Practical Skills for Quality Meals A Five-Step Process



School Nutrition E-STAR Program

Enhanced Strategies Training Action Plans Resources

Training Manual

Practical Skills for Quality Meals: A Five-Step Process

Training Manual



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Key Area: 2000 (Operations)

Professional Standards Codes: 2100, 2110, 2130, 2140, 2200, 2230, 2620

Institute of Child Nutrition The University of Mississippi

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PURPOSE

Improve the operation of child nutrition programs through research, education and training, and information dissemination.

VISION

Lead the nation in providing research, education, and resources to promote excellence in child nutrition programs.

MISSION

Provide relevant research-based information and services that advance the continuous improvement of child nutrition programs.

Institute of Child Nutrition The University of Mississippi

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Background Information

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 *Practical Skills for Quality Meals: A Five-Step Process*. This Instructor's Manual was developed to serve as an instructional aid for you, the course instructor. The manual provides you with the content and educational tools needed to introduce school nutrition professionals to concepts and basic skills related to preparing and serving safe, high-quality meals to school customers. To further assist you in successfully conducting this training, the Instructor's Manual includes the following prompts:

SAY: This prompt outlines what the instructor should say to participants. This is the content that teaches the learning objectives.

ASK: This prompt indicates when the instructor should ask the participants a question. If the question warrants feedback, it will be followed by the FEEDBACK prompt.

FEEDBACK: This prompt is used to ensure certain elements are covered in discussions, including possible answers for the instructor to give.

DO: This prompt is used to explain what the instructor and/or participants are to do. It may be used to lead into activities, demonstrations, or any other action.

Additional Information

- This training also includes a pre-assessment and a post-assessment that will be administered via an online survey tool link and conducted before and after the training. The assessments for the E-STAR workshop will be administered prior to the workshop.
- Each lesson contains activities to reinforce what participants have learned and to help participants improve their professional skills. Instructions for each activity are presented within the lessons.
- Encourage participants to engage in the conversations using the virtual platform features of the chatbox and reaction buttons during the activities. Some activities also use "Breakout Rooms" for small group activities. ICN will save the chatbox responses and share them with the group as an additional resource following the training.

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. (https://theicn.org/icn-resources-a-z/ground-rules-for-training-mini-posters/)

Professional Standards and Key Area Code

Key Area: 1 Nutrition

1120 – Plan cycle menus that meet all rules. Consider cost, equipment, foods available, storage, staffing, student tastes, and promotional events.

Key Area: 2 Operation

- **2110** Understand and effectively prepare food using a standardized recipe.
- **2130** Develop culinary skills necessary for school meal preparation.
- **2140** Properly use and care for equipment.
- **2230** Serve food to maintain quality and appearance standards.
- 2620 Practice general food safety procedures.

Competencies, Knowledge, and Skills

Functional Area 4: Marketing, Communication, and Customer Service

• **Competency 4.3:** Implements customer service techniques to promote customer satisfaction.

Functional Area 8: Meal Preparation and Service

- **Competency 8.1:** Follows Federal, State, and local policies and procedures to meet compliance requirements for meal preparation and service in the school nutrition program.
- **Competency 8.2:** Follows standardized recipes that meet the requirements of the school nutrition program.
- **Competency 8.3:** Organizes food preparation and production that allows for efficient and effective use of equipment.
- **Competency 8.4:** Follows policies and procedures for maintaining food production records for the school nutrition program.
- **Competency 8.5:** Creates and utilizes production planning and scheduling procedures in the school nutrition program to produce quality foods.
- **Competency 8.6:** Implements foodservice procedures that produce high quality food that is appealing for the school nutrition program.

Objectives

By the end of this training, participants will:

- Recall the definition of school meal quality and why it is important.
- Recall the five-step process for preparing quality school meals.
- Identify the benefits of using a cycle menu.
- Discuss the importance of using a standardized recipe to prepare quality school meals.
- Identify the components of a standardized recipe.
- Identify how to make appropriate ingredient substitutions when using standardized recipes.
- Identify the required information needed for documenting and evaluating amounts of food planned, prepared, and served.
- Apply time standards to plan for batch cooking.
- Discuss the benefits of practicing mise en place when following a standardized recipe.
- Explain the purpose of using only approved, commercial grade equipment in school foodservice kitchens.
- Discuss the importance of measures and weight in recipes.
- Describe the importance of organizing workspace, equipment, and ingredients to work smarter not harder.
- Identify how colors, textures, and shapes contribute to positive school meal experiences.
- List three common cooking methods.
- Demonstrate how to properly hold a knife and food for fabrication.
- Describe proper knife techniques.
- Describe how the principles of food production impact food quality.
- Demonstrate use of a quality scorecard to assess school meals.
- Organize an appealing serving line during meal service periods.
- Formulate strategies and activities related to improving meal quality and student perception of meal quality to create an action plan.

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.

Task	Person Responsible	Completion Date	✓
Instructors Manual	Instructor		
Videos (and/or QR Codes and video URLs)			
Zoom meeting Links			
PowerPoint Slides			
Notes for VILT Host			
 Assistance with breakout rooms, chats, activities, posting links, and other needs during the online training event 			
Training Manual			

Training-at-a-Glance

Introduction: Quality and the Five-Step Process			
40 minutes	 Introduction Quality School Meals The Five-Step Process 		
	Lesson 1: Using Cycle Menus and Standardized Recipes		
40 minutes	 Cycle Menus Standardized Recipes Ingredient Substitutions 		
	Lesson 2: Planning Food Production and Batch Cooking		
40 minutes	Food Production Records and Batch Cooking		
Le	esson 3: Organizing Workplace, Equipment, and Ingredients		
40 minutes	 Mise en Place Commercial Grade Equipment Weight and Measure 		
L	esson 4: Using Culinary Skills to Create Quality and Appeal		
40 minutes	 Colors, Textures, and shapes Cooking Methods Maintenance and Use of Knives 		
Lesson 5: Delivering a Quality Product			
45 minutes	 Quality Scorecard Serving Line Set Up and Maintenance Portion Control During Service 		
Lesson 6: Strategies and Activities Related to Improving Meal Quality and Student Perception			
60 minutes	Goal and Action Plan Development		
TOTAL: 310 minut	tes		

Introduction

Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials		
10 minutes	 Introduction 	Course overview	Training Manual		
		Ground rules	Manager's Corner resources		
		Manager's Corner resources			
Objective: D	efine quality schoo	I meals and state why they are s	so important.		
15 minutes	 Quality School Meals 	 Define quality school meals 	 Training Manual 		
Objective: R	Objective: Recall the five-step process for preparing quality school meals.				
15 minutes	 The Five-Step Process 	 Discuss the five-step process used in preparing quality school meals 	 Training Manual 		
TOTAL: 40 minutes					

Introduction

Instructor's Note: The introductions, ground rules, and Zoom review will occur on Day 1 of the E-STAR Michigan Workshop. Therefore, any information in reference to the introductions, ground rules, and zoom details should be omitted for the Michigan Workshop. If this training is being taught for other purposes, please conduct the introductions then review the ground rules and zoom review.

SAY: Welcome to *Practical Skills for Quality Meals*. This training is designed to be interactive, requiring you, the participant, to be an active learner. Today, we will discuss the concept of serving quality school meals, and why quality meals are so important to the success of school nutrition programs. We will also explore ways you can ensure quality school meals are served using a five-step process.

DO: Review the features of the virtual platform (Zoom) that will be used by the participants during training.

SAY: We will be using these features throughout this course, to reinforce learning and give you time to test your knowledge and skills. If you have any questions during the training, please type them into the chatbox or use the "Raise Hand" feature and be ready to unmute your microphone when called on.

DO: Introduce yourself and other special guests. You should state your name, title/ credentials, and relevant experience and provide participants with an opportunity to do the same. Then, confirm that participants all have a copy of the Training Manual, a notepad or paper, and a pen or pencil.

SAY: The purpose of the school meals programs is to provide safe, healthy reimbursable meals across the nation. Organization, commitment, and communication are the fundamental principles of an efficient food production system, while the quality of food is ultimately in the hands of the staff. As a leader, the manager must model the same expectations that ensure high standards for meal preparation and service.

To meet the unique training, technical assistance, and professional development needs of sitebased school nutrition managers, the *School Nutrition E-STAR* initiative has been prepared to help managers/site-level supervisors develop goals and best practices to improve program administration and operations.

E-STAR stands for:

- Enhanced
- Strategies
- Training
- Action Plans
- Resources

SHOW SLIDE: Training

SAY: This training provides general concepts to help school nutrition managers understand how to prepare and provide quality reimbursable school meals to students. Additionally, it allows the opportunity for participants to receive training that will enhance their culinary skills to prepare quality meals. Managers will also leave this training with presentation skills to train their frontline staff.

This training will cover a variety of topics, and questions are highly encouraged.

To help guide you through this training, the Institute of Child Nutrition (ICN) has provided each of you with a Training Manual. The manual contains activities developed specifically for this training. On the upper right corner of the slides, you will see a reference to the corresponding lesson in the Training Manual.

The School Nutrition E-STAR program provides the opportunity to learn from your peers, identify best practices, and share success stories. The manual guides you through the activities of the training. During the training remember to spend time thinking about what the key takeaways are for you and how you can plan to incorporate strategies into your action plans to implement back home. As you participate in the training, use your Training Manual to record new ideas, best practices, and any "ah-ha" moments.

DO: Determine the makeup of the audience by asking the audience to type in the chatbox the size of their district and the location of their city or town. Confirm participants have all the necessary materials for the lesson.

SHOW SLIDE: Manager's Corner

SAY: *Manager's Corners* are designed for directors/managers to use in training their staff. Each lesson is approximately 15 minutes. These are training resources designed to give directors/managers an easy-to-use lesson plan for training staff in various topics. Each *Manager's Corner* is color-coded to easily identify one of the Key Areas.

- Nutrition
- Operations
- Administration
- Communications/Marketing

Let us take a moment to locate the list of *Manager's Corners* that support the topics included in this training. You will use the *Manager's Corner* series to practice conducting trainings with your peers later on in the workshop. We will discuss the *Manager's Corner* series in more detail later.

DO: Direct the participants to the Manager's Corner tab located in the Training Manual.

Instructor's Note: Manager's Corners are available on the ICN website (www.theicn.org).

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Lesson Topic	Manager's Corner
Menus	Cycle Menus
Menu Quality and Acceptability	 Meal Quality and Acceptability Standardized Recipes Student Taste Testing – Breakfast Student Taste Testing – Lunch
Food Production	 Cycle Menus Ingredient Calculations Preventing Excess Waste in Storage Locations Production Records
Basic Culinary Principles	 Common Large Cooking Equipment Knife Skills: Knife Safety Knife Skills: Types of Knives Mise en Place Roasting Vegetables Weights and Volume
Appetizing and Varied Food Presentation	Food PresentationServing Line Presentation

Manager's Corner Training Topics

SAY: This training will discuss the five-step process in preparing quality meals:

- Lesson 1: Using Cycle Menus and Standardized Recipes
- Lesson 2: Planning Food Production and Batch Cooking
- Lesson 3: Organizing Workplace, Equipment, and Ingredients
- Lesson 4: Using Culinary Skills to Create Quality and Appeal
- Lesson 5: Delivering a Quality Product
- Lesson 6: Strategies and Activities Related to Improving Meal Quality and Student Perception

Each topic will include a number of sub-topics, many of which will include activities to reinforce the concept. In addition, the *Manager's Corners* correspond to the topics in this training.

SHOW SLIDE: Research

We will begin with an overview of quality and the five-step process. Research has shown there is a connection between nutrition and proper brain development in children. We also know that when children do not receive enough nutritious food to eat, it can impact their ability to learn. By preparing and serving quality school meals, you are in a unique position to aid in ensuring children receive the nutrients they need to grow and learn. Providing quality meals also demonstrates that you take pride in what you do and increases the likelihood of students being repeat customers because they enjoy the food you serve.

Objective: Recall the definition of school meal quality and why it is important.

SHOW SLIDE: Quality School Meals

ASK: How would you define "quality school meals"?

DO: Have participants think independently of answers to this question. Then, have participants volunteer by typing their responses into the chat feature (remind participants of the location) or raising their hand and being prepared to unmute their microphone (remind participants of the location) when called on to reply.

SAY: Quickly think of your answer to this question for approximately 1 minute. Who would like to volunteer to provide their response? Please type your ideas into the chat feature (remind participants of the location) or raise your hand and be ready to unmute your microphone (remind participants of the location) to reply, when called upon.

DO: Read a few typed responses and comment on verbal replies.

FEEDBACK: Here are some possible responses.

- Quality meals can be defined as meals that meet the United States Department of Agriculture's (USDA) nutrition standards and the Dietary Guidelines for Americans.
- Quality meals are appealing to students.
- Quality meals are received, stored, prepared, and served using proper food safety practices.
- Quality meals are served in a timely, friendly manner.
- Quality meals are served in an attractive cafeteria/environment.

SAY: For this training, School Meal Quality is defined as *characteristics of food that affect its acceptability to consumers*. This includes food appearance (size, shape, color, gloss, and consistency), texture, flavor, nutritional value, and freshness.

Examples of factors related to meal quality that have been cited in the research to affect students' perceptions of school lunch and willingness to eat it include variety, flavor, attractiveness of food on the serving line, choices that allow students to meet cultural and ethnic preferences, access to fresh foods, etc. Meal quality can be measured against developed quality standards or by assessing consumers' perceptions of meal quality (e.g., satisfaction surveys, taste-testing ballots, etc.).

There are many different ways to define quality school meals; however, to truly produce a quality meal, excellence must be achieved during every step of the foodservice process. Menu planning and recipe selection, receiving, storing, preparing, and serving food—all while using proper culinary techniques and food safety practices. Our course will outline best practices needed to ensure quality meals.

During our time together, we will use many culinary terms. To make sure we are familiar with these terms, let's do a quick activity.

SHOW SLIDE(s): Match the Definition(s)

Activity: Key Terms Matching

DO: Refer participants to the **Key Terms** handout in the appendix of their Training Manual. Use the series of slides containing a definition or photo and multiple-choice answers to have participants correctly pick the word that matches the definition. Ask participants to type the word they believe corresponds to the definition.

SAY: On the next series of slides, we will have a definition or photograph of a culinary term. After the definition or picture will be four words. After I read the definition or after seeing the photograph, please type in the chatbox (remind participants of the location) the word you believe matches the definition.

DO: Read each definition, then prompt participants to write in the word that matches the definition. The next click should reveal the correct answer.

SAY: (After concluding the definition slides) Thank you for participating in this activity. While we did not cover all of the key terms listed on your handout, you can refer to this page at any time, and ask questions throughout this training.

Instructor's Note: If time allows show slide that contains the five steps in random order (as the answers are revealed, the steps move into the correct order using slide animation).

SAY: On this slide are five steps we use in preparing quality school meals. Take a minute to look at the steps and independently determine the logical sequence or order for the steps of preparing quality meals.

DO: Allow the participants approximately 2 minutes to determine the order for the five steps.

SAY: Let's see the order you have put these steps in. Please use the chatbox—what is step number one?

DO: Review the written chatbox answers, then "reveal" the first step by animating the slide. Continue this process of having participants write the second, third, fourth, and fifth steps into the chatbox, then revealing the correct sequence of steps on the slide. **SAY:** Great job everyone. Let's learn a little more about these five steps. This is an overview of the content that will be presented in the five lessons in this training.

Objective: Recall the five-step process for preparing quality school meals.

