nutrition (ICN) offers a variety of resources to support food production in school meal programs.

- The Child Nutrition Recipe Box (CNRB) is a comprehensive source of recipes developed by the USDA, States, and territories. It serves as an essential tool for finding standardized recipes tailored to CNPs. Visit the CNRB at theicn.org/cnrb to explore these resources.
- The Culinary Institute of Child Nutrition (CICN) provides numerous tools and materials designed to enhance your team's culinary skills. Resources include:
  - CICN Presents: Series designed to introduce participants to the fundamental principles of scratch cooking, equipping them with essential culinary skills and techniques applicable to basic food preparation.
  - Menus of Flavor: Inspiring ideas for creating flavorful and nutritious meals.
  - USDA Recipe Standardization Guide for Child Nutrition Programs: A guide to help streamline recipe standardization processes.

Visit the CICN at theicn.org/cicn to access these and other culinary resources.

These tools are designed to empower CNP teams to improve food quality, creativity, and consistency in meal production.

Class Discussion

ASK: Are there any questions related to Food Production and Operation Management before we continue to the next lesson?

CICN Presents: Culinary Training and Facilitating Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
Introduction			
20 Minutes	Welcome and Overview	• Training overview • Review training goals and objectives	• Culinary Training Manual
OBJECTIVE: Identify the methodology of the train-the-trainer format and the importance of developing staff and preparing for training.			
15 Minutes	Setting the Foundation	• Discuss the methodology of the train-the-trainer format and the importance of preparing for staff development training	• Culinary Training Manual
OBJECTIVE: Recognize the skills of a successful trainer.			
15 Minutes	Skills of a Successful Trainer	• Review the skills of a successful trainer	• Handout: Successful Trainer Tips • Handout: Training Tips for Effective Communication
OBJECTIVE: Recognize culinary demonstration skills.			
10 Minutes	Demonstration of Techniques	• Review culinary demonstration skills	• Handout: Demonstration Communication Skills for Trainers
OBJECTIVE: Recognize the skills of a successful facilitator.			
10 Minutes	Skills of a Successful Facilitator	• Review the skills of a successful facilitator	• Handout: Skills of Successful Facilitators • Handout: Training Tips for Effective Communication
Wrap Up			
5 Minutes	Wrap Up	• Review the training • Questions and Answers	• Training Manual
1.25 hours			

Background Information for Trainers

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

WELCOME to CICN Presents: Culinary Training and Facilitating. This training manual is an instructional aid for you, the course instructor. The manual provides content and educational tools to introduce school nutrition professionals to concepts and basic skills related to preparing and serving safe, high-quality meals to students. To assist you further in successfully conducting this training, the Training Manual includes the following prompts:

Instructor's Note: If possible, arrange participants into smaller groups of 4–5 people during training sessions. This can be done upon arrival or around the icebreaker. If some participants seem hesitant to participate in class discussions, you can encourage them to discuss questions in smaller groups and then share their group's answers with the larger group. This strategy helps to involve more people in the conversation and prevents only a few individuals from dominating the discussion.

CICN Presents: Culinary Training and Facilitating - Introduction

Discuss

Welcome to CICN Presents: Culinary Training and Facilitating.

This training is designed to be engaging, inviting you, the participant, to be an active learner. Today, we will focus on developing culinary training and facilitation skills that will better enable you to provide professional development for child nutrition professionals.

Training your staff with the correct culinary knowledge and skills can be hard. However, this training can help you identify the abilities that make a good trainer, learn how to run an effective training session, and understand the techniques to teach your staff cooking skills. You will also learn how to demonstrate cooking skills in the best way and create helpful visual aids.

The CICN Presents: Culinary Training and Facilitating training is designed to help you teach your staff about food preparation. This lesson is the first step in the CICN Presents series and will teach you how to be a good trainer and facilitator. You will learn how to engage and teach your staff about effective food production techniques. The training aims to help you become a successful trainer who can answer questions, demonstrate culinary techniques, and lead activities that help your staff learn by utilizing resources from CICN.

CICN has developed a series of culinary trainings utilizing a train-the-trainer model. As you participate in CICN face-to-face trainings, you will become familiar with the materials and hopefully have the opportunity to utilize the training manuals to train the staff in your program.

CICN has also developed Culinary Quick Bites, a short-format (15-minute) training series intended to be facilitated on-site by school food authority (SFA) staff overseeing food production. Each lesson focuses on a specific culinary-related training topic.

You are encouraged to utilize the training materials from CICN and take the skills learned today to enhance your team's culinary competencies, knowledge, and skills.