SHOW SLIDE: The Five-Step Process

Five-Step Process

- Lesson 1: Using Cycle Menus and Standardized Recipes
- Lesson 2: Planning Food Production and Batch Cooking
- Lesson 3: Organizing Workplace, Equipment, and Ingredients
- Lesson 4: Using Culinary Skills to Create Quality and Appeal
- Lesson 5: Delivering a Quality Product

DO: Refer participants to the **Five-Step Process** handout as you review the flow of the course contents.

SAY: This training is based on each step in the five-step process. We will briefly cover each step. Each of our five lessons will be dedicated to helping you learn a little more about each step.

DO: Using the discussion points below, provide a quick overview of each step.

SHOW SLIDE: Step 1: Using Cycle Menus and Standardized Recipes

SAY: Step one of the five-step process is to plan menus and then develop standardized recipes.

ASK: How many of you have started preparing a recipe only to find that you made a mistake halfway through because you didn't read the entire recipe?

DO: Have participants use the Yes or Raise Hand reaction feature to reply (remind participants of the location of these reaction buttons).

SAY: No matter how many times you have prepared the recipe, always review the recipe from beginning to end before preparation. Reviewing the recipe will help prevent problems that could arise during food preparation and production.

SHOW SLIDE: Step 2: Planning Food Production and Batch Cooking

Step two of the five-step process is to *plan food production and batch cooking*. Batch cooking means to cook in small batches, as needed, throughout the service period. To be successful at batch cooking, the school nutrition team must plan ahead, review the work schedule, and communicate effectively between the front and back of the house.

SHOW SLIDE: Step 3: Organizing Workplace, Equipment, and Ingredients

Step three of the five-step process is to **organize our workplace**, **equipment**, **and ingredients**. The French term for this is mise en place (meez-un-plahss), which means "to put in place." Step three includes all the "get ready steps" needed for food production to be well-organized. Organizing equipment and recipe ingredients save time and energy.

Instructor's Note: Most participants will probably raise their hands. Time permitting, allow a couple of participants to explain their experience.

Best Practice/Strategy: Organizing equipment and recipe ingredients save time and energy.

SHOW SLIDE: Step 4: Using Culinary Skills to Create Quality and Appeal

SAY: Step four is to **use the right** *culinary skills to create quality and appeal*. When the right equipment and the correct culinary techniques are utilized, food preparation efficiency is maximized. Customers will notice the care taken to prepare and deliver a quality product.

SHOW SLIDE: Step 5: Delivering a Quality Product

Step five of the five-step process is to *deliver a quality product*. The food on the serving line demonstrates the skill level of back-of-the-house school nutrition professionals. It also communicates pride in a job well done and care for the customer.

The five-step process should be used when preparing and serving safe, quality meals. If you follow these five steps during preparation, you will be proud of the healthy, quality school meals you serve.

During this brief overview, we have discussed what it means to prepare and serve high-quality school meals. We also covered a five-step process that, if followed, will aid you in ensuring the food you prepare and serve keeps customers coming back to the cafeteria.

ASK: Are there any questions related to the topics we just covered? If so, please type your questions into the chatbox or raise your hand and be ready to unmute your microphone when called on.

DO: Remind participants where the virtual features can be found. Answer any questions the participants may have before moving on to the next lesson.

Lesson 1: Using Cycle Menus and Standardized Recipes Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials		
Objective: I	dentify the benefits	s of a cycle menu.			
5 minutes	IntroductionMenus	 Discussion of benefits of cycle menus. 	Training Manual		
Objective: I meals.	Discuss the importa	ance of using a standardized rec	cipe to prepare quality school		
10 minutes	 Introduction Importance of Using Standardized Recipes 	 Discussion of recipes and the importance of utilizing standardized recipes 	Training Manual		
Objective: I	dentify the compor	nents of a standardized recipe.			
20 minutes	 Introduction Eight Components of a Standardized Recipe 	 Overview of eight components. Facilitate the Building a Grilled Chicken Salad Recipe Activity Discussion of eight components of a standardized recipe. 	• Training Manual		
	Objective: Identify how to make appropriate ingredient substitutions when using standardized recipes.				
5 minutes	 Using a Standardized Recipe Making Appropriate Ingredient Substitutions 	 Discuss making recipe substitutions 	• Training Manual		
TOTAL: 40 minutes					

Lesson 1: Using Cycle Menus and Standardized Recipes

Objective: Identify the benefits of using a cycle menu.

SHOW SLIDE: Cycle Menus

SAY: Welcome to Lesson 1: Using Cycle Menus and Standardized Recipes. In this lesson, we will learn about the benefits of cycle menus, the major components of a standardized recipe, and the importance of using them to prepare quality school meals. We will also review how to make appropriate substitutions to maintain the integrity of a recipe.

Cycle menus are a set of meal components and food items that are different for each day during a set period of time (cycle). A cycle menu offers different daily menu items and repeats for a designated duration. The menu planner has the flexibility to determine the cycle length. In general, the length of the cycle repeats every two to five weeks and can be different for different age groups.

If your school uses a cycle menu, write how long your cycle menu is in the chatbox.

DO: Acknowledge answers in the chatbox.

SAY: Planning menus in advance saves time, helps avoid repetitive tasks, reduces labor, ensures meal quality, controls food costs, implements cost-effective inventory management, and may reduce waste. Menus created for seasons allow for the opportunity to incorporate in-season options and support local agricultural products.

Take a few minutes to think about this question then post one or two of your responses in the chatbox. What are the advantages of cycle menus?

SHOW SLIDE: Benefits of Cycle Menus

DO: Read responses as they are posted. Invite 2 to 3 participants to share verbally any additional comments. Share any advantages of using cycle menus that participants did not mention.

FEEDBACK: Possible responses may include:

- <u>Cycle menus save time.</u> Cycle menus save time because they reduce repetitive tasks such as menu planning.
- <u>Cycle menus reduce labor.</u> Cycle menus reduce labor because as the staff becomes more familiar with specific standardized recipes, they become more efficient in producing the recipes.
- <u>Cycle menus control food costs.</u> Cycle menus control food costs because information provided on the production record can contribute to accurate forecasting of specific menu items.

• <u>Cycle menus support local agriculture.</u> Cycle menus provide the opportunity to incorporate local agricultural products during the peak of their season.

Objective: Discuss the importance of using a standardized recipe to prepare quality school meals.

SHOW SLIDE: Importance of Standardized Recipes

SAY: Now that we have discussed the benefits of using cycle menus, let's talk about why it is important to use standardized recipes for items on your menus to ensure quality meals are prepared every time.

ASK: Does a salad prepared at a national chain restaurant in Florida look the same as a salad prepared at the same national chain restaurant in California?

DO: Tell participants to use their reaction button to give a thumbs up for yes and thumbs down for no. Wait for responses, then say if you gave a thumbs up for yes, you are correct.

SAY: The reason the salads are probably the same is because a standardized recipe is used by both restaurants. Standardized recipes are the building blocks of quality food production. The standardized recipe gives the cook all the necessary steps and procedures for consistent quality food production. By following detailed recipe instructions, a quality product should be produced every time it is prepared and served.

In school nutrition operations, a standardized recipe is a recipe that has been tried, adapted, and retried several times for use by a given school nutrition operation. The tested recipe produces the same good results and yields every time when using the exact procedures, the same type of equipment, and the same quantity and quality of ingredients.

All foods served in schools need a standardized recipe. Even convenience foods, such as frozen pizza, need directions for staff to follow during preparation and cooking. Think of a standardized recipe as your blueprint or guide for preparing menu items.

Following standardized recipes are important because they:

- Ensure consistent quality
- Simplify the job for employees
- Provide a time standard
- Yield the same amount every time
- Provide safe cooking and holding temperatures
- Help determine how much food to order
- Ensure customers will receive a quality product

Objective: Identify the components of a standardized recipe.

SHOW SLIDE: Components of a Standardized Recipe

ASK: What are the eight major components of a standardized recipe?

DO: Invite participants to respond in the chat or raise their hands to respond verbally. Open a whiteboard in the share screen Zoom feature. List the eight major components on the whiteboard as they are mentioned.

FEEDBACK: The major components of a recipe include:

- Recipe name
- Recipe category
- Ingredients
- Measures and weight
- Directions
- Equipment and utensils
- Food safety guidelines/Hazard Analysis Critical Control Point (HACCP)
- Serving size and recipe yield

SHOW SLIDE: Activity: Building a Grilled Chicken Salad Standardized Recipe

SAY: To help you understand all the necessary parts of a standardized recipe and the level of detail needed, we are going to examine a standardized recipe for a grilled chicken salad. Find the **Building a Grilled Chicken Salad Standardized Recipe** worksheet. You are going to work in your mentoring groups in breakout rooms to determine the missing parts of a grilled chicken salad recipe. You have approximately 7 minutes to fill in the blanks.

DO: Launch 2 breakout rooms. After 7 minutes, bring participants back from breakout rooms to review the answers. Invite participants to share their answers in the chatbox or by raising their hands.

Building a Grilled Chicken Salad Standardized Recipe

Directions: Work in pairs to determine the missing parts of the grilled chicken salad recipe.

Name of Recipe: _____

Yield: 25 Salads

Meal Components: 2.5 oz meat/meat alternate; 1 ³/₈ cups dark green vegetable, ¹/₄ cup other vegetable, and ¹/₂ cup red/orange vegetable

Chicken filet, grilled, fully cooked		50 each	 CCP: No bare hand contact with ready-to-eat food. 1 fully cooked chicken filets in the refrigerator overnight. 2. Slice thawed, grilled chicken breast into 4- to 6-inch long, equal strips (depending on size of filet). CCP: Hold at or below.
Lettuce,, chopped	6 lb + 4 oz	3 gal + 3 qt + 2 ¼ cup	CCP: No bare hand contact with ready-to-eat food.
			3. Cut romaine head in half lengthwise through root end of lettuce. Rinse both halves thoroughly. Make at least 3 cuts lengthwise leaving the root intact. Then cut across to make 1-inch dices. Rinse chopped romaine under running water and drain well. Salad spinner recommended. Or use purchased, precut Romaine.
			CCP: Hold at 41 °F or below.
Spinach,	12 ½ oz	1 qt + 2 ¼ cup	CCP: No contact with ready-to-eat food.
			 Roll prewashed spinach into a tight roll on a cutting board. Using a chef's knife, make ½ inch slices. Toss into the Romaine.
			CCP: Hold at 41 °F or below.

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Cucumber, sliced	2 lb + 5 ½ oz	1 qt + 2 ¼ cup	CCP: No bare hand contact with ready-to-eat food.
			5 cucumber. Remove 4 strips of the cucumber peel with a vegetable peeler. Using a chef's knife, cut cucumber into $\frac{1}{8}$ inch (4 $\frac{1}{8}$ inch slices = $\frac{1}{4}$ c).
			CCP: Hold at 41 °F or below.
Tomato,	1.56 lb	each	CCP: No bare hand contact with ready-to-eat food.
			6. Wash cherry tomatoes. Cut in
			CCP: Hold at 41 °F or below.
Carrots, shredded	1.56 lb	6 ¼ cup	CCP: No bare hand contact with ready-to-eat food.
Cheddar cheese,	12 ½ oz	3 ¼ cup	 Assemble the salad in the appropriate salad container as follows:
			Fill the container with the romaine/spinach mixture. Starting at the left corner and working clockwise, top romaine/spinach mixture with:
			cup sliced cucumber
			1/4 cup shredded carrots
			6 cherry tomato halves
			¹ ∕₃ cup shredded cheese
			Place 4–6 strips of chicken in the center of salad. Serve with a variety of salad dressings.
			CCP: Hold and serve at 41 °F or below.

Building a Grilled Chicken Salad Standardized Recipe Answer Key

Directions: Work in pairs to determine the missing parts of the grilled chicken salad recipe.

Name of Recipe: Grilled Chicken Salad

Yield: 25 Salads

Meal Components: 2.5 oz meat/meat alternate; 1 ³/₈ cups dark green vegetable, ¹/₄ cup other vegetable, and ¹/₂ cup red/orange vegetable

Chicken filet, grilled, fully cooked	3 lb + 2 oz	50 each	 CCP: No bare hand contact with ready-to-eat food. 1. Thaw fully cooked chicken filets in the refrigerator overnight. 2. Slice thawed, grilled chicken breast into 4- to 6-inch long, equal strips (depending on size of filet). CCP: Hold at 41 °F or below.
Lettuce, Romaine, chopped	6 lb + 4 oz	3 gal + 3 qt + 2 ¼ cup	 CCP: No bare hand contact with ready-to-eat food. 3. Cut romaine head in half lengthwise through root end of lettuce. Rinse both halves thoroughly. Make at least 3 cuts lengthwise leaving the root intact. Then cut across to make 1-inch dices. Rinse chopped romaine under running water and drain well. Salad spinner recommended. Or use purchased, precut Romaine. CCP: Hold at 41 °F or below.
Spinach, pre-washed	12 ½ oz	1 qt + 2 ¼ cup	 CCP: No bare hand contact with ready-to-eat food. 4. Roll prewashed spinach into a tight roll on a cutting board. Using a chef's knife, make ½ inch slices. Toss into the Romaine. CCP: Hold at 41 °F or below.

Training Manual

Cucumber, sliced	2 lb + 5 ½ oz	1 qt +	CCP: No bare hand contact with ready-to-eat food.
		2 ¼ cup	 Wash cucumber. Remove 4 strips of the cucumber peel with a vegetable peeler. Using a chef's knife, cut cucumber into 1/8 inch slices (4 1/8 inch slices = 1/4 c).
			CCP: Hold at 41 °F or below.
Tomato, cherry	1.56 lb	75 each	CCP: No bare hand contact with ready-to-eat food.
			6. Wash cherry tomatoes. Cut in half.
			CCP: Hold at 41 °F or below.
Carrots, shredded	1.56 lb	6 ¼ cup	CCP: No bare hand contact with ready-to-eat food.
Cheddar cheese, shredded	12 ½ oz	3 ¼ cup	 Assemble the salad in the appropriate salad container as follows:
			Fill the container with the romaine/spinach mixture. Starting at the left corner and working clockwise, top romaine/spinach mixture with:
			1/4 cup sliced cucumber
			1/4 cup shredded carrots
			6 cherry tomato halves
			1/8 cup shredded cheese
			Place 4–6 strips of chicken in the center of salad. Serve with a variety of salad dressings.
			CCP: Hold and serve at 41 °F or below.

SHOW SLIDE: Important Points to Remember about Standardized Recipes

SAY: Let's talk a little more about each of the major components of a recipe and some important points to remember about them.

- Each standardized recipe has a name or a descriptive title. Many times, that name or title is designed to make the dish sound more appealing to customers. For example, *Enchilada Bake* may sound more appealing than *Mexican Casserole*.
- The recipe category, another major component of a standardized recipe, makes it easier to sort recipes in a file box or on the computer. For USDA recipes, the recipe category usually represents a specific meal component such as the main dish or vegetable.
- When reviewing a recipe, it is important to pay close attention to the ingredients. The ingredient name is usually clear and includes the type of ingredient—fresh, frozen, or canned for example. Preparation techniques, such as slicing and dicing, are sometimes included in the ingredient name as well (e.g., sliced carrots or diced onions). Another helpful thing to remember is that ingredients are usually listed in order of use.

Let's take a minute and talk about the importance of reading/reviewing a recipe every time before using it. In 1961, Julia Child, Louisette Bertholle, and Simone Beck published *Mastering the Art of French Cooking*. In it, they wrote that too often a beginner cook will begin enthusiastically on a new dish without reading the recipe first. Suddenly an ingredient, process, or timing issue will arise and there is frustration, surprise, and even disaster. To avoid this from occurring, a cook should always read the recipe first from beginning to end, even if they are familiar with the dish they are preparing.