Overall Training Goal

Develop effective site-level trainers who possess the necessary skills to deliver successful culinary demonstrations and facilitate engaging training sessions while prioritizing staff development and preparation.

The objectives for this lesson are:

- Identify the methodology of the train-the-trainer format and the importance of developing staff and preparing for training.
- Identify the skills of successful trainers.
- Learn culinary demonstration skills.

Setting the Foundation

The main focus of this lesson is to learn the necessary skills and knowledge to train your staff on cooking skills. You will acquire various techniques, abilities, and knowledge to efficiently teach your staff how to prepare menu items in a skilled and effective manner.

Discuss

What are the basic principles of train-the-trainer?

Instructor's Note: Take note of the answers and emphasize the identified areas throughout the training.

CICN designed this train-the-trainer course to teach individuals how to become effective trainers. Experienced trainers share their knowledge and skills with learners in this training, teaching them how to use and deliver effective training programs. Train-the-trainer aims to equip individuals with the necessary skills and knowledge to deliver high-quality training, enabling them to pass on their expertise and knowledge to others in their organization.

Class Discussion

- Question: How many of you have experience training staff at the district or school level?
  - Possible Answer: Answers will vary.
- Question: Whether you have experience or not, what helpful tips and strategies would you like to gain from this experience?
  - Possible Answer: Answers will vary.

Discuss

This training lesson is different from other ICN Train-the-Trainer models because it focuses on providing culinary training and training for the staff in your program. The CICN Presents series focuses on teaching culinary skills. You not only will learn how to teach culinary skills, but you will also learn how to train the people who work with you.

After completing this training, participants will share and apply the knowledge and skills learned when they return to their workplace. You will use your skills in training and facilitation to lead your team through operational changes, which could be major or small improvements over time.

Change is not always easy and is often met with resistance. However, we want to emphasize that staff buy-in is crucial in successfully implementing changes. When staff members are properly trained and confident in their abilities, they are more likely to embrace the changes and feel satisfaction with their jobs. The result is a positive work environment where everyone works toward a common goal and staff members feel valued and empowered. So, let's approach change with a positive attitude and work together to create a better workplace!

Class Discussion

- Question: Why should staff training be seen as a positive and necessary aspect of any organization?
  - Possible Answers:
    - It provides employees with the tools they need to succeed and can lead to a more engaged and satisfied workforce.
    - Employees with the right training and knowledge to do their jobs can see change as an opportunity instead of a challenge. Staff training is like investing in their professional growth. It is not just about following rules but developing your team and helping them succeed.
    - When properly trained, staff feel more confident in their abilities and better equipped to handle challenges that may arise in their roles. This can lead to increased job satisfaction

and a sense of fulfillment in their work.
- When staff feel valued and supported through training opportunities, they are more likely to be engaged in their work and feel empowered to make positive changes within the organization. This can lead to a more productive and positive workplace culture, benefiting staff and the organization.

Discuss

As leaders, explaining what changes are happening in your organization and why they are necessary is important. When staff understand the reasons behind the changes and are asked for their input, they are more likely to see their work as meaningful and important. This can lead to a greater sense of purpose and motivation among staff and, ultimately have a positive impact on the organization as a whole. By explaining the why behind changes, leaders can help their staff feel more engaged and invested in their work.

Class Discussion

- Question: What do you see as some benefits to having staff buy-in?
  - Possible Answers: Having staff buy-in, or gaining the support and commitment of your staff, is critical to the success of any initiative, including culinary training to enhance a school nutrition program. Here are some benefits of having staff buy-in:
    - Improved morale: When staff members are involved in all organizational decision-making processes and have a say in their training and development programs, they are more likely to feel valued and appreciated. This can lead to organizational buy-in, increased job satisfaction and improved morale.
    - Increased motivation: Staff members who have buy-in are more likely to be motivated to implement the skills and knowledge gained during culinary training. They will be more invested in the program and more willing to put in the effort required to make it successful.
    - Improved quality: With staff buy-in, there is a greater chance that the skills and knowledge learned during culinary training will be applied effectively. Buy-in can lead to improved quality of meals and overall program success.
    - Increased retention: Staff invested in the program are more likely to stay with the organization. This can lead to decreased turnover and increased stability within the team.
    - Improved communication: When staff members are involved in decision-making and training programs, there is often increased communication and collaboration among team members. Improved communication can lead to improved teamwork and a more cohesive team.

Discuss

It is important to establish a positive and productive atmosphere for successful training. One way to do this is by setting guiding principles everyone can follow. At the ICN, we have ground rules that we review at the start of the training.