ASK: What are some other examples of problems that could arise during food preparation and production, if a cook did not review a recipe first?

DO: Ask participants to respond in the chatbox. Read a few responses.

FEEDBACK: Here are some possible responses.

- Missing ingredients
- Oven is not preheated
- Necessary equipment is not available
- Frozen food is not thawed properly

Best Practice/Strategy: Always review the recipe from beginning to end before preparation. Reviewing the recipe will help to prevent problems that could arise during food preparation and production.

SHOW SLIDE: Additional Points to Remember about Standardized Recipes

SAY: Thanks for sharing. Let's finish talking about the last few components of a standardized recipe.

- Weights and/or measures are included for every ingredient in the standardized recipe. Weights and measures are not interchangeable. It is important to decide when weights and/or measures will be used in food production. Weighing ingredients is more accurate, but always use measures for liquid ingredients.
- Directions, or detailed instructions, are included with each standardized recipe. The directions tell how the ingredients should be combined; they list in order the steps to be followed when preparing the recipe.
- Standardized recipes also list **equipment and utensils** needed for production. School kitchens are equipped with a variety of large and small equipment. Often, different pieces of equipment can be used to achieve the same result; however, the result may not be a quality product. For example, you can steam fresh broccoli in an oven, but the result may be a lower quality product than broccoli batch cooked in a steamer.
- Standardized recipes include food safety guidelines/HACCP critical control points (CCPs).

SHOW SLIDE: Final Points to Remember about Standardized Recipes

ASK: Why are CCPs, such as cooking and holding temperatures, an important component of a standardized recipe? Feel free to raise your hand or respond in the chatbox.

FEEDBACK: Because following them ensures that the final product will be safe to eat and more appealing to students.

SAY: Standardized recipes also include **serving size and recipe yield**. Let's take a minute to think about a couple of examples of how mistakes are made while preparing a standardized recipe and how that can impact the yield. After I read each scenario, take a minute to think, then raise your hand to share verbally.

DO: Read the scenarios and invite a participant volunteer to respond to each scenario.

ASK: A food service worker uses the weight of the spinach before it is cut into a chiffonade and ends up with not enough spinach (2 or 4 servings short) when they make 50 salads. Where might the food service have gone wrong when following the standardized recipe?

FEEDBACK: One possible response: The food service worker may have weighed the spinach before the stems were trimmed instead of after it was chopped.

ASK: A food service worker weighed the correct amount of bulk cheese needed for the grilled chicken salad recipe but gathers the wrong portioning tool. The food service worker realizes the mistake when they run out of cheese halfway through production. What spoodle did they grab

instead of using the 1 oz spoodle (1/2 cup)?

FEEDBACK: The foodservice worker grabbed the 2 oz spoodle (¹/₄ cup) instead of using a 1 oz.

SAY: Using the correct weighing and/or measuring and portioning tools are crucial factors that impact the yield of the standardized recipe. One other example of a factor that can impact the yield of a standardized recipe is losing moisture during cooking.

The last major component of standardized recipes is a time standard.

ASK: Can anyone recall what time standard means?

SAY: Please raise your virtual hand to share verbally or post your answer in the chatbox.

FEEDBACK: The time standard is the estimated total amount of time required to make the recipe, from preparation to clean up, and is used to plan batch cooking for quality meals.

DO: Remind participants that it's important to remember that the first several times a new recipe is prepared, the time standard should be recorded.

Objective: Identify how to make appropriate ingredient substitutions when using standardized recipes.

SHOW SLIDE:

SAY: Now let's talk a little bit about when you're using a standardized recipe for food production. It is crucial to remember that during the preparation of a standardized recipe if any changes to the recipe are made, it can affect the yield, nutritional content, and product quality. There are times you may need to make a substitution for an ingredient. Before you do so, make sure the substitution is appropriate for the recipe. If a chili recipe calls for pinto beans, you may be able to substitute light red kidney beans. While some substitutions are acceptable, an inappropriate substitution could spell disaster.

For example, if you substitute cayenne pepper for chili powder just because it is one of the ingredients in chili powder, your customers may be in for an unpleasant, heated surprise. More importantly, substitutions should only be made if the original ingredient is unavailable. Each ingredient in a recipe has a specific purpose and substituting one ingredient for another may alter the desired taste or texture and the overall product. Any changes or recipe concerns should be discussed with your supervisor.

Best Practice/Strategy: During preparation, if you make any changes to the recipe, it could affect the yield, nutritional content, and product quality. Any changes or recipe concerns should be discussed with your supervisor.

SHOW SLIDE: Lesson 1: Reflections

SAY: Using cycle menus and standardized recipes is crucial to creating and serving quality school meals. Standardized recipes are the building blocks of quality food production. By following detailed recipe instructions, a quality product can be produced every time it is prepared and served.

ASK: Are there any questions related to the topics we just covered?

DO: Invite participants to ask questions by posting to the chat or raising their virtual hand. Answer any questions the participants may have before moving on to the next lesson.

SAY: Think back to the **E-STAR SMART Goals and Action Plan Framework and Process** we reviewed in the previous training. We will use a few minutes to allow you an opportunity to capture any notes or information you may want to recall later to assist you with identifying a strategy or activity to improve meal quality or student perception.

DO: Allow participants approximately 5 minutes to complete the reflection sheet.

Lesson 1: Reflection Sheet

Spend some time reflecting on the ideas and thoughts from Lesson 1 and what "take-aways" you want to recall later to assist with identifying a strategy or activity to improve meal quality or student perception.

Lesson 2: Planning Food Production and Batch Cooking Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials
	dentify the required nned, prepared, and		enting and evaluating amounts
10 minutes	 Introduction Production Records 	Discuss and compare the required information included on food production records	 Training Manual Participant-provided daily production records (from their own school or district)
Objective: /	Apply time standard	ds to plan for batch cooking.	
30 minutes	Batch Cooking	 Define and discuss batch cooking Review Time Standard Example: Eagle Pizza and Batch Cooking Example: Eagle Pizza handouts Facilitate Put Time on Your Side activity 	 Training Manual Time-lapse video of batch cooking broccoli
TOTAL: 40 minutes			

Lesson 2: Planning Food Production and Batch Cooking

SHOW SLIDE: Batch Cooking

SAY: Our next step in preparing quality meals is planning food production and batch cooking. Batch cooking means cooking food in small batches, as needed, throughout the service period. Some school nutrition professionals use the phrases *cooking-to-the-line* and *just-in-time for service* to mean the same thing as batch cooking. Batch cooking is ideal because it ensures the best appearance, temperature, and texture of food. During this lesson, we will discuss the importance of creating and using food production records and planning for batch cooking.

Objective: Identify the required information needed for documenting and evaluating amounts of food planned, prepared, and not served.

SHOW SLIDE: Planning

SAY: To be successful in preparing quality school meals, we must plan ahead. Planning includes several steps—school nutrition professionals should review the menu, standardized recipes, daily work schedule, and food production record.

Food production is all about preparing and serving quality meals in the most efficient way. A welldesigned food production system provides an avenue for serving healthy, appealing, and safe meals to school customers. It provides the necessary basis for schools to produce the desired number of quality meals in a cost-effective manner.

SHOW SLIDE: Characteristics of an Efficient, Cost-Effective Foodservice System

ASK: What are the characteristics of an efficient, cost-effective foodservice system?

DO: Ask participants to take a minute to think about this question. Next, ask participants to share their thoughts in the chatbox (remind participants of the location). Read some of the chat responses. Pause after reading some of the posted characteristics to ask for a thumbs up (remind participants of the location) if they feel their foodservice system has the mentioned characteristic(s).

FEEDBACK:

- Adequate dry storage, refrigerated storage, and freezer space appropriately located
- Accessible handwashing sinks, soap, and paper towels
- Standardized recipes, quality ingredients, and accurate forecasting
- Sufficient utensils, food and storage thermometers, equipment, and supplies
- Trained staff that are empowered to maximize the use of their skills and the resources available
- Overall layout and design of the operation

SHOW SLIDE: Production Records

SAY: Now, we will briefly discuss production records. The production record provides documentation that supports meeting Federal regulations. Production records also help staff identify the quantity to prepare, predict future production needs, and can help to reduce waste.

SHOW SLIDE: Accurate and Legible Production Record

SAY: It is important that the school nutrition staff understand the guidelines for completing food production records daily.

Best Practice/Strategy: A good practice is to cross-train several employees to complete food production records. Remember to stress in the training the importance of legible production records.

SHOW SLIDE: Activity: Daily Menu Production Record and Anatomy of a Production Record

DO: Instruct participants to find the **Daily Menu Production Record** and **Anatomy of a Production Record** handouts.

ASK: What information is required to be included on a school meals production record?

SAY: Please respond in the chatbox (remind participants of the location).

DO: Read a few responses then provide participants with confirming or corrective feedback, as necessary. Point out each section of the Daily Menu Production Record slide and have participants find the corresponding section of their **Anatomy of a Food Production Record** handout.

Daily Menu Production Record – Food-Based Menu Planning						[SAMPLE]													
Name of school/site: Grade Group: Date: Menu:			Breakfast Lunch		#	Reimbursable Meals # of student meals planned (projected) # of student meals offered (prepared) # of student meals selected (served) B = Reimbursable			Non-reimbursable Meals # of student meals planned (projected) # of student meals offered (prepared) # of student meals selected (served)										
	Menu/ food items	Recipe ID/Product ID	Portion Size	Meats/meat alternates	-	ortion s			Planned	(projected) Servings		Planned (projected) quantity of food (in purchased units)		servings offered (prepared)			servings selected (served)	Substitutions, leftovers, and notes	
		Rec	Pol	Me alt	Gra	Fruits	Ve	Milk	R	NR NR		Pla qui	R	S)		R	NR	Sut left	_
																			_
																			_
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Anatomy of a Production Record

If you're not clear about how to complete a production record, start by reviewing these details for each numbered item on the sample record:

BASIC INFORMATION

- 1 Name of school/site
- 2 Grade group
- 3 Date
- 4 Menu
- 5 Menu type (lunch or breakfast) and 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); provided the total number of student meals offer (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

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

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

11 Actual number of nonreimbursable meals selected (served); provides the total number of nonreimbursable meals selected (served) for the specified school/site

The sample is one example of a production record. Use the format that best fits your programs.

ALL MENU ITEMS LISTED

- 12 Menu/food items all food item choices offered on the specified grade group's menus, 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 preparations
- 13 Planned (projected), offered (prepared), and selected (served) number of milk by type—fatfree, 1% low-fat unflavored, 1% low-fat chocolate or other flavors

RECIPE/PRODUCT NUMBER

14 Recipe ID/product ID number – standardized recipe number (USDA or your local recipe number) or product ID

PORTION SIZE

15 Portion size for r the specified grade group – specific unit of measure: scoop number, measuring cap 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 (WG indicates whole grain-rich)
- 18 Fruits portion offer in volume, (½ cup in sample)
- 19 Vegetables portion offer in volume (¼ cup in sample), note that subgroup is identified in column #14
- 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 purchased units – forecasted from past production, standardized recipes, and Food Buying Guide. Adjust on day-of-service, if needed
- 23 Actual number of servings offered (prepared) provided 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 serving 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 & DATE

26 Person in charge of site review, 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.
- Food Buying Guide details source of calculations for purchase units required for total servings planned
- Additional required information by your State agency or school program

DO: Show the slides and point out the location of the required information.

SAY: The next activity will help to compare the "gold standard" anatomy of required information on a production record to the daily food production records you are currently using in your school or district. You were asked to bring a copy of a daily food production record. Please get your copy out.

SHOW SLIDE: Required Information for School Meals Production Records

Activity: Required Information for School Meals Production Records worksheet

DO: Refer participants to the **Anatomy of a Production Record** handout and their school's or district's daily production record, which they should have brought for this day's training.

SAY: Please work independently to compare the Anatomy of a Production Record handout to your school or district's daily food production record. Your goal is to identify crucial information that may be missing or may be incomplete. I will give you 3 minutes to review and circle concerns you find on your school's daily production record.

DO: Allow participants 3 minutes to compare the two documents.

ASK: Who has found information that is missing, incomplete, or incorrect? Please raise your hand and be ready to unmute your microphone when called on. If you would prefer, you can also write your observations in the chatbox.

DO: Call on several participants with raised hands to report their observations. Also, monitor and read/respond to chatbox comments related to this activity.

SAY: Thank you for these great responses. If you found missing, incomplete, or incorrect information on your school's daily production record, please take a minute to make a note to yourself. You will want to make suggestions for updates to your director.

Now let's talk about an important **Best Practice** that ensures our food is of optimal quality.

Objective: Apply time standards to plan for batch cooking.

Instructor's Note: You may mention that not all states require paid rest breaks. However, most employers do provide them. Participants should refer to their district's policy regarding rest breaks for more specific guidance.

SHOW SLIDE: Applying Time Standards to Plan for Batch Cooking

SAY: Batch cooking can help protect food quality and reduce waste. For example, if a food item is not as popular as other menu items, batch cooking empowers the staff to scale back the amount that was originally planned. On the other hand, if a food item is selected by customers more than planned, staff can prepare additional batches to meet demand. Although it takes a little more effort to batch cook, it is easy to develop and execute a production plan that includes time standards. The result is well worth the time—higher quality food for the students with waste reduction.

When it comes to batch cooking, scheduling time appropriately takes skill and practice. In years past, school nutrition teams would prepare foods in advance and place the foods in hot holding cabinets hours before service. Today we know some foods, such as steamed vegetables, lose quality when held and should be cooked immediately prior to serving.

Best Practice/Strategy: Batch cooking is ideal because it ensures the best appearance, temperature, and texture of food.

ASK: How many of you are familiar with the term time standard? If so, please indicate by clicking on the "yes" button.

SHOW SLIDE: Time Standard

SAY: A time standard is how long it takes for a food product to be prepared and cooked for service. Unfortunately, most recipes do not include the time standard because it is unique to individual kitchens. Time standards vary from kitchen to kitchen because of factors such as number of servings required, available equipment, and number of employees.

SHOW SLIDE: Activity: USDA Recipe: Eagle Pizza and the Time Standard Example

DO: Ask participants to turn to the **USDA Recipe: Eagle Pizza** and the **Time Standard Example: Eagle Pizza** handouts in the Training Manual. Briefly review the handouts and discuss the time allotted for each task and how to calculate the total time.

Instructor's Note: This is a brief example before the next activity to give participants an understanding of the process before they complete their time standard and batch cooking forms.

USDA Recipe: Eagle Pizza

Ingredients	50 Ser	vings	100 Se	ervings	Directions			
ingredients	Weight	Measure	Weight	Measure	Directions			
Fresh spinach, julienne sliced	5 oz	1 qt	10 oz	2 qt				
Fresh romaine lettuce, julienne sliced	8 oz	1 qt	1 lb	2 qt	1. Combine lettuce and spinach in bowl. Set aside.			
Salt-free, chili-lime seasoning blend		¼ cup 2 Tbsp		³∕₄ cup				
Canned low-sodium refried pinto beans, fat-free	7 lb 12 oz	3 qt 1 ½ cups	15 lb 8 oz	1 gal ¾ qt	2. Mix salt-free seasoning and beans. Set aside.			
Fresh green bell peppers, diced	2 lb	1 qt 2 cups	4 lb	3 qt				
Fresh onions, diced	2 lb	1 qt 2 ¼ cups	4 lb	3 qt				
Canned low-sodium corn, drained, rinsed	3 lb 6 oz	1 qt 2 cups	6 lb 12 oz	3 qt	3. Sauté green peppers, onions, and corn for 3–4 minutes in a pan. Set aside.			
Tostada shells, round (0.5 oz each)		50		100	4. Portion beans with No.16 scoop (¼ cup) on each tostada shell. Spread evenly.			
Reduced-fat Mexican cheese blend, shredded	1 lb	1 qt	2 lb	2 qt	 Top with ¼ cup vegetable mixture. Sprinkle with 1 Tbsp cheese. Place tostadas on a sheet pan (18" x 26" x 1") lightly coated with pan release spray. For 50 servings, use 4 pans. For 100 servings, use 8 pans. Bake until cheese is melted. Conventional oven: 350 °F for about 5 minutes Convection oven: 350 °F for about 3 minutes. CCP: Heat to 135 °F or higher for at least 15 seconds. CCP: Hold for hot service at 135 °F or higher. 			