In each lesson in the CICN Presents program, we provide specific ground rules for culinary training, including kitchen and food safety standards. It is essential to share these rules with training participants at the beginning of each session. Prior to each session, ensure that participants are aware of the proper attire for working in the kitchen so that they come prepared. Sharing the ground rules ensures everyone is ready to learn in a safe and productive environment.

Instructor's Note: Review the additional culinary-focused Ground Rules with participants on the CICN Culinary Training Ground Rules handout.

Class Discussion

- Question: Are there any additional ground rules you would implement at your site(s)?
  - Possible Answers: Answers will vary based on program-specific needs.

Key Message

This training is unique because it focuses on teaching culinary skills and training the people working with you. After completing the training, you, as a participant, will aim to implement changes in your workplace, which can be challenging. It is important to get staff buy-in by training them and making them feel valued and empowered. With a positive attitude and teamwork, we can create better work environments.

Instructor's Note: Ask if there are any questions.

Skills of a Successful Trainer

Recognize the skills of a successful culinary trainer who can train their staff and peers. By the end of this training, you will be able to identify the key qualities and techniques that make a culinary trainer successful.

Discuss

Let's start by discussing the importance of training in the culinary industry. In today's fast-paced and competitive environment, culinary professionals must continuously learn and improve their skills. Training not only helps them stay up-to-date with the latest industry trends and techniques but also helps them stay ahead of the competition. This concept applies to child nutrition culinary (kitchen) staff as well.

However, training can be daunting for some, especially if they lack the necessary skills and experience to effectively train others. A successful culinary trainer can help with this.

Class Discussion

- Question: So, what are the skills of a successful culinary trainer?
  - Possible Answers:
    - Understands the audience and topic
    - Defines unfamiliar terms
    - Prepares for presentation
    - Uses a variety of presentation techniques
    - Involves participants- Makes them feel welcome and appreciated
    - Draw upon experience and expertise

Instructor's Note: Use chart paper and record the answers. Alternatively, you may ask a volunteer to write on the chart paper. Review the answers as you work through the rest of the lesson.

Discuss

Let's explore some of the key qualities and techniques:

- Strong Communication Skills: A successful culinary trainer must possess strong communication skills to convey knowledge to others effectively. This includes the ability to explain concepts clearly, listen actively, and provide feedback in a constructive manner.
- Patience: A culinary trainer should have patience when working with others, especially if they are new to the industry or struggling to grasp certain concepts. Patience allows the trainer to take the time necessary to explain things thoroughly and answer any questions.
- Flexibility: A successful culinary trainer must be flexible and adaptable in their approach to training. Flexibility means adjusting their teaching style and methods to accommodate different learning styles and personalities.
- Motivation and Enthusiasm: A great culinary trainer should be passionate about their work and genuinely interested in helping others succeed. They should be able to motivate and inspire their trainees to learn and improve their skills.

The four key qualities listed above are great examples for any trainer.

- Communication
- Patience
- Flexibility
- Motivation and enthusiasm

The next two areas may feel more challenging for some still learning culinary skills and techniques, but do not worry, CICN will help you, and we will explain soon.

- Ability to Demonstrate: A successful culinary trainer must be able to demonstrate the techniques and skills they are teaching. This means performing tasks with precision and accuracy and explaining each step clearly as they go along.
- Technical Knowledge: A good culinary trainer must have a strong foundation in culinary techniques and terminology. Good culinary trainers should be well-versed in industry standards and have a deep understanding of the various cooking methods, ingredients, and tools used in the kitchen.

CICN is always striving to offer you the necessary tools for learning culinary skills. We provide resources that not only help you develop your food production abilities, but also relieve you from the pressure of being an expert. You can rely on our training materials as helpful guides throughout your training journey.

One of our useful tools is the Culinary Quick Bites, a short-format (15-minute) training series intended to be facilitated on-site by school food authority (SFA) staff overseeing food production. Each lesson focuses on a specific culinary-related training topic. Each lesson includes talking points for the facilitator (you), a video demonstrating the skill, an infographic highlighting the steps necessary to complete the skill, and an activity to support the learning. We will discuss facilitation techniques a little later.

Every trainer's unique style includes their body language, appearance, attitude, welcoming nature and how they interact with participants. Trainers can develop and improve their style by practicing and being aware of these things.

Identifying our strengths is as important as identifying our weaknesses, meaning that recognizing our areas of expertise is just as crucial as recognizing the areas where we need improvement.