Ingradiants	50 Se	rvings	100 Se	ervings	Directions
Ingredients	Weight	Measure	Weight	Measure	Directions
Fresh carrots, shredded	1 lb 8 oz	1 qt 3 ½ cups	3 lb	1 gal 3 cups	
Low-sodium salsa, mild	1 lb 8 oz	3 cups	3 lb	1 qt 2 cups	
Fat-free sour cream	1 lb 8 oz	3 cups	3 lb	1 qt 2 cups	9. Top each tostada with: 1 Tbsp spinach/lettuce mixture, 2 Tbsp carrots, 1 Tbsp salsa, and 1 Tbsp sour cream.

Nutrients Per Serving									
Calories	206	Saturated Fat	2 g	Iron	2 mg				
Protein	9 g	Cholesterol	7 mg	Calcium	173 mg				
Carbohydrate	32 g	Vitamin D	1 IU	Sodium	290 mg				
Total Fat	6 g	Potassium	500 mg	Dietary Fiber	6 g				

Serving

- 1 tostada pizza as Meat Alternate: 1 ¼ oz equivalent meat alternate, ½ cup red/orange vegetable, ½ cup starchy vegetable, ½ cup other vegetable, and ½ oz equivalent grains
- OR Legume as Vegetable: ¼ oz equivalent meat alternate, ¼ cup legume vegetable, ¼ cup red/orange vegetable, ¼ cup starchy vegetable, ½ cup other vegetable, and ½ oz equivalent grains
- Legume vegetables can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously

Time Standard Example: Eagle Pizza

Activity	\checkmark	Time in Minutes				
Pre-preparation: Assembling equipment and ingredients		15 minutes				
Preparation: Slicing, dicing, mixing, sautéing, portioning, and panning		1 hour				
Cook: Cooking to the required safe internal temperature		5 minutes				
Set up: Transferring food for serving and serving line placement		5 minutes				
Cleaning		10 minutes				
Total time for activity: 1 hour and 35 minutes						

SAY: In the example provided, every step, from pre-preparation to cleanup, has been timed. The time standard provides valuable information when planning for batch cooking. Time standards can also help you, as the manager, complete an accurate daily work schedule.

DO: Tell participants to refer to the **Batch Cooking Preparation Example: Eagle Pizza** handout in the Training Manual.

Forecasted Amount:	300	300 servings						
Pizzas per Pan:	12	12						
Time Standard:	10–15 minutes (preparation, cooking, line setup)*							
Cooking Time:	5 minutes							
BATCH COOKING START TIME		SERVING PERIOD START TIME	PORTIONS FOR SERVING PERIOD					
10:45 am		11:00 am	60 servings (5 pans)					
11:15 am		11:30 am	60 servings (5 pans)					
11:45 am		12:00 pm	60 servings (5 pans)					
12:15 pm		12:30 pm	60 servings (5 pans)					
12:45 pm		1:00 pm 60 servings (5 pans)						

*Many items may be pre-prepared and stored until time for cooking to reduce preparation time. For example, the Eagle pizzas can be assembled and placed on pans before beginning batch cooking.

SAY: Look at the example of batch cooking for the Eagle Pizza. If you know how long it takes to prepare and cook an item, you know how far in advance work must take place to be ready for service. To help you understand and develop the skills necessary for batch cooking, we are going to do an activity that will allow us to complete our own time standards for fresh and frozen steamed broccoli florets.

SHOW SLIDE: Activity: Put Time on Your Side

Activity: Put Time on Your Side

Materials: Time-lapse, side-by-side video of fresh vs frozen broccoli with timestamps at key points in pre-preparation, preparation, cooking, set-up, and cleaning.

Time: 20 minutes

Instructions:

- Divide participants into four teams.
- Direct teams 1 and 2 to view the **Recipe: Steamed Fresh Broccoli** handout, the **Time Standard: Steamed Fresh Broccoli** worksheet, and the **Batch Cooking Preparation Form: Steamed Fresh Broccoli** worksheet.
- Instruct teams 3 and 4 to view the Recipe: Steamed Frozen Broccoli handout, the Time Standard: Steamed Frozen Broccoli worksheet, and the Batch Cooking Preparation Form: Steamed IQF Broccoli worksheet.
- Allow participants 1–2 minutes of independent review time.

SAY: We will be watching a time-lapse video for these two recipes. During the production process, timestamps will appear at key points to indicate the time it takes to prepare, cook, set up, and clean the food preparation area. As the video plays, please watch for the time stamps for the recipe you have been assigned and record these times in the space provided at the top of the Time Standard worksheet for the product you have been assigned (either fresh or frozen broccoli).

We will then put your teams into breakout rooms. As soon as you are in your room, select someone to record information and serve as your spokesperson when we return as a group. Please compare the data you have collected from watching the video. Based on your production time standard results, you will then calculate the time you would start batch cooking 3 pans of steamed broccoli for each serving period. Record these times on your Batch Cooking Preparation Form.

DO: Play the video. After the video concludes, put teams into their mentoring groups (breakout rooms) assigned breakout rooms for 10 minutes. Bring groups back and continue with the class question and discussion outlined below.

Recipe: Steamed Fresh Broccoli

Name of Recipe: Steamed Fresh Broccoli

Meal Components: Dark green vegetable

Ingredient	Weight	Measure	Directions
Broccoli florets, fresh	2 ½ lbs		 Place broccoli florets in 2-inch perforated pan. DO NOT put more than 3 lbs in each 2-inch pan. DO NOT cover pan.
			Note: Some florets may be large. Use a paring knife to cut into uniform sizes.
			2. Place pan in steamer and steam until tender or al dente.
			CCP: Heat to 135 °F or above.
			Cooking time should be monitored and recorded on the Time Standard/Batch Cooking Preparation Form.
			3. Broccoli should be vibrant green in color.
			CCP: Hold and serve at 135 °F or above.

Time Standard: Steamed Fresh Broccoli

Activity	\checkmark	Time in Minutes					
Pre-preparation: Assembling equipment and ingredients							
Preparation: Combining ingredients, mixing, panning							
Cook: Cooking to the required safe internal temperature							
Set up: Place in non-perforated pan for serving line placement							
Cleaning							
Total time for activity:							

Batch Cooking Preparation Form: Steamed Fresh Broccoli

Based on your activity results, calculate the time you would start batch cooking 3 pans of fresh steamed broccoli for each serving period.

Forecasted Amount:	25	255, ½ cup servings						
Servings per Pan:	17	17 servings per 2-inch full-size pan						
Number of Pans Needed:	For steaming: 15 2-inch full-size perforated pans for 255 servings For serving: 15 2-inch full-size non-perforated pans for 255 servings							
Batch Cooking Start Tim	е	Serving Period Start Time	Portions For Serving Period					
		11:00 am	51 servings (3 pans)					
		11:30 am	51 servings (3 pans)					
		12:00 pm	51 servings (3 pans)					
		12:30 pm	51 servings (3 pans)					
		1:00 pm	51 servings (3 pans)					

Recipe: Steamed Frozen Broccoli

Name of Recipe: Steamed Frozen Broccoli

Meal Components: Dark green vegetable

Ingredient	Weight	Measure	Directions
Broccoli spears or cut broccoli	2 ½ lbs	1 block	1. Place 1 frozen broccoli block in 2-inch perforated pan. DO NOT cover pan.
OR Broccoli spears or cut broccoli, IQF	2 ½ lbs		 Place pan in steamer and steam until tender or al dente. CCP: Heat to 135 °F or above. Cooking time should be monitored and recorded on the <i>Time Standard/Batch Cooking Preparation Form</i>.
			 Broccoli should be vibrant green in color CCP: Hold and serve at 135 °F or above.

Time Standard: Steamed Frozen Broccoli

Activity	√	Time in Minutes
Pre-preparation: Assembling equipment and ingredients		
Preparation: Combining ingredients, mixing, panning		
Cook: Cooking to the required safe internal temperature		
Set up: Place in non-perforated pan for serving line placement		
Cleaning		
Total time for activity:		

Batch Cooking Preparation Form: Steamed Individually Quick Frozen (IQF) Broccoli

Based on your activity results, calculate the time you would start batch cooking 2 pans of frozen steamed broccoli for each serving period (4 lbs per pan).

Forecasted Amount:	19	190, ½ cup servings		
Servings per Pan:	19	19 servings per 2-inch full-size pan		
Number of Pans Needed:		For steaming: 10 2-inch full-size perforated pans for 190 servings For serving: 10 2-inch full-size non-perforated pans for 190 servings		
Batch Cooking Start Time		Serving Period Start Time	Portions For Serving Period	
		11:00 am	38 servings (2 pans)	
		11:30 am	38 servings (2 pans)	
		12:00 pm	38 servings (2 pans)	
		12:30 pm	38 servings (2 pans)	
		1:00 pm	38 servings (2 pans)	

ASK:

- (Alternate between Teams) What was the preparation and cooking time for fresh broccoli? What was the total time required for your recipe? What would be your start time for batch cooking your first pan of broccoli?
- (Alternate between Teams) What was the preparation and cooking time for frozen broccoli? What was the total time required for your recipe? What would be your start time for batch cooking your first pan of broccoli?

FEEDBACK: Make the point that even though the product is the same, different forms require different preparation and cooking times.

ASK: What did you learn by doing this activity? Please write your comments and observations in the chatbox or raise your hand.

FEEDBACK: Possible answers may include:

- Batch cooking provides a better, higher quality product.
- Even though the product was the same, fresh and frozen broccoli require different preparation and cooking times.
- Knowing the preparation and cooking time contributes to a less stressful kitchen environment.
- Planning ahead helps to prevent problems that may arise during food production.
- Planning ahead and preparing batch cooking for service ensures the first and last student in line receives a quality school meal.

SHOW SLIDE: Lesson 2: Reflections

SAY: During this lesson, we discussed planning for batch cooking. To be successful at batch cooking, the school nutrition team must plan ahead, review the daily production schedule, and develop good communication skills between the front of the house and back of the house. The back of the house cook needs to know how long it will take for the product to be cooked and prepared for service. The front of the house server needs to notify the cook in advance if product levels are running low. This shared task is key to successful batch cooking.

ASK: Are there any questions related to the topics we just covered?

DO: Invite them to ask questions by posting to the chat or raising their virtual hand. Answer any questions the participants may have before moving on to the next lesson.

SAY: Think back to the **E-STAR SMART Goals and Action Plan Framework and Process** we reviewed in the previous training. We will use a few minutes to allow you an opportunity to capture any notes or information you may want to recall later to assist you with identifying a strategy or activity to improve meal quality or student perception.

DO: Allow participants approximately 5 minutes to complete the reflection sheet.

Lesson 2: Reflection Sheet

Spend some time reflecting on the ideas and thoughts from Lesson 2 and what "take-aways" you want to recall later to assist with identifying a strategy or activity to improve meal quality or student perception.

Lesson 3: Organizing Workplace, Equipment, and Ingredients Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials	
Objective: Discuss the benefits of practicing mise en place when following a standardized recipe.				
20 minutes	 Introduction <i>Mise en Place</i> Using proper equipment, ingredients, and steps 	 Discuss: Benefits of <i>mise en place</i> Importance of using the proper resources Facilitate the <i>Mise en Place</i> Activity: Grilled Chicken Salad activity 	 Training Manual 	
Objective: E foodservice		of using only approved, commerc	cial grade equipment in school	
5 minutes	 Commercial Grade Equipment 	 Discuss approved, commercial grade equipment 	 Piece of small equipment (e.g., chef's knife) with the National Sanitation Foundation® logo 	
Objective: D	iscuss the importar	nce of using measures and weigh	ts in recipes.	
10 minutes	 Measures and Weights Equipment and Methods 	 Discuss: Measures and weights Scales and watch video demonstration How using appropriate equipment and technique impacts nutrition integrity 	 Training Manual 	
Objective: Describe the importance of organizing workspace, equipment, and ingredients to work smarter not harder.				
5 minutes	 Organization Skills for Increased Productivity and Work Simplification 	• Discuss why the overall organization of workspace, equipment, and ingredients improves workflow and saves resources (e.g., time).	 Training Manual 	
TOTAL: 40 r	ninutes			

Preparation Checklist

Instructions: The following task is optional.

Task	Person Responsible	Completion Date	✓
 Gather a chef's knife or another small piece of equipment, with NSF® (National Sanitation Foundation) Certification. 	Instructor		

Lesson 3: Organizing Workplace, Equipment, and Ingredients

SAY: Welcome to Lesson 3: Organizing Workspace, Equipment, and Ingredients. During this lesson, we will discuss the importance and benefits of organizing your workspace, equipment, and ingredients and using the proper equipment and steps necessary to follow standardized recipes. We will also look at organizing workspace, equipment, and ingredients to work smarter, not harder.

Objective: Discuss the benefits of practicing *mise en place* when following a standardized recipe.

SHOW SLIDE: Benefits of Practicing Mise en Place When Following a Standardized Recipe

SAY: A well-organized cook saves time and energy by assembling all ingredients and equipment before starting food preparation. Professional chefs use the French term *mise en place* (meez-un-plahss), which means to put in place, to describe assembling ingredients and utensils. It describes a series of meticulous steps in the food preparation process. *Mise en place* is a collection of good work habits. It takes planning, effort, and practice to develop any habit.

Best Practice/Strategy: A successful manager views the food preparation process as a whole and identifies the necessary steps for an efficient and organized approach.

SHOW SLIDE: Mise en Place

SAY: *Mise en place* also refers to a state of mind. Meaning, it is important to anticipate and plan for situations that could arise during food production. Hazard Analysis Critical Control Points (HACCP) are a great example of this state of mind since they are based on being proactive and thinking ahead. HACCP also includes corrective action—what to do when something goes wrong. Proactive food production is like proactive food safety programs. Thinking ahead, knowing culinary techniques, and being a well-organized cook reduces stress in the kitchen and helps staff easily solve problems that could arise during food production.

ASK: Take a minute to think of your answer(s) to this question: What are some benefits of practicing *mise en place*?

DO: Instruct participants to write their answers into the chatbox.

SAY: In the bottom center of your screen, you should see the "Chat" feature. If it is not already open, please open your chatbox and write one answer to our question: What are some benefits of practicing mise en place?

DO: Read responses as they appear in the chatbox.

FEEDBACK:

- Leads to happier employees due to less stress in their jobs
- Provides a cost-effective approach for food, supplies, and labor
- Helps to identify if all ingredients are available before beginning recipe preparation
- Helps to identify the availability of the utensils and equipment

SHOW SLIDE: Mise en Place: Grilled Chicken Salad Recipe

Activity: Mise en Place: Grilled Chicken Salad Recipe

SAY: Now, we are going to complete an activity about applying mise en place when using the Grilled Chicken Salad recipe, we looked at previously. You will work in mentoring breakout groups to write down a mise en place list of equipment, ingredients, and steps needed to prepare this recipe. As soon as you are in your breakout rooms, quickly assign a spokesperson. This person will be responsible for representing your group's ideas when you return to the main group. You will have about 7 minutes to complete the activity.