Class Discussion

- Question: What are some undesirable traits or characteristics that trainers may have?
  - Possible Answers:
    - Poor posture, head bowed, showing no confidence when walking around the room
    - Speaking unclearly, whispering, or yelling
    - Reading the text word for word

Instructor's Note: Use chart paper and record the answers. Alternatively, you may ask a volunteer to write on the chart paper. Review the answers as you work through the rest of the lesson.

Discuss

Like any profession, trainers may possess negative traits or characteristics that can affect their ability to train and develop others effectively. Some examples of negative traits or characteristics that trainers may have include:

- Lack of empathy: A trainer who lacks empathy may not understand or relate to the challenges and struggles faced by their trainees. A lack of empathy and understanding can lead to a lack of support and guidance, hindering the trainee's progress.
- Arrogance: A trainer who is overly confident and dismissive of others' opinions can be detrimental to the learning process. Arrogant trainers may not be open to feedback or alternative perspectives, limiting the trainee's growth.

- Impatience: Impatient trainers who are easily frustrated with struggling trainees can hinder the learning process. Impatience can create a stressful learning environment and discourage trainees from asking questions or seeking help.
- Inflexibility: A trainer who is rigid in their approach and unwilling to adapt to the needs of their trainees can be problematic. Inflexibility can lead to a one-size-fits-all approach, which may not be effective for all trainees.
- Lack of knowledge or experience: A trainer who lacks the necessary knowledge or experience in their field can be ineffective in teaching and guiding their trainees, leading to misinformation and confusion.
- Poor communication skills: Trainers who struggle to communicate effectively can hinder learning. They may be unable to convey ideas and concepts clearly, leading to confusion and misunderstandings.
- Lack of motivation: Trainers who lack motivation or enthusiasm for their work may not inspire their trainees to learn and grow. A lack of motivation can create a disengaged learning environment and limit the trainee's progress.

Key Message

In conclusion, we have explored the desirable qualities of a trainer in today's lesson. We have learned that a great trainer possesses exceptional communication skills, patience, and passion. They lead by example, motivate their trainees, and provide constructive feedback to help trainees grow.

We identified undesirable characteristics that trainers should avoid, such as being condescending, rigid, disorganized, and lacking empathy. These traits can hinder the learning process and make trainees feel discouraged.

Keep these qualities and undesirable characteristics in mind and strive to embody the positive traits while avoiding the negative ones. As trainers, we have a unique opportunity to inspire and guide the next generation of child nutrition professionals. Let's use our knowledge, skills, and passion to empower our trainees to become the best version of themselves.

Instructor's Note:
The training includes Successful Trainer Tips and Training Tips for Effective Communication handouts that the participants can use as a reference source. Encourage participants to review the handouts at their leisure. Ask if there are any questions.

Demonstration of Techniques

This lesson covers adult learning principles and discusses the different techniques that trainers can use to engage participants with different learning styles. Visual learners prefer reading or watching videos, auditory learners prefer lectures or audio communication, and kinesthetic learners prefer hands-on activities. It is important to encourage audience participation during demonstrations and provide opportunities for hands-on practice. Demonstrating a culinary technique is a fun and interactive way to teach, as it engages multiple learning styles through verbal, visual, and hands-on communication with the audience.

Discuss

Adults learn in many ways. Some people like to learn by looking at things or watching videos. Others prefer to listen to information or attend lectures. Some people learn better by doing things, like working in groups or building things.

Most of us have more than one way that we like to learn. Trainers can use many different teaching methods to help everyone find a way that works for them.

Class Discussion

- Question: What learning style works best for you as a learner?
    - Possible Answer: Answers will vary.

Discuss

There are different ways that adults prefer to learn, and one common model is called VARK.

VARK identifies four main learning styles:

- Visual learners: Prefer to see information presented in pictures, charts, videos, and other visual formats.
- Auditory learners: Prefer to hear information through lectures, discussions, and podcasts.
- Read/write learners: Prefer to learn through reading and writing, such as textbooks, handouts, and taking notes.
- Kinesthetic learners: Prefer to learn by doing physical activities and having hands-on experiences, like experiments or simulations.

Remember that not everyone fits neatly into just one of these categories and many people use different styles depending on the situation. Also, other models of learning styles may have different categories or words for these styles.

Class Discussion

- Question: Do these learning styles accurately represent you and your teams? Is anything missing?
    - Possible Answer: Answers will vary.

Discuss

We will now dig further into demonstrating skill as a trainer.

Culinary art is as much about technique as it is about ingredients. For budding cooks, watching a skilled professional at work can be far more instructive than merely reading a recipe or hearing an explanation. It is in the doing, and more precisely in observing the 'how' of doing, that the nuances of the craft become clear.

The Power of Demonstration

Visual learning is a dominant form of learning. When instructors demonstrate a culinary technique—the right way to julienne a carrot or swirl of a saucepan to emulsify a sauce—they are offering students a clear, visual blueprint. According to Dr. Lynell Burmark, a proponent for visual learning, "...unless our words, concepts, ideas are hooked onto an image, they will go in one ear, sail through the brain, and go out the other ear. Words are processed by our short-term memory where we can only retain about seven bits of information. Images, on the other hand, go directly into long-term memory where they are indelibly etched." (Burmark, 2002)

Principles of Effective Demonstration:

- Preparation: Before demonstrating, the trainer should have all necessary ingredients and tools on hand. This ensures the demonstration goes smoothly and models the importance of mise en place, or everything in its place, for participants.
- Clear Visibility: participants must have a clear view of the demonstration. Depending on the setting, mirrors above the workstation or video feeds can help ensure every participant has an optimal viewing angle.
- Narration: As trainers perform the technique, narrating the steps offers a dual-learning modality. This verbal reinforcement of the action can further solidify understanding.
- Engagement and Interactivity: Asking questions, prompting participants to predict the next step, or even inviting a participant to replicate a technique after a demonstration can enhance the learning experience.
- Repetition: It is essential to repeat critical techniques, as repetition aids memory. Encouraging participants to practice immediately after the demonstration can further cement the learning.
- Feedback: After participants attempt the technique, constructive feedback is vital. It helps refine their skills and understand the nuances that might not have been immediately evident during the demonstration.
- Context: Explaining the 'why' behind a technique can be just as important as the 'how.' By offering historical, cultural, or scientific context, trainers can enrich the learning experience and aid retention.

Instructor's Note: Facilitate a brief conversation using the Demonstration Skills for Trainers handout to guide the conversation.

Key Message

People have unique ways of learning, so it's crucial for trainers to use various teaching methods to involve participants with different learning preferences. Some people learn better by seeing things, while others learn through hearing, and some learn by doing. Therefore, it's important to encourage individuals to actively take part in demonstrations and provide opportunities for hands-on activities.

Teaching culinary skills is a dynamic process that blends both art and science. Through effective demonstration, culinary trainers can transmit technical skills and inspire passion, precision, and a deep appreciation for the craft. As participants watch, listen, and then do, they bridge the gap between theory and practice, forging their path in the world of culinary arts.

When you're teaching a new skill, such as cooking, it's important to use different methods like talking, demonstrating, and hands-on practice. This way, everyone can learn in a way that suits them best.

Instructor's Note: Ask if there are any questions.

Skills of a Successful Facilitator

This lesson will identify the differences between a trainer and a facilitator. When conducting training for child nutrition professionals, you will need to display skills of both.

Discuss

Trainer and Facilitator – Definitions

A trainer is a person who conducts a training session by presenting information, leading discussions, and demonstrating skills. A trainer is usually an expert in the subject matter they teach and has a more structured approach to delivering the training.

A facilitator is a person who leads group discussions and activities to help participants learn from each other. A facilitator focuses on creating a safe and engaging learning environment where participants can share their experiences and knowledge.

At times, you may find yourself fulfilling both roles when training staff. For example, during this training, I have been acting as both. When we review material, I am conducting training. During discussion times, I am acting as a facilitator.

Class Discussion

Instructor's Note: Use chart paper and record the answers. Alternatively, you may ask a volunteer to write on the chart paper. Review the answers as you work through the rest of the lesson.

- Question: What are some similarities between being a trainer and a facilitator?
  - Possible Answers:
    - Both trainers and facilitators are responsible for creating a safe and supportive learning environment.
    - Both roles involve guiding learners toward achieving their goals and objectives.
    - Trainers and facilitators must have good communication and interpersonal skills to engage learners and address their needs effectively.
    - Both roles require adaptability and flexibility in response to changing situations and learner needs.
    - Trainers and facilitators must be knowledgeable and skilled in their subject matter or area of expertise.
    - Both roles involve creating and delivering engaging and interactive learning experiences that encourage participation and collaboration among learners.
    - Trainers and facilitators need to be able to assess learner progress and provide feedback to help learners improve their skills and knowledge.
    - Trainers and facilitators aim to create a positive learning experience for their participants. However, their approaches are different.

Discuss

What are some differences between a trainer and a facilitator?

Difference: Trainers focus on delivering information in a structured and organized manner. They use lectures, demonstrations, and exercises to convey information to participants. Trainers may also evaluate participants' progress through assessments or quizzes.