DO: Divide participants into their mentoring teams. Direct participants to the **Mise en Place: Grilled Chicken Salad Recipe** handout and the worksheet in the Training Manual. Launch the breakout rooms. After about 7–10 minutes have the groups return from their breakout rooms. Call on each group to have their spokesperson share a few of their responses. Use the Zoom share screen whiteboard feature to list responses while groups are sharing.

Mise en Place Activity: Grilled Chicken Salad Recipe

Name of Recipe: Grilled Chicken Salad

Yield: 25 Salads

Meal Components: 2.5 oz meat/meat alternate; 1 ³/₆ cups dark green vegetable, ¹/₄ cup other vegetable, and ¹/₂ cup red/orange vegetable

Chicken filet, grilled, fully cooked	3 lb + 2 oz	50 each	CCP: No bare hand contact with ready-to-eat food.
			1. Thaw fully cooked chicken filets in the refrigerator overnight.
			 Slice thawed, grilled chicken breast into 4- to 6-inch long, equal strips (depending on size of filet).
			CCP: Hold at 41 °F or below.
Lettuce, Romaine, chopped	6 lb + 4 oz	3 gal + 3 qt +	CCP: No bare hand contact with ready-to-eat food.
		2 ¼ cup	3. Cut romaine head in half lengthwise through root end of lettuce. Rinse both halves thoroughly. Make at least 3 cuts lengthwise leaving the root intact. Then cut across to make 1-inch dices. Rinse chopped romaine under running water and drain well. Salad spinner recommended. <i>Or use purchased, precut</i> <i>Romaine.</i>
			CCP: Hold at 41 °F or below.
Spinach, pre-washed	12 ½ oz	1 qt +	CCP: No bare hand contact with ready-to-eat food.
		2 ¼ cup	 Roll prewashed spinach into a tight roll on a cutting board. Using a chef's knife, make ½ inch slices. Toss into the Romaine.
			CCP: Hold at 41 °F or below.
Cucumber, sliced	2 lb + 5 ½ oz	1 qt + 2 ¼ cup	CCP: No bare hand contact with ready-to-eat food.

			5. Wash cucumber. Remove 4 strips of the cucumber peel with a vegetable peeler. Using a chef's knife, cut cucumber into ½ inch slices (4 ½ inch slices = ¼ c).
			CCP: Hold at 41 °F or below.
Tomato, cherry	1.56 lb	75 each	CCP: No bare hand contact with ready-to-eat food.
			6. Wash cherry tomatoes. Cut in half.
			CCP: Hold at 41 °F or below.
Carrots, shredded	1.56 lb	6 ¼ cup	CCP: No bare hand contact with ready-to-eat food.
Cheddar cheese, shredded	12 ½ oz	3 ¼ cup	 Assemble the salad in the appropriate salad container as follows:
			Fill the container with the romaine/spinach mixture. Starting at the left corner and working clockwise, top romaine/spinach mixture with:
			1/4 cup sliced cucumber
			1/4 cup shredded carrots
			6 cherry tomato halves
			1/8 cup shredded cheese
			Place 4–6 strips of chicken in the center of salad. Serve with a variety of salad dressings.
			CCP: Hold and serve at 41 °F or below.

Grilled Chicken Salad Recipe Mise en Place

Instructions: Create a mise en place list to prepare the Grilled Chicken Salad recipe.

Equipment	
Dry ingredients	
Ingredients from cooler	
Ingredients from freezer	
Tasks	

Grilled Chicken Salad Recipe Mise en Place Answer Key

Instructions: Create a mise en place list to prepare the Grilled Chicken Salad recipe.

Equipment Dry ingredients	 Chef knife Cutting board Scale Salad spinner (recommended) or colander Vegetable peeler Salad containers None	
Ingredients from cooler	 Lettuce, Romaine, chopped Spinach, pre-washed Cucumber, sliced Tomato, cherry Cheddar cheese, shredded 	
Ingredients from freezer	Chicken filet, grilled, fully cooked	
Tasks	 Thaw fully cooked chicken filets in the refrigerator overnight. Slice thawed, grilled chicken breast into 4- to 6-inch long, equal strips (depending on size of filet). 	
	3. Cut romaine head in half lengthwise through root end of lettuce. Rinse both halves thoroughly. Make at least 3 cuts lengthwise leaving the root intact. Then cut across to make 1-inch dices. Rinse chopped romaine under running water and drain well. Salad spinner recommended. <i>Or use purchased, precut Romaine.</i>	
	4. Roll prewashed spinach into a tight roll on a cutting board. Using a chef's knife, make ½ inch slices. Toss into the Romaine.	
	5. Wash cucumber. Remove 4 strips of the cucumber peel with a vegetable peeler. Using a chef's knife, cut cucumber into ¼ inch slices (4 ¼ inch slices = ¼ c)	
	6. Wash cherry tomatoes. Cut in half.	
	7. Assemble the salad in the appropriate salad container as follows:	
	Fill the container with the romaine/spinach mixture. Starting at the left corner and working clockwise, top romaine/spinach mixture with:	
	• ¹ / ₄ cup sliced cucumber	
	 ¼ cup shredded carrots 	
	6 cherry tomato halves	
	• ¹ / ₈ cup shredded cheese	
	Place 4–6 strips of chicken in the center of salad. Serve with a variety of salad dressings.	

Best Practice/Strategy: Thinking ahead, knowing culinary techniques, and being a wellorganized cook reduces the stress in the kitchen and helps staff easily solve problems that could arise during food production.

Objective: Explain the purpose of using only approved, commercial grade equipment in school foodservice kitchens.

SHOW SLIDE: Approved, Commercial Grade Equipment

SAY: Having the proper equipment for food production is critical to a job well done. Only commercial grade large and small equipment should be used in a commercial kitchen. Take a minute to think about this true or false question then use your reaction buttons to respond—thumbs up for true and thumbs down for false.

Ask: It is safe to make a chill stick out of a plastic two-liter soda container or store food in a leftover one-gallon ranch dressing container?

FEEDBACK: The participants should answer false (thumbs down) to this question.

ASK: Why it is not safe to make a chill stick out of a plastic two-liter soda container or store food in leftover one-gallon ranch dressing containers? Please respond in the chatbox.

FEEDBACK: This type of plastic is single-use only and cannot be sanitized after use. Consequently, it is considered a food safety hazard.

DO: Show a picture of small pieces of equipment(s), e.g., chef's knife, with the NSF® (National Sanitation Foundation) logo.

Instructor's Note: Optional--You may also show a small piece of equipment, in addition to or in lieu of the images on the slide.

SAY: This logo stands for the National Sanitation Foundation. Companies pay a fee for the NSF to certify that their product is easily cleaned, safe for food to touch, non-toxic, and non-absorbent. Using unapproved, non-commercial tools and equipment could be a food safety hazard in your facility.

DO: Show an actual piece of equipment, if available.

Best Practice/Strategy: Having the proper equipment for food production is critical to a job well done. Only commercial grade large and small equipment should be used in a commercial kitchen.

Objective: Discuss the importance of using measures and weights in recipes.

SHOW SLIDE: Importance of Measures and Weights in Recipes

SAY: As we have discussed, standardized recipes are used in school foodservice to ensure that

consistent, quality products are produced in the amounts or portions that are needed for service. To get the desired recipe results, ingredients must be weighed or measured correctly. Recipes indicate the amount of each ingredient to use in two ways—by volume and weight. Weighing is faster, easier, and more accurate than measuring ingredients by volume. There is less chance for error if ingredients are weighed. This is why weighing ingredients is considered the more accurate measurement of the ingredient. For example, you do not have to worry if you leveled the flour correctly, packed the brown sugar, or did not put enough shredded cheese on your chef salad, because weighing ingredients will eliminate errors and speed production.

Electronic and spring scales are used in school nutrition to weigh ingredients and determine correct portion sizes, such as portioned meats and cheeses. Let's watch a video about using the appropriate equipment, a scale, and methods to measure an ingredient in the grilled chicken salad, cheese.

DO: Play scale video.

SHOW SLIDE: Importance of Using the Correct Volume or Weight

SAY: Another important reason for using the correct volume or weight is nutrition integrity. In other words, ensuring the nutrient analysis of the standardized recipe is accurate.

Use your reaction buttons like emojis and/or post to the chatbox how you would feel or what you would think about a restaurant, if you purchased a meal that was advertised as low in saturated fat and calories, only to find out this was not true.

DO: Acknowledge and affirm participants' visual and written reactions to the question.

SAY: The nutrient analyses of school nutrition recipes and menus published for the community must be accurate. For the nutrient information on the recipe to be accurate, ingredients must be weighed or measured correctly each time the recipe is prepared.

Best Practice/Strategy: In order for the nutrient information on the recipe to be accurate, ingredients must be weighed or measured correctly each time the recipe is prepared.

Objective: Describe the importance of organizing workspace, equipment, and ingredients to work smarter not harder.

SHOW SLIDE: Importance of Organizing Workspace, Equipment, and Ingredients

SAY: Organizing your overall kitchen workspace is another major aspect of practicing mise en place. Taking time to plan and organize your overall workspace helps to improve workflow, streamline food production, and increase efficiency which helps to eliminate any unnecessary steps so you can work smarter, not harder. It is estimated the average cook takes 14,000 steps per day. For example, making sure film wrap, aluminum foil, and parchment paper are stored in easily accessible locations saves steps and time, which improves workflow, streamlines food

production, and increases efficiency in a kitchen.

SHOW SLIDE: Ideas or Suggestions

ASK: What are some other ideas or suggestions for improving workflow, streamlining food production, and increasing efficiency in a kitchen?

DO: Invite participants to share their ideas in the chatbox. Give a minute for participants to respond then read some of the posted responses and invite participants to share any additional comments verbally if time allows.

FEEDBACK: Here are some possible responses.

- Rearranging work tables
- Increasing use of rolling bun pan racks and/or carts
- Storing film wrap, aluminum foil, and parchment paper in easily accessible locations (e.g., parchment paper could be stored in a sheet pan located on top or bottom of rolling bun pan rack)
- Removing unnecessary items from dry storage and table drawers
- Using food processing equipment (e.g., sectionizers, slicers, food processors)
- Reorganizing storage areas, including refrigerated and dry storage

SAY: Organizing your overall kitchen workspace to improve workflow, streamline food production, and increase efficiency is a major aspect of practicing mise en place in the kitchen. Applying mise en place when following a standardized recipe and when organizing your overall workspace, equipment and ingredients will help ensure that quality and appealing meals are prepared in an efficient and cost-effective manner.

During this lesson, we discussed the importance of practicing mise en place and using the proper equipment and methods needed to follow standardized recipes, including the importance of using only approved commercial grade equipment in school foodservice kitchens. We also discussed organizing your workspace, equipment, and ingredients will help you work smarter, not harder.

ASK: Are there any questions related to the topics we just covered?

DO: Invite them to ask questions by posting to the chat or raising their virtual hand. Answer any questions the participants may have before moving on to the next lesson.

SAY: Think back to the **E-STAR SMART Goals and Action Plan Framework and Process** we reviewed in the previous training. We will use a few minutes to allow you an opportunity to capture any notes or information you may want to recall later to assist you with identifying a strategy or activity to improve meal quality or student perception.

DO: Allow participants approximately 5 minutes to complete the reflection sheet.

Lesson 3: Reflection Sheet

Spend some time reflecting on the ideas and thoughts from Lesson 3 and what "take-aways" you want to recall later to assist with identifying a strategy or activity to improve meal quality or student perception.

Lesson 4: Using Culinary Skills to Create Quality and Appeal Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials			
-	Objective: Identify how colors, textures, and shapes contribute to positive school meal experiences.					
15 minutes	 Appetizing and Varied Food Presentation 	 Discuss: Food Presentation Presentation is Critical Colorful Serving Overcooked Food Texture Describe Menu Items Facilitate Describe Menu Items activity Discuss Shapes, Shape Variety, Simplicity, Height, Self-Serve Packaging Discuss Positive Meal Experience 	• Training Manual			
Objective: I	Objective: List three common cooking methods.					
5 minutes	 Common Cooking Methods 	 Discuss dry heat, moist, heat, and combination heat cooking methods 	 Training Manual 			

Time Allowed	Торіс	Activity	Materials
Objective: I	Demonstrate how to	o properly hold a knife and food	for fabrication.
10 minutes	 Introduction How to Hold a Knife Tips for Cutting with a Knife 	 Demonstrate: How to hold a knife and food items How to anchor a cutting board 	Training ManualKnife Video, Part 1
	 Nescribe proper kni Knife Maintenance Cutting With a Knife Garnishing 	 Demonstrate: How to sharpen and hone a knife How to cut melon with a knife The chiffonade technique Facilitate the Chiffonade activity 	 Knife Video, Part 2 Cantaloupe Video Chiffonade Video
TOTAL: 45 minutes			

Lesson 4: Using Culinary Skills to Create Quality and Appeal

INSTRUCTOR: Child Nutrition Expert

Objective: Identify how colors, textures, and shapes contribute to positive school meal experiences.

SHOW SLIDE: Colors, Textures, and Shapes Contribute to Positive Meal Experiences

SAY: Welcome to Lesson 4: Using the Right Culinary Technique to Create Quality and Appeal. Presenting food creatively can turn a dull-looking foodservice line into a bountiful marketplace of healthful and appetizing eating opportunities. Students have the same impressions as most of us when deciding what they will select as they come through the serving line. By ensuring meals are presented in an appealing manner, the school nutrition manager and staff increase the likelihood of students returning to the cafeteria.

ASK: What are some first impressions that may influence a student's decision to select a healthy school meal?

DO: Provide the participants a few moments to write down their thoughts.

ASK: Who would like to share a few of the ideas you have written down?

SAY: Please feel free to write one of your thoughts in the chatbox (located at the center bottom of your screen) or raise your hand (center bottom of screen reaction buttons) and, when called on, open your microphone (left bottom of screen) to share one of your thoughts.

FEEDBACK:

- The way the food looks on the serving line
- If a friend makes a positive comment, like, "This is my favorite school lunch."

SAY: Think of food presentation as art. Well-planned menus take into consideration the principles of food presentation such as color, texture, and shapes. Remember that no matter how skillful you become at planning menus, the final presentation is a critical last step. You have certainly heard the phrase "we eat with our eyes first." Eye appeal is key.

SHOW SLIDE: Colorful Serving

SAY: In the next few slides, you will see ways that the school nutrition team can present food to increase eye appeal and stimulate appetite.

Best Practice/Strategy: Using color to increase eye appeal is one of the basic principles of menu planning.

SHOW SLIDE: Texture

SAY: Texture is one of the most important attributes used by consumers to assess food quality. Think about how eating a taco gives your mouth a sensation of different textures. When you are developing a menu, think about terms you can use to describe the texture in menu items to help students perceive them as appealing.

By combining crisp foods with soft foods, or vice versa, we get great presentation and sensory enjoyment. Of course, you don't have to combine the two textures in the same dish, but both should exist on the menu. When we go into a restaurant and order a green salad to go with our entrée, it's often because we want a mixture of textures, though that particular thought may be more subconscious than conscious.

ASK: Can you think of additional ways eye appeal can be impacted? What has worked well at your school?

DO: Ask attendees to respond with their ideas and experiences using the chatbox or by unmuting and speaking.

SHOW SLIDE: Describe Menu Items

SAY: In the next activity, as a group, we will describe common menu items. The menu items will appear on the slide. For example, when you see chicken wrap on the slide, the menu description may be crunchy Hawaiian chicken wrap.

Activity: Describe Menu Items

SAY: On the slide, we have four menu items listed. Take a minute to think independently. Create one interesting and enticing name for two of these listed items, and describe what it would look like on the plate.