Difference: Facilitators, on the other hand, use a more interactive approach. They encourage participation from all participants and foster a collaborative learning environment. Facilitators help participants share their experiences and perspectives, creating an open learning experience.

Class Discussion

Instructor's Note: Use chart paper and record the answers. Alternatively, you may ask a volunteer to write on the chart paper.

- Question: How can you be sure to have an effective and successful training session?
  - Possible Answers:
    - Prepare thoroughly. Before the training session, ensure you clearly understand the material you are presenting. Review your notes, slides, and other training materials to ensure they are clear and concise.
    - Start with an icebreaker. Use an icebreaker activity to help break the ice and get everyone engaged. Icebreakers can be a simple game, a group discussion, or a fun activity that gets everyone moving.
    - Use visual aids. Use visual aids, like diagrams, charts, and videos, to help illustrate your points. Visual aids make it easier for trainees to understand complex ideas and keep them engaged.
    - Encourage participation. Encourage trainees to participate in the training session by asking questions, sharing experiences, and providing feedback. Participation creates a more engaging and interactive training experience.
    - Keep it interactive. Incorporate interactive activities, like group discussions, case studies, cooking opportunities, and role-playing. Interactive activities help trainees apply the knowledge they have learned and make it easier to retain information.
    - Be flexible. Be prepared to adapt your training session if necessary. If you notice trainees struggling with a particular topic, spend more time on it or use different methods to help them understand.
    - Provide feedback. Provide feedback to trainees throughout the training session. Let them know what they are doing well and where they can improve. Feedback helps them develop their skills and confidence.

Instructor's Note: The training includes Skills of Successful Facilitators and Training Tips for Effective Communication handouts that participants can use as a reference source. Encourage participants to review the handouts at their leisure.

Key Message

As trainers and facilitators, we must create a positive and inclusive learning environment that encourages participation, engages learners, and fosters growth and development. It is essential to remain open-minded, adaptable, and willing to learn and grow alongside our learners.

I encourage you to apply the skills you learned today to your training sessions. Remember, always strive for excellence and continually evaluate and improve your techniques. With dedication and practice, you can become a successful trainer and facilitator who positively impacts your learners' lives.

Instructor's Note: Ask if there are any questions.

Wrap Up

Discuss

Today, we discussed important concepts related to training and facilitating culinary skills training and the many benefits of effectively developing staff.

We have:
- Identified the skills of successful trainers
- Recognized the skills of successful facilitators
- Applied effective training and facilitation techniques

Thank you all for your participation during the training today. I hope you found it beneficial and gained knowledge and skills that will assist you in preparing and serving meals for the students in your program. We know that learning is always enhanced if we are given a chance to relate personally to the material and how we might apply it.

ICN has numerous other training resources available online at www.theicn.org, including access to the Child Nutrition Recipe Box, Child Nutrition Sharing Site, Culinary Institute of Child Nutrition resources, and the ICN

Help Desk for further technical assistance.

For additional support conducting training, check out ICN's Train-the-Trainer in-depth training series:
- Designing and Delivering Training Programs (8 training hours)
- Foundations for Training Excellence: Basics (4 training hours)

Encourage participants to network and stay connected to share success stories and offer support.

End of Class Discussion

Ask participants if there are any questions regarding the content of the training.

Answer questions the participants may have.

Instructor's Note: Authentically thank the participants for their attendance and participation. Acknowledge the time they have taken to complete this training. Remind them the ICN is available in a variety of ways to help them meet their program and professional goals.

Soft Skills for Chefs in School Meal Programs Roundtable Session Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
10 minutes	Introduction	Icebreaker	Culinary Training Manual
Objective: Identify the key soft skills crucial for success in School Meal Programs.			
5 minutes	Soft Skills Overview	Introduction to the key soft skills chefs should possess, with examples	Culinary Training Manual
Objectives: ● Engage in collaborative discussions and shared learning. ● Apply skills through scenario-based problem-solving.			
20 minutes	Leadership	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Communications	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Time Management	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	People Management	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Collaboration	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Conflict Resolution	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Managing Change	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Training Staff	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Emotional Intelligence	Scenario-based Group Discussion	Culinary Training Manual
20 minutes	Complex Problem Solving	Scenario-based Group Discussion	Culinary Training Manual
10 minutes	Conclusion	Reflection	Culinary Training Manual
3 hours 45 minutes			

Soft Skills for Chefs in School Meal Programs Roundtable Session

Discuss

Welcome to Soft Skills for Chefs in School Meal Programs Roundtable Session.

This session is designed to engage you, the participant, to be an active learner. Today, we will explore the soft skills chefs need to succeed in School Meal Programs. Through group discussions and scenario analysis, participants will deeply dive into each skill, understand its importance, and learn how to apply it to everyday work.

Class Discussion

Ask participants to share their experiences or challenges related to soft skills in the workplace. Soft skills are defined as personal attributes that support situational awareness and enhance an individual's ability to get a job done.

The objectives for this lesson are:

- Identify the key soft skills crucial for success in School Meal Programs.
- Engage in collaborative discussions and shared learning.
- Apply skills through scenario-based problem-solving.

Key Message

Introduction to the key soft skills chefs should possess and examples:

1. Leadership: Motivating kitchen staff, delegating tasks, and fostering a positive work environment.
2. Communication: The ability to convey information clearly and effectively to colleagues, staff, and students.
3. People Management: Skills related to leading and motivating a team, resolving conflicts, and fostering a positive work environment.
4. Collaboration: Working effectively with others within the kitchen team and across different departments.
5. Time Management: Efficiently organize tasks, prioritize responsibilities, and meet deadlines.
6. Conflict Resolution: Addressing disagreements or issues constructively and finding mutually beneficial solutions.
7. Managing Change: Adaptability and openness to new processes, policies, and procedures.
8. Training Staff: Providing team members guidance, mentoring, and skill development.
9. Emotional Intelligence: Recognizing and managing emotions in oneself and others.
10. Complex Problem-Solving: Analyzing situations, identifying challenges, and devising creative solutions.

Activity

ACTIVITY: Soft Skills Explained and Scenario-based Learning

Discuss the definition, importance, and application of the soft skills for chefs in SN Programs. For each soft skill:

- Introduction to a skill (5 mins)
- Scenario presentation and discussion using the 1-2-4-All Method (15 mins)
    - 1 minute: Silent self-reflection by individuals
    - 2 minutes: Generate ideas in pairs, building on ideas from self-reflection
    - 4 minutes: Share and develop ideas from pairs with another pair (group of 4)
    - 5 minutes: Each group shares one important idea/takeaway with all

Soft Skills

1. **Leadership:**
   - Definition: The ability to guide, inspire, and influence the behavior and work of others towards the achievement of specific goals in a given situation.
   - Importance: Leadership is crucial for maintaining team morale and productivity and helps in setting a positive tone in the kitchen, ensuring tasks are completed efficiently and effectively.
   - Application: A school nutrition chef can demonstrate leadership by setting clear expectations, providing constructive feedback, and recognizing the efforts of their team members.
   - Scenario: The kitchen staff seems unmotivated, and the morale is low.
     - Discussion: What strategies might we consider to boost the motivation and morale of the kitchen staff?
     - Focus: Motivation strategies, creating a positive work environment, and setting clear expectations

2. **Communication:**
   - Definition: The process of transmitting information and understanding from one person to another.
   - Importance: Effective communication ensures everyone is on the same page, reducing misunderstandings and increasing efficiency.
   - Application: Chefs must communicate effectively with their team about daily tasks, menu changes, and safety procedures. They must also communicate with students and staff about menu options and dietary needs.
   - Scenario: The chef needs to explain new menu changes to staff who are resistant to changes.
     - Discussion: How do you ensure communication is welcoming and understandable for everyone?
     - Focus: Clarity, active listening, and feedback

3. **Time Management:**
   - Definition: The ability to plan and control how one's time is spent to accomplish goals effectively.
   - Importance: Time management is essential in a fast-paced kitchen environment to ensure meals are prepared and served in a timely manner.
   - Application: Chefs use time management skills to plan meal preparation and cooking schedules, prioritize tasks, and meet serving deadlines.
   - Scenario: You have a tight schedule with breakfast, lunch, and a special event in the evening.
     - Discussion: How would you organize and prioritize your tasks to ensure everything gets done on time?
     - Focus: Prioritization, efficiency, and adaptability

4. **People Management:**
   - Definition: The process of training, motivating, and directing employees to optimize workplace productivity and promote professional growth.
   - Importance: Good people management can improve team performance, job satisfaction, and retention rates.
   - Application: Chefs manage their kitchen staff by assigning tasks based on individual skills and strengths, resolving conflicts, and providing opportunities for professional development.
   - Scenario: A chef notices varying levels of culinary skills among the staff, leading to inconsistencies in meal preparation.
     - Discussion: How do you manage a diverse team and ensure consistent quality?
     - Focus: Delegation, motivation, and staff development