DO: Tell participants whose last name starts with A–M to take the first two items on the slide and participants whose last names start with N–Z take the second two items on the slide. Allow the participants 2–3 minutes of independent time to think. Then, read the menu items on the slide one at a time.

ASK: Who would like to share their name and vision of the first item? (Go through each item in a similar method.)

DO: Ask the participants to share a few of their responses using the chat feature or open mic.

FEEDBACK: There is no right or wrong answer; below are some examples.

Menu Items

Vegetable WrapCrunchy Hawaiian Vegetable WrapTofu ScrambleSouthwest Tofu Scramble

 Fish
 Herb Baked Fish with Fresh Lemon Slices

 Sweet Potatoes
 Locally Grown Sweet Potatoes with a dash of Cinnamon

Instructor's Note: The purpose of this activity is to illustrate how a menu description can help to entice the selection of an item.

SHOW SLIDE: Shapes Variety

SAY: The next presentation principle involves shapes in food. Have you ever thought about how combining shapes makes food more appealing? We can add visual appeal by combining natural shapes or creating new shapes.

ASK: How can combining shapes make food more appealing?

DO: Allow participants to share their answers using the chatbox or by unmuting.

FEEDBACK: Participant answers may vary.

SAY: A variety of shapes gives the impression of a variety of foods. Children will look at a sandwich cut in a different way as a different food.

SHOW SLIDE: Simplicity

SAY: Simple, clean lines and shapes are most pleasing to the eye. Too much food on a plate or a tray that is too small causes the food to look messy and unappetizing.

SHOW SLIDE: Self-Serve Packaging

SAY: Pre-prepared or prepackaged salads are great merchandising options for schools. Healthy, tasty, and attractive prepackaged salads offer students variety and choices. Presentation makes a big difference in selling prepackaged meals. Part of the challenge is to showcase food products in an appealing way. This slide shows a relatively simple way to make a variety of salads and display them in an appealing manner.

SAY: You will find the Principles of Good Food Presentation handout that highlights additional ways to improve presentation. Feel free to review this handout as you see fit and capture anything you would like to remember.

Principles of Good Food Presentation

Good food presentation is important. It allows you to grab your students' attention as soon as they enter the serving area. Good food presentation increases eye appeal and stimulates an appetite. Here are some tips to keep in mind as you plan your school lunch presentation.

Increase Visual Appeal

Light

• Make sure serving areas are well lit. Consider under-counter or track lighting to enhance the appearance of foods.

Color

- Avoid using poor-quality ingredients.
- Proper cooking is a must! It ensures bright, crisp colors.
- Garnish the food.
- Plan the fruits and vegetables in your menus to include at least two colors.

Shapes

- Add interest by combining natural shapes or creating new shapes.
- Vary the cuts in the food and shapes of food on the line.
- Surprise customers with unexpected shapes—cut food into triangles instead of squares, diamonds instead of rectangles.

Simplicity

- Place garnish in the center, side edge, or corner(s) of the pan.
- Clean lines attract the eye and focus the attention.
- Line decorations should enhance the food, not compete with it.

Height

- Keep serving pans full, making it easy for students to see the complete array of options.
- Add height to meals with other ingredients. For example, adding shredded lettuce to a sub sandwich adds little cost but increases appeal to students.
- Choose containers that add height to the line.

Principles of Good Food Presentation, continued

Stimulate the Appetite

Senses

- Make food more appealing by allowing students to experience it using their five senses.
 - Sight: seeing beautifully presented food encourages students to select and try it.
 - Smell: smelling the aroma enhances the attraction to food and increases the anticipation to taste it.
 - Taste: tasting fresh, well-prepared food provides positive experiences physically and emotionally.
 - Touch: feeling a variety of textures and temperatures enhances the enjoyment of the meal.
 - Hearing: the sound of crisp, crunchy food makes it fun to eat.

Texture

- Makes food fun by providing finger foods that add sensory stimulation and make sample tasting easy.
 - Choose textures that complement each other.
 - Contrast textures in a dish.
 - Weave texture through the menu.

Vary the Temperatures of Foods

• Serve hot vegetable soup with a cool, crisp green salad, and crackers.

Use Specialty Bars for Fun

• Use specialty bars to expand your cafeteria and make it a fun and ever-changing eating scene.

Other Quick Tips

- Put fresh fruits and vegetables to the front of the serving line. By offering these selections first, students will select more instead of racing past them once they pick up their hot item.
- Pre-portion cooked vegetables and place the vegetables so students can help themselves.
- Display whole fruits in baskets near the register. Add a sign advertising these choices.
- Add static clings to the sneeze guard to remind students to select fruits and vegetables.
- Jazz up the names of the menu items and add signage to your serving line.
- Display a sample meal, including salad and vegetable dish, for students to see before entering the line to make their selections.
- Offer tasting samples of new items as students enter the serving line or pass them around the lunchroom while they are eating, so they can taste test the fruit or vegetable before it is offered on the line. Promote these as "free samples."

Objective: List three common cooking methods.

SHOW SLIDE: Overcooked Food

SAY: Let's look at something else that can influence appeal. You can see from this slide how overcooking can change the color and appearance of food.

Matching ingredients with the correct cooking method will help to create a quality product. For example, heat causes proteins and starches to thicken, sugars to caramelize, water to evaporate, and fats to melt. Using the incorrect cooking method could spell disaster.

SHOW SLIDE: Three Cooking Methods

DO: Instruct participants to turn to the **Cooking Methods** handout in the Training Manual. Explain the three cooking methods and the medium typically used to achieve the desired outcome for each method. Provide participants with examples of foods that are cooked using each method.

DRY-HEAT METHODS	MEDIUM	EQUIPMENT
Broiling	Air	Overhead broiler
Grilling	Air	Grill
Roasting	Air	Oven, combi oven
Baking	Air	Oven, combi oven
Sautéing	Fat	Fat tilt skillet (May sauté using sheet pan in an oven)
Stir-frying	Fat	Tilt skillet, steam-jacketed kettle, wok
Pan-frying	Fat	Stovetop, tilt skillet
Deep-frying	Fat	Deep fat fryer
MOIST-HEAT METHODS	MEDIUM	EQUIPMENT
Poaching	Water or other liquid	Stovetop, oven, steam-jacketed kettle, tilt skillet
Simmering	Water or other liquid	Stovetop, steam-jacketed kettle, tilt skillet
Boiling	Water or other liquid	Stovetop, steam-jacketed kettle, tilt skillet
Steaming	Steam	Convection steamer, combi oven
COMBINATION- METHODS	HEAT MEDIUM	EQUIPMENT
Braising	Fat, then liquid	Oven, combi oven, tilt skillet
Stewing	Fat, then liquid	Oven, combi oven, tilt skillet

Cooking Methods

SHOW SLIDE: Common Cooking Methods in School Nutrition

SAY: Most items on a school nutrition menu are baked, steamed, or roasted. It is important we cook foods to safe internal temperatures and do not overcook products, which will make them tough, dry, and distasteful. This is especially true for items pre-cooked by the manufacturer.

For example, raw poultry should be cooked to an internal temperature of 165 °F. However, when heating precooked chicken tenders, you should follow the manufacturer's instructions to ensure the safety and quality of the tenders. Due to temperature loss between the oven and the serving line, some schools choose to heat manufactured food to higher temperatures than required. This practice is acceptable, but make sure the product is not overcooked and food quality is not lost.

INSTRUCTOR: Chef

Objective: Demonstrate how to properly hold a knife and food for fabrication

SHOW SLIDE: How to Accomplish Visual Appeal?

SAY: Let's look at how we accomplish the visual appeal that we have been talking about. Much of it will be accomplished with a very important culinary technique—knife skills. Please turn to the Choosing the Right Knife handout in your Training Manual.

SHOW SLIDE: Choosing the Right Knife

DO: Use the **Choosing the Right Knife** handout to discuss the various types of knives and uses for each knife type.

Choosing the Right Knife

BONING

- Features a straight, narrow blade with a heavy spine
- Blade size: 8" to 12"
- Used to cut, section, and trim larger pieces of meat

BREAD

- Features a long, serrated edge blade
- Blade size: 7" to 10"
- Used to slice breads and other items with thick, hard crusts

CARVING

- Features a long, thin edge with either a serrated or granton blade
- Blade size: 8" to 14"
- Used to carve meats, such as roast and turkey

CHEF

- Features a wide blade that tapers at the tip
- Blade size: 6" to 14"
- Used to chop, dice, mince, and slice a wide variety of foods

Choosing the Right Knife (continued)



CLEAVER

- Features a long, wide straightedge blade
- Blade size: 5" to 8"
- Used to chop thick cuts of meat or break down poultry



SHEARS

- Features two short blades, mirroring scissors
- Blade size: Varies
- Used to snip herbs; cut fresh cuts of meat, poultry, or fish; and chop fruits and vegetables

PARING

- Features a short, straight edge or curved blade
- Blade size: 2" to 4"
- Used to peel, core, slice, or mince smaller foods, such as fruits and vegetables

UTILITY

- Features a straight or serrated edge blade
- Blade size: 4" to 7"
- Used to chop, dice, slice, and mince a variety of foods

SHOW VIDEO: Knife Video, Part 1

Instructor's Note: This video demonstrates the proper culinary technique using a knife and reflects the scripting and illustrations below.

DO: Demonstrate how to hold a chef's knife as shown in the pictures.



SAY: It is important for all culinarians to know how to properly use a chef's knife. The most common grip is to hold the handle with the last three fingers while gripping the blade between the thumb and index finger. Do not place your index finger along the top of the blade of the knife.

Best Practice/Strategy: The most common grip is to hold the handle with the last three fingers while gripping the blade between the thumb and index finger. Do not place your index finger along the top of the blade of the knife.

DO: Place your index finger on top of the blade to demonstrate what not to do. Let each participant individually demonstrate the proper way to hold a chef's knife and help participants make corrections as needed.

SAY: The opposite hand is used to hold the food item. It is important that you cannot see fingernails on this hand. If you can see fingernails, there is an increased risk of cutting yourself. Always keep your non-cutting hand in a claw on top of the product.

ASK: Ask the participants to hold up their non-cutting hands and show their claw.

SAY: Knives should always be used with a cutting board. It is important to never cut on stainless steel tables because it will dull your knife.

Best Practice/Strategy: Knives should always be used with a cutting board. It is important to never cut on stainless steel tables because you will dull your knife.

Cutting Boards		
If your cutting board is not designed with rubber edges to hold it in place, be sure you secure your cutting board with a damp, sanitized terry or disposable cloth or rubberized shelf liner.	If you are using a color-coded cutting board system for food safety, be sure you have paired the correct color with the correct food. For example, a green cutting board should be used with fresh produce.	

Best Practice/Strategy: If your cutting board is not designed with rubber edges to hold it in place, be sure you secure your cutting board with a damp, sanitized terry or disposable cloth or rubberized shelf liner.

Best Practice/Strategy: If you are using a color-coded cutting board system for food safety, be sure you have paired the correct color with the correct food. For example, a green cutting board should always be sued with fresh produce.

Objective: Describe proper knife techniques.

SHOW VIDEO: Knife Video, Part 2

Instructor's Note: This video demonstrates the proper culinary technique for sharpening, honing, and cutting with a knife, and reflects the scripting and illustrations below.

SAY: Before fabricating any foods, especially produce, make sure your knife is sharp. A dull knife will not leave a smooth, clean edge on the food. A dull knife may crush and damage food, reducing eye appeal and product quality. School nutrition operations may use a knife sharpening service, electric knife sharpening equipment, or manual knife sharpening equipment to sharpen knives.

Best Practice/Strategy: Before fabricating any foods, especially produce, make sure your knife is sharp. A dull knife will not leave a smooth, clean edge on the food. A dull knife may crush and damage food, reducing eye appeal and product quality.

Instructor's Note: Some school nutrition personnel may be trained to sharpen knives using a whetstone. Please note that untrained personnel should not attempt to sharpen knives using a whetstone. Improper use of the whetstone could result in knife blade damage.

DO: Demonstrate how to sharpen a knife with a knife sharpener. Then, show participants the knife steel.

ASK: Does anyone know what this is called? Do you know why we use it?

DO: Ask participants to respond using the chat or by unmuting.

SAY: This is a knife steel. It does not sharpen a knife. A steel is used to hone, or straighten, the blade edge after sharpening or in between sharpening for longer use.

DO: Use the illustration as a guide and demonstrate how to properly use a knife steel to hone the blade.



SAY: After you sharpen and hone your knife, you should always wash it to remove debris. However, you should not clean or sanitize knives in a commercial dishwasher. The heat and chemicals may damage the handle and the blade. Always clean and sanitize knives using the 3-compartment sink method. In fact, you should wash, rinse, and sanitize all utensils and cutting boards immediately after each use. It is also important to remember knives should never be left in the sink unattended because it is an employee safety hazard.

Best Practice/Strategy: After you sharpen and hone your knife, you should always wash it to remove debris. However, you should not clean or sanitize knives in a commercial dishwasher. The heat and chemicals may damage the handle and blade. Always clean and sanitize knives using the 3-compartment sink method. In fact, you should wash, rinse, and sanitize all utensils and cutting boards immediately after each use. It is also important to remember knives should never be left in the sink unattended because it is an employee safety hazard.

SAY: Now, I am going to demonstrate the proper way to use a chef's knife by slicing and dicing a cantaloupe. When fabricating fresh produce, be sure to rinse all produce before using it. Best practice is to wear single-use, disposable gloves when handling ready-to-eat foods, such as produce.

Best Practice/Strategy: Wear single-use, disposable gloves when handling ready-to-eat foods, such as produce.

Instructor's Note: Mention to participants that millions of Americans suffer from latex allergy. The allergens (latex proteins) can be transferred from latex gloves to food. As a precaution, purchase non-latex containing single-use, disposable gloves.

Best Practice/Strategy: The allergens (latex proteins) can be transferred from latex gloves to food. As a precaution, purchase non-latex containing single-use, disposable gloves.

SHOW VIDEO: Cantaloupe Video

Instructor's Note: This video demonstrates the proper culinary technique for slicing and dicing a cantaloupe and reflects the scripting and illustrations below.



Slice A Cantaloupe

Remove each end of the melon using a chef's knife.

After removing both ends of the fruit, place cut side down. Cut away skin while turning 20 degrees after each cut.

Cut the melon in half. Using a large spoon, remove and discard the seeds of the fruit.

Tip: Use a 4" or 6" pan as a tabletop garbage can for seeds and rind.

The cantaloupe may be sliced into wedges and served.



If a dice cut is preferred, after slicing, turn the fruit one-quarter turn and slice again into 1" to 2" cubes.

SAY: Using the right culinary technique—in this case, the correct knife for the task at hand—will result in a high-quality product that is more acceptable and appealing to students. In addition, using the correct technique will make your job easier (e.g., using a chef's knife versus a paring knife to cut the cantaloupe) and save time during food production.

DO: Fill a portion cup with the diced cantaloupe. Use a damp, sanitized terry cloth or disposable towel to wipe down the cutting board for the next demonstration.

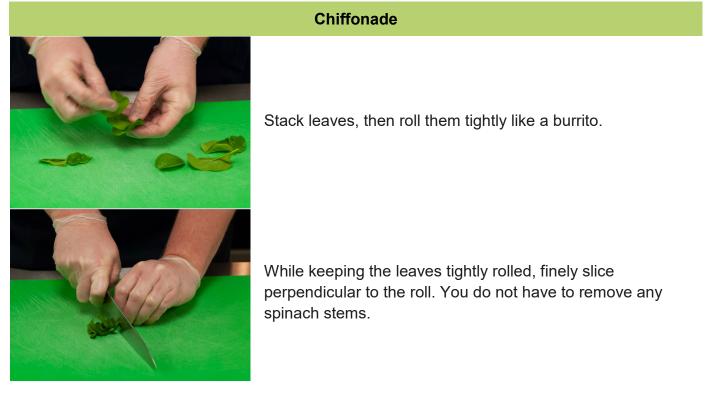
Garnish the cantaloupe with 3–4 red seedless grapes.

SHOW VIDEO: Chiffonade Video

Instructor's Note: This video demonstrates the proper culinary technique to chiffonade spinach and reflects the scripting and illustrations below.

SAY: Another culinary technique that can be used to garnish various recipes with fresh leafy greens is a chiffonade.

DO: Using a chef's knife and the following photos as a guide, demonstrate how to chiffonade spinach for use as a garnish. Be sure to wear single-use, disposable gloves.



SAY: It is a common belief that we experience food with our eyes before even tasting it. So, using garnishes is a great way to add color and increase the eye appeal of dishes served. For example, this chiffonade of spinach would be a great garnish for pasta and salad dishes. We'll be using it in the next lesson as part of a salad.

Best Practice/Strategy: Using garnishes are a great way to add color and increase the eye appeal of dishes served.

ASK: Are there any questions related to the topics we just covered?

DO: Invite them to ask questions by posting to the chat or raising their virtual hand. Answer any questions the participants may have before moving on to the next lesson.

SAY: Think back to the E-STAR SMART Goals and Action Plan Framework and Process we reviewed in the previous training. We will use a few minutes to allow you an opportunity to capture any notes or information you may want to recall later to assist you with identifying a strategy or activity to improve meal quality or student perception.

DO: Allow participants approximately 5 minutes to complete the reflection sheet.

Lesson 4: Reflection Sheet

Spend some time reflecting on the ideas and thoughts from Lesson 4 and what "take-aways" you want to recall later to assist with identifying a strategy or activity to improve meal quality or student perception.

Lesson 5: Delivering a Quality Product Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials		
Objective: D	escribe how the pr	inciples of food production imp	act food quality.		
10 minutes	 Quality Meal Service Food Quality and Performance Acceptability 	 Review Meal Quality and Acceptability: Best Practices Strategies 	Training Manual		
Objective: D	emonstrate the use	e of a quality scorecard to asses	ss school meals.		
20 minutes	• Quality Scorecard	 Discuss the importance of and how to use the quality scorecard Facilitate Using the Quality Scorecard for Cantaloupe and Chicken Salad activity Discuss the importance of appearance 	 Training Manual Cantaloupe picture Chicken Salad Video 		
Objective: C)rganize an appeali	ng serving line during meal serv	vice periods.		
15 minutes	 Serving Line Setup and Maintenance Portion Control During Service 	 Facilitate Serving Up Success activity 	Training Manual		
TOTAL: 45 minutes					

Lesson 5: Delivering a Quality Product

INSTRUCTOR: Chef

Objective: Describe how the principles of food production impact food quality.

SHOW SLIDE: Quality Meal Service

SAY: Quality is achieved by the actions we take during every step of preparation and service. Quality meal service relates to the entire school nutrition program, starting with the time the food is received at delivery and continuing to the time the customer leaves the dining room.

To ensure the highest quality product, establish quality standards to evaluate each menu item. Include quality standards as part of the standardized recipe and train all production staff on each standard. Determine actions in advance if a food item does not meet the quality standard, and identify strategies to reduce the possibility of similar situations in the future.

SHOW SLIDE: Food Quality and Performance Acceptability

SAY: We all know that managers cannot be in the kitchen all of the time. They are still ultimately responsible for the integrity of the program. Establishing and implementing quality standards ensures:

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

SAY: Please turn to the Meal Quality and Acceptability: Best Practice Strategies handout.

DO: Read the best practice strategy tips from the **Meal Quality and Acceptability: Best Practice Strategies** handout.

Menu Quality and Acceptability: Best Practice Strategies

Best Practice/Strategy: It is important to remember to use standardized recipes for accurate servings, portion sizes, and nutrition information applicable to your specific operation.

Best Practice/Strategy: It is important that managers determine in advance what is and is not an acceptable quality product and communicate the standards with the staff.

SAY: Throughout this entire workshop, we have discussed quality. Quality standards and product evaluation are important aspects of food and nutrition customer service. Food quality standards are the characteristics of food that are acceptable to consumers. This includes factors such as:

- Appearance (size, shape, and color)
- Texture or consistency
- Flavor and seasoning

SHOW SLIDE: Define Quality Scorecards

SAY: Using quality scorecards is an excellent way to evaluate food products for quality. A quality scorecard identifies characteristics of a product based on an established quality standard. As managers, you are encouraged to work with your staff to develop district-wide scorecards and to identify quality standards. It is the manager's responsibility to ensure deviation from the standard does not occur. ICN has provided samples of quality scorecards in your manual.

Objective: Demonstrate the use of a quality scorecard to assess school meals.

SHOW SLIDE: Use of a Quality Scorecard

SAY: Quality scorecards present the quality standard targets you should aim to meet when determining how the finished product should look and taste. Let's look at the standards listed on the quality scorecard. Turn to the **Quality Scorecard for Fresh Fruit and Fresh Fruit Menu Items** in your manual.

ASK: Can anyone name the quality standards we use when evaluating a food or beverage served in school meals?

DO: Ask participants to respond using the chatbox or by unmuting.

FEEDBACK: The major quality standard categories are:

- Appearance
- Texture or consistency
- Flavor
- Service temperature

SAY: Appearance refers to how the food should look when it is prepared according to a recipe. Texture or consistency is how the food should feel in the mouth and how it cuts. Flavor is how the food tastes, and service temperature refers to the ideal temperature for serving the food, which may be higher than the safe holding temperature for hot foods. Let's practice using a quality scorecard to assess cantaloupe, like one we just saw cut up in the last video.

SHOW SLIDE: Activity: Using the Quality Scorecard for Cantaloupe

Activity: Using the Quality Scorecard for Cantaloupe

DO: Direct participants to the **Quality Scorecard for Fresh Fruits and Fresh Fruit Menu Items** worksheet in the Training Manual. Show the picture of cantaloupe on the slide.

SAY: Take a minute to complete the Quality Scorecard for Fresh Fruits and Fresh Fruit Menu Items worksheet using this picture of the cantaloupe that was cut in the previous lesson. If you believe a statement does not apply to this product, or if it is something that can't be determined from a picture, select NA for not applicable.

Quality Scorecard for Fresh Fruits and Fresh Fruit Menu Items

DATE:	MENU ITEM:
PROUDLY PREPARED BY:	
QUALITY SCORED BY:	

When the food is ready to serve, use this Quality Scorecard to evaluate the quality. Mark YES when the food meets the standard and NO when it does not. Mark NA (Not Applicable) when a specific quality standard does not apply to the food being evaluated. Use the COMMENTS section to explain why a food does not meet a standard. Remember, if a food does not meet the quality standards, it should not be placed on the service line.

Quality Scorecard	Yes	No	Na	Comments
Appearance	-	-	-	
Color is typical of the ripe fruit(s).				
Color is fresh (not marred by discoloration from oxidation).				
Fruit pieces are similar in size.				
Fruit pieces are intact.				
Garnish is edible and appropriate for the dish.				
Texture Or Consistency				
Fruit is at the peak of ripeness.				
All pieces of the fruit have the same texture.				
Flavor				
Fruits have a pleasing, slightly sweet, ripe flavor.				
If seasonings have been used, they are detectable but not overpowering.				
Seasonings enhance the fruit flavor.				
If a dressing or sauce is used, it complements the fruit (mild, not overpowering).				
Service Temperature				
Chilled – 34 °F – 38 °F				

DO: Allow participants enough time to complete the **Quality Scorecard for Fresh Fruits and Fresh Fruit Menu Items** worksheet.

SAY: Let's go over your review of the quality scorecard, starting with appearance. Everyone, including children, eats with their eyes first. If the food does not look appealing, it is less likely to be selected.

DO: Ask participants to share their answers for each quality standard through chat or by unmuting. Time permitting, allow for further discussion of appearance, texture, flavor, and temperature. Reinforce the importance of keeping chilled, cut fruit out of the temperature danger zone.

SAY: We are going to bring everything we have learned about producing a quality meal together by looking again at the Grilled Chicken Salad that we used for our standardized recipe activity. To truly produce a quality meal, excellence must be achieved during every step of the foodservice process—receiving, storing, preparing, and serving food—all while using proper food safety practices. For this salad, let's look at the qualities that we are looking for in lettuce.

DO: Refer participants to the Lettuce Information Sheet, and briefly discuss it with the group.



Lettuce Information Sheet

Purchasing Specifications

Specification should state grade, type, size, and quantity. Lettuce should have a light to dark green color and be bright and crisp. Depending on variety and type, lettuce also may have a reddish to dark burgundy appearance on the outer leaves. Any variety or type of lettuce should have not more than 12% defects that make lettuce unusable, and no more than 3% should be affected by decay. Romaine-type lettuce shall have not more than 10% and 2%, respectively. If lettuce is purchased in sealed bags, it should be unwashed and display the same characteristics as loose product.

Lettuce Varieties with U.S. Grades

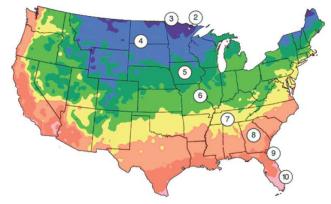
- Lettuce Includes Iceberg (very compact head), Boston, and Bibb types (loosely compacted heads).
- Field Grown Leaf Lettuce Most common are red leaf and green leaf with loosely compacted heads.
- Romaine Generally the longer and broad green leaf type with a whitish sweet core.
- Greenhouse Leaf Lettuce Includes the varieties of field lettuce grown in a controlled atmosphere.

Most Common U.S. Grades

U.S. No. 1 is common to all the lettuce varieties and types, and is considered the standard for commercial use. U.S. No. 1 consists of lettuce of similar varietal characteristics that are well developed, fairly well trimmed, free from decay, doubles, and freezing. U.S. No. 1 lettuce should be free from damage by broken midribs, bruising, dirt or foreign material, discoloration, downy mildew, seedstems, tipburn, watersoaked, yellowing, insects, worms, or mechanical or other means.

Domestic Harvest

2, 3: July - September
 4, 5: August - October
 6: September - November
 7: October - November
 8, 9, 10: June - September



Many lettuce varieties are grown throughout the United States and are harvested at varying times throughout the year, making year-round locally available lettuce possible. Check with your county or state Cooperative Extension Office for specific information regarding lettuce production in your area.







Lettuce Information Sheet, continued

Desirable Characteristics





Iceberg **Red Leaf** · Color should be bright and product crisp.

Product Defects







Butter (Bibb)

Receiving Guidelines



Romaine



Romaine Hearts

Russet Spots

Peeling/Feathering

Downey Mildew

Decay

Discoloration Lettuce should not be flabby or wilted.

Storing and Handling Guidelines

- Store lettuce ideally as close to 32 °F as possible with a relative humidity of 98 to 100% and some air circulation. Lettuce stored at refrigeration temperatures closer to 41 °F and below has an approximate shelf life of 5 days. Do not freeze lettuce. Do not store lettuce in dry storage areas.
- Store lettuce in air tight containers for maximum shelf life.
- Store lettuce away from ethylene gas producing items such as apples, grapes and berries because lettuce is extremely sensitive to ethylene and will develop russet spotting and soft rot within 24 hours.
- Store, hold, and serve lettuce at 41 °F degrees or below at all times. Do not allow direct contact with ice at any time during storing, handling, or serving.
- Use lettuce as soon as possible because it is a very perishable product. Avoid using leafy greens with visible signs of decay or damage. Remove unusable portions or discard entire head.
- Wash lettuce just prior to serving under cold, running water. Strip outer coarse leaves from heads prior to washing. Do not immerse or allow to soak in water. Separate the leaves of Romaine during washing to remove sand and debris.
- Do not wash lettuce that has been labeled pre-washed.
- Add lettuce to soups or stews during the last 3 to 5 minutes of cooking if it has passed its peak quality.

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For more information, please contact helpdesk@theicn.org.

Updated: 02/2016



SAY: Now we will watch a video where lettuce and the rest of the salad is prepared according to the standardized recipe using good culinary techniques.

SHOW VIDEO: Activity: Grilled Chicken Salad Video

SAY: Now that you have seen the salad created using good culinary techniques, what characteristics do you think should be evaluated on the Quality Scorecard to determine a quality product?

DO: Divide the group into mentoring groups. Assign each group the following category to discuss:

- Breakout Room 1: Appearance and Flavor
- Breakout Room 2: Texture and Consistency

Allow breakout rooms to discuss the prompt for about 5 minutes. When participants return from the breakout room, ask a representative from each room to summarize their discussion.

Ask participants to turn to the **Quality Scorecard for Salads** and see if they came up with everything that is on the scorecard.

Quality Scorecard for Salads

DATE:	MENU ITEM:
PROUDLY PREPARED BY:	
QUALITY SCORED BY:	

When the food is ready to serve, use this Quality Scorecard to evaluate the quality. Mark YES when the food meets the standard and NO when it does not. Mark NA (Not Applicable) when a specific quality standard does not apply to the food being evaluated. Use the COMMENTS section to explain why a food does not meet a standard. Remember, if a food does not meet the quality standards, it should not be placed on the service line.

Quality Scorecard	Yes	No	Na	Comments
Appearance				
Color is bright, typical of fresh greens.				
Color is bright, typical of other fresh ingredients (no discoloration).				
Salad appears moist, not dry or excessively wet.				
Salad ingredients are cut evenly.				
Salad ingredients appear crisp, not limp.				
Garnish is edible and appropriate for the salad.				
Texture Or Consistency				
Salad ingredients are crisp, not soggy.				
Meat or pasta/rice salads are tender but not mushy.				
Flavor				
Salad ingredients have a fresh, distinctive flavor.				
Seasonings enhance the salad but are not too salty or too tart.				
A variety of salad dressings are available.				
Service Temperature				
Chilled – 34 °F – 38 °F				

SHOW SLIDE: Pictures of salad (one is high quality and the other is not)

SAY: Using the Quality Scorecard for Salads, we will evaluate two different Grilled Chicken Salads.

DO: Ask participants to use their Quality Scorecard for Salads to evaluate the pictures of the two salads. Depending on time, each participant can evaluate both pictures or divide the class and have each take a picture to review. Discuss the findings by asking participants to give feedback in the chatbox or by unmuting their microphones.

SHOW IMAGE: Picture of tray with salad, cantaloupe, milk, and whole grain roll

SAY: Here is the salad and cantaloupe as part of a complete reimbursable meal. When we practice and use the skills we learn today, we produce quality meals that appeal to students.

Objective: Organize an appealing serving line during meal service periods.

INSTRUCTOR: Child Nutrition Expert (or Chef)

SHOW SLIDE: An Appealing Serving Line

SAY: An additional way to communicate that you care and encourage students to participate in your program is the way you organize foods on the serving line. Not only should foods be nutritious and appealing to the eye, but they should also be easy to see and reach. When placing foods on the serving line, ask yourself the following questions:

- How does the food look from a customer's point of view?
- Do the colors complement each other?
- Is the item attractive and eye-appealing?
- Would you want to eat this food?

SHOW SLIDE: Serving Line Diagrams

Our food should be presented in an appealing way to our customers. Planning how the serving line will be set up and what small equipment and/or supplies will be needed during service is critical. The best way to plan your service is through serving line diagrams. These diagrams should be posted for all staff to see on the day the menu will be served. In the next activity, you will practice planning a serving line using a diagram.

Best Practice/Strategy: Planning how the serving line will be set up and what small equipment and/or supplies will be needed during service is critical. The best way to plan your service is through serving line diagrams. These diagrams should be posted for all staff to see on the day the menu will be served

SHOW SLIDE: Activity: Serving Up Success

Activity: Serving Up Success

DO: Direct participants to the **Serving Line Diagram** worksheet and the **Serving Line Diagram Example** handout in their manual. Divide participants into breakout rooms of two or three. Instruct each team to identify menu items for their team and complete the serving line diagram for the menu using the Serving Line Diagram worksheet. Tell participants they may refer to the Serving Line Diagram Example for guidance on how to fill out the template.

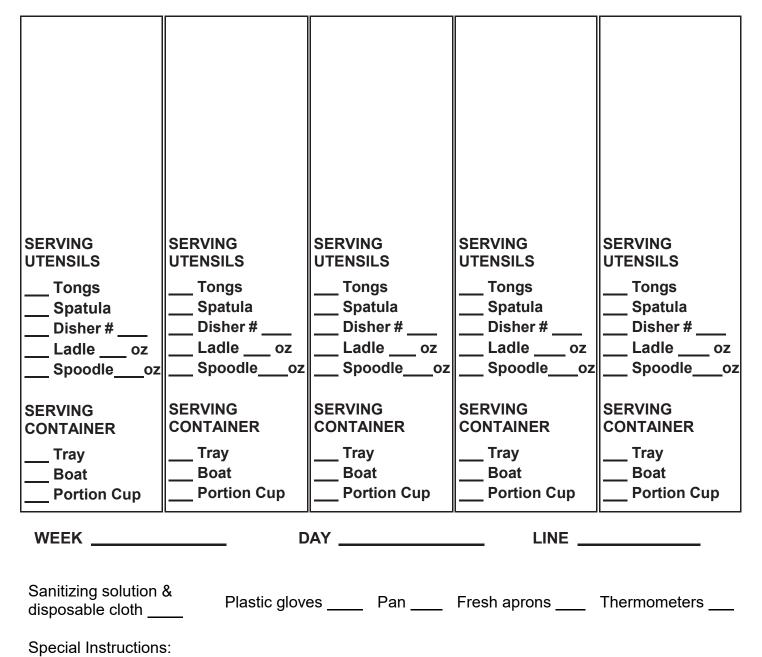
Tell participants if multiple pans are placed in a well, draw a line on the diagram to reflect multiple pans in one well. Allow participants approximately 5 minutes to complete the serving line diagram activity in their breakout rooms. Bring participants back from breakout rooms and ask a representative from a few of the breakout rooms to share what they designed for their serving line.

Serving Line Diagram

Directions: In teams, identify menu items and complete the serving line diagram. You may refer to the **Serving Line Diagram Example** for guidance on how to fill out the template. If multiple pans are placed in a well, draw a line on the diagram to reflect multiple pans in one well.

Age/Grade:

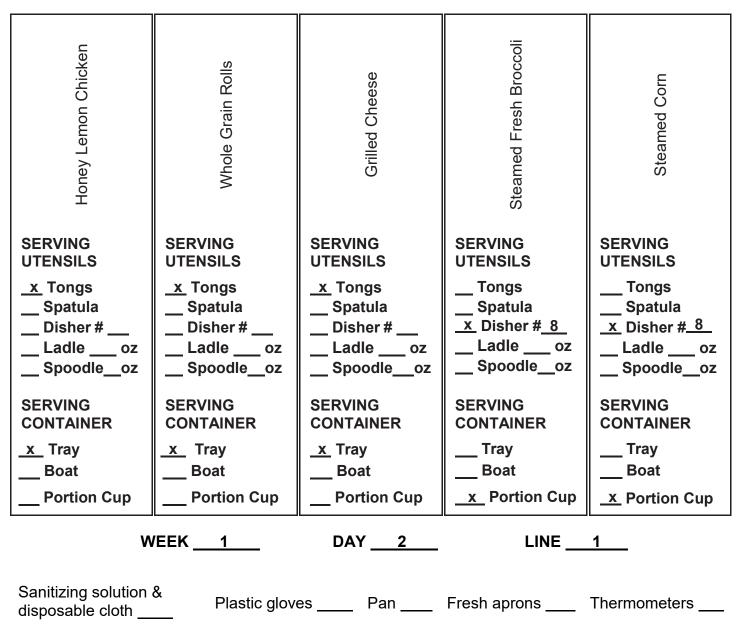
Lunch Menu: Lemon Chicken, WG Rolls, Grilled Cheese, Steamed Fresh Broccoli, Steamed Corn



Serving Line Diagram Example

Age/Grade: _____

Lunch Menu: Lemon Chicken, WG Rolls, Grilled Cheese, Steamed Fresh Broccoli, Steamed Corn



Special Instructions:

SAY: Think about each of these questions as it relates to your service line.

- Are products arranged within easy reach of the server and/or customer?
- Are hot and cold foods in a unit that can maintain safe temperatures? If not, how is temperature-controlled for safety?
- Are the products matched with the correct serving utensils?
- What special instructions were written for this serving line setup?
- How could this serving line setup be improved for speed of service?
- How could this serving line setup be improved for food safety?
- How could this serving line setup be improved for attractiveness?

ASK: Can you think of other ways to improve the appeal of your serving lines?

DO: Allow participants to respond through the chatbox or by unmuting.

SAY: Thank you for your answers. Remember that in addition to the way the serving line looks, the first person and the last person served deserve the same nutritious, quality food in the same portion size. In addition to unhappy customers, if the incorrect portion is served, you have lost nutrition integrity, and you may run out of food or have a large quantity of leftovers. The standardized recipe will include the correct portion size for that item. Take time to place the correct portioning equipment on the serving line before the bell rings and customers are waiting in line.

ASK: What are some of the serving utensils you selected when completing the serving line diagrams?

FEEDBACK: Discuss correct portioning equipment for serving lines based on the age of the customers in your operation and menu items.

DO: Ask participants to refer to **Basics at a Glance** for portioning information included on the worksheet.

Basics at a Glance

Recipe Abbreviations Volume Equivalents

approx.	=	approximate
tsp or t	=	teaspoon
Tbsp or T	=	tablespoon
С	=	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

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 🛛 🔤

eit



	-575	<u> </u>
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 tsn	

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 guart. For example, eight No. 8 scoops = 1 guart.



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." "FI 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.



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 (Ib)	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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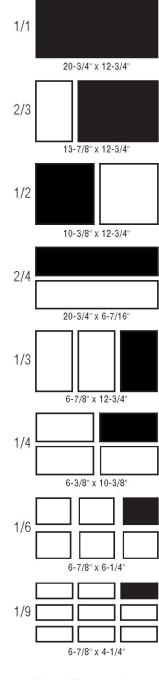
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Pan Size	Approx. Capacity	Serving Size	Ladie (fi oz)	Scoop #	Approx. # Servings
12" x 20" x 2-1/2"	2 gal	1/2 cup 3/8 cup 1/3 cup 1/4 cup	4 oz 3 oz 2.65 oz 2 oz	8 10 12 16	64 80 96 128
12" x 20" x 4"	3-1/2 gal	1/2 cup 3/8 cup 1/3 cup 1/4 cup	4 oz 3 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

Steamtable Pan Capacity

Other Pan Sizes

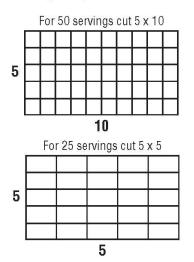


Steamtable or counter pans are available in various sizes. Smaller size pans may require the use of an adapter bar.

Approximate Dimensions of Serving Sizes from Different Pan Sizes

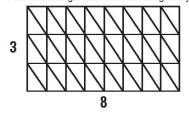
Pan	Approx. Size	No. and Approx. Size Servings per Pan		
Baking or		25	50	100
steamtable	12" x 20" x 2-1/2"	2" x 3-3/4"	2" x 2"	
Sheet or bun	18" x 26" x 1"	3-1/4" x 5"	3-1/4" x 2-1/2"	1-3/4" x 2-1/2"

Cutting Diagrams for Portioning





10 For 48 servings cut 3 x 8 then diagonally



SHOW SLIDE: Lesson 5: Reflections

SAY: In this lesson, we have discussed ways to deliver a quality product. This happens when you focus on quality and appeal from the delivery of food, through preparation, and then finally when serving.

ASK: Are there any questions related to the topics we just covered?

DO: Invite them to ask questions by posting to the chat or raising their virtual hand. Answer any questions the participants may have before moving on to the next lesson.

SAY: Think back to the E-STAR SMART Goals and Action Plan Framework and Process we reviewed in the previous training. We will use a few minutes to allow you an opportunity to capture any notes or information you may want to recall later to assist you with identifying a strategy or activity to improve meal quality or student perception.

DO: Allow participants approximately 5 minutes to complete the reflection sheet.

Lesson 5: Reflection Sheet

Spend some time reflecting on the ideas and thoughts from Lesson 5 and what "take-aways" you want to recall later to assist with identifying a strategy or activity to improve meal quality or student perception.

Lesson 6: Strategies and Activities Related to Improving Meal Quality and Student Perception

Lesson-at-a-Glance

Time Allowed	Торіс	Activity	Materials	
Objective: Formulate strategies and activities related to improving meal quality and student perception of meal quality to create an action plan.				
90 minutes	 Strategies and Activities Related to Meal Quality and Student Perception of Meal Quality 	 SMART Goal Menu and Action Plan Framework and Process Template 	• Training Manual	
TOTAL: 90 minutes				

Lesson 6: Strategies and Activities Related to Improving Meal Quality and Student Perception

SHOW SLIDE: Activity: Review Lesson Reflection Sheets

Activity: Review Lesson Reflection Sheets

SAY: We have discussed important concepts related to serving quality school meals, as well as reasons quality meals are so important to the success of school nutrition programs. I hope you found the information beneficial and gained knowledge and skills that will assist you in preparing and serving quality meals.

We know that learning is always enhanced if we are given a chance to personally relate to the material and how we might apply it. So, turn to the Reflection Sheets that you completed for each lesson and review the "take-aways" you thought might be important.

DO: Allow 5 minutes for the participants to review their Reflection Sheets. Then instruct participants to turn to **the E-STAR SMART Goals and Action Plan Framework and Process** document.

SHOW SLIDE: Ideas for Strategies and Activities

SAY: Now, let's spend some time thinking about the strategies and activities that you would like to implement in your program operation to improve meal quality and student perception of meal quality. As discussed on Day 1, we have identified three strategies and corresponding activities to aid you in improving school meal quality and three strategies and corresponding activities to aid in increasing student perception of meal quality.

Category: Meal Quality

Strategy 1: Increase Menu Variety and Choices for Student Selections

- Activity 1: Provide at least 1 (2 or 3) cultural menu option(s) a week (month).
- Activity 2: Use **food bars or salad bars** to provide students with menu variety and choices of at least 2 (3, 4, or 5) fruit and/or vegetable offerings served each day (week).
- Activity 3: Make fruit available daily at all points of sale.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

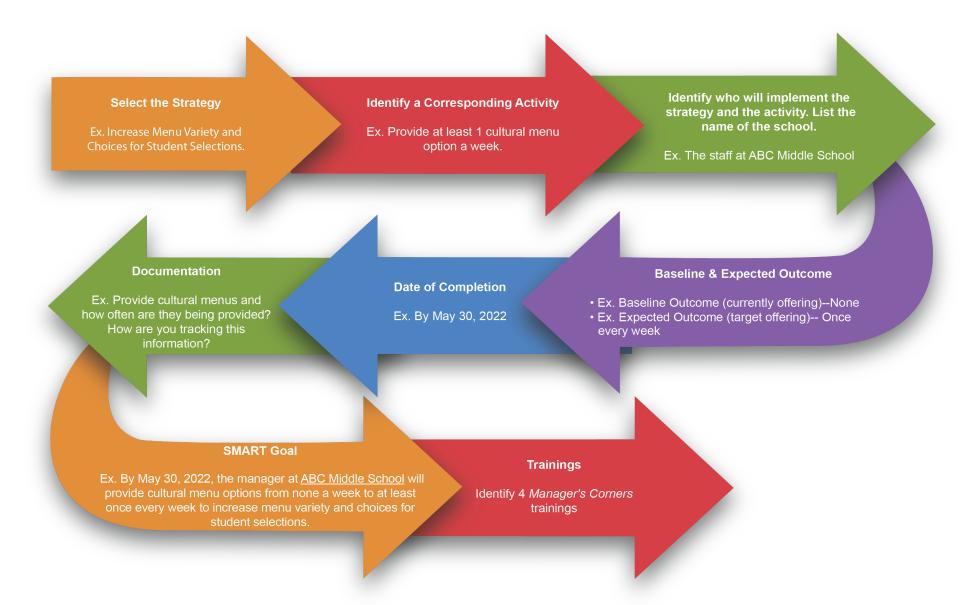
Strategy 2: Enhance Visual Appeal of Meals at Breakfast and Lunch

- Activity 1: The staff will use garnishes to add color and eye appeal to dishes served daily (weekly).
- Activity 2: The manager will utilize quality scorecards daily (weekly) to identify acceptable quality products of each meal prepared to ensure meals meet a set of quality standards.
- Activity 3: The manager will **ensure the staff does not serve brown, bruised, or otherwise damaged produce** on serving lines or salad bars daily.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

Strategy 3: Enhance Culinary Preparation Techniques

- Activity 1: The manager will **incorporate batch cooking** within the operation based on the menu offerings to ensure the best appearance, temperature, and texture of food are provided to maintain meal quality.
- Activity 2: The staff will prepare menu items using **a different culinary technique** (i.e., roasting, steaming, sautéing, etc.) each month (semester, etc.).
- Activity 3: The staff will incorporate the use of at least 1 (2, or 3) herb(s) and spice(s) to enhance flavor each week to a menu item.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

Meal Quality Improvement Goal and Action Plan Process



Identify one (1) strategy under Meal Quality that you want to implement in your operation.

Select an activity that corresponds with the chosen strategy.

Why did you select the strategy and activity?

Identify who will be doing the activity and where will the activity take place (name of school)?

Baseline Outcome: What can you currently measure as it relates to the activity (how often, how many, numbers, frequency, etc.)? This measure will be tracked over time to monitor the progress and show improvement as a result of implementation of the activity.

Target Outcome: What will you want the change to be as it relates to the activity (how often, how many, measurements, numbers, frequency, etc.)?

Date of Completion: When do you anticipate to reach your goal?

Documentation: What type of documentation will illustrate the accomplishment of the goal (i.e., menus, photos, etc.)? Who will be responsible for developing the documentation to track the measure? How often will you track the measure?

Goal: Write out your goal.

Identify four (4) Manager's Corner lessons that you plan to train your staff as it relates to your selected strategy and activity.

SAY: You will identify one of the strategies and an activity listed under each category to incorporate in your operation over the next year. Choose one strategy and activity for meal quality and one strategy and activity for student perception. Once you select your strategy and activity, we will work on how to build out your action plan with specific baseline and target outcome measures, timelines, and tracking documentation.

You will work through the process flow, which will enable you to think through all the goal-setting components to create your SMART goal and action plan.

DO: Create 2 breakout rooms with the respective mentors. Allow participants 25 minutes to identify their strategies and activities to discuss and develop their action plans.

SAY: We will go into 2 breakout rooms with your respective mentors. You will be given 25 minutes to identify your strategies and activities for Meal Quality. You will also follow the E-STAR SMART Goal Action Plan Framework and Process to walk through the steps to create your action plan that includes the specific baseline