5. **Collaboration:**
   - Definition: Working together with others towards a common goal.
   - Importance: Collaboration encourages idea-sharing and can lead to more effective and efficient outcomes.
   - Application: Chefs collaborate with other staff members to plan menus, coordinate meal times, and meet dietary needs.
   - Scenario: A chef works with suppliers, staff, and school administration for a special nutrition program.
     - Discussion: How do you bridge the gap between culinary excellence and program objectives?
     - Focus: Teamwork, relationship-building, and shared goals

6. **Conflict Resolution:**
   - Definition: The process of resolving disputes or disagreements between two or more parties.
   - Importance: Conflict resolution maintains a positive working environment and ensures team cooperation.
   - Application: Chefs may need to resolve conflicts that arise in the kitchen, such as disagreements over task assignments or differences in food preparation techniques.
   - Scenario: Two nutrition staff members disagree on preparing a specific dish.
     - Discussion: As a chef, how do you mediate and resolve such conflicts?
     - Focus: Negotiation, empathy, and compromise

7. **Managing Change:**
   - Definition: The ability to adapt to new situations and changes in the environment.
   - Importance: Change is inevitable in any workplace, and managing change is key to staying flexible and resilient.
   - Application: Chefs may need to adapt to changes in school nutrition guidelines, food supply availability, or kitchen equipment.
   - Scenario: A popular ingredient becomes unavailable due to supply chain issues, requiring a menu change.
     - Discussion: How do you manage and communicate such sudden changes effectively to the team and stakeholders?
     - Focus: Change management strategies and adaptability

8. **Training Staff:**
   - Definition: The process of teaching or learning a skill or job.
   - Importance: Training staff ensures they have the necessary skills and knowledge to perform their jobs effectively.
   - Application: Chefs often train kitchen staff on food preparation techniques, safety procedures, and nutrition guidelines.
   - Scenario: The chef trains kitchen staff with limited culinary skills to improve food quality and presentation.
     - Discussion: How do you approach training in a manner that's constructive and boosts morale?
     - Focus: Coaching, mentoring, and knowledge transfer

9. **Emotional Intelligence:**
   - Definition: The ability to recognize, understand, and manage our own emotions and the emotions of others.
   - Importance: Emotional intelligence can lead to better team relationships, improved decision-making, and increased personal well-being.
   - Application: Chefs can use emotional intelligence to navigate stressful kitchen situations, respond to feedback, and understand the needs of their team members.
   - Scenario: A staff member seems disengaged and less enthusiastic after receiving feedback.
     - Discussion: How do you recognize and address emotional cues to ensure a positive working environment?
     - Focus: Self-awareness, social awareness, and relationship management

10. **Complex Problem-Solving:**
    - Definition: The process of finding solutions to difficult or complex issues.
    - Importance: Problem-solving is crucial for overcoming challenges and obstacles in the workplace.
    - Application: Chefs solve problems daily, such as adjusting recipes based on available ingredients, accommodating dietary restrictions, or troubleshooting equipment issues.
    - Scenario: Staff encounter a sudden increase in students requiring special dietary needs, challenging the standard menu.
        - Discussion: How do you adapt and find solutions that cater to everyone's dietary needs?
        - Focus: Critical analysis and decision-making

Wrap Up/Key Message

This session is unique because it focuses on soft skills and scenario-based learning. After completing the session, you, as a participant, will aim to implement these soft skills into your work.

Instructor's Note: Ask if there are any questions.

Wrap Up
Lesson-at-a-Glance

Time Allowed	Topic	Activity	Materials
30 minutes	Summary of Key Learnings	Reflections	Culinary Training Manual
30 minutes			

Wrap Up

Summary of Key Learnings

Revisit each module and highlight the key learning objectives:

- Effective Goal Setting Using SMART Goals
- Reimbursable School Meals
- Food Production and Operations Management
- CICN Presents: Culinary Training and Facilitating
- Soft Skills for Chefs in School Meal Programs Roundtable Session

Participant Reflections

- Invite participants to share their most significant takeaways from the training.
- Encourage participants to share their SMART goals and Action Plans.
- Ask participants to share future trainings they would like to attend from the ICN.

Evaluations

- Distribute and collect the evaluations to understand the effectiveness of the training and areas for improvement.

Closing Remarks

- Thank participants for their active involvement.
- Encourage continuous learning and application of the skills acquired.

Instructor's Note: Authentically thank the participants for their attendance and participation. Acknowledge the time they have taken to complete this training. Remind them that the ICN is available in various ways to help them meet their program and professional goals.

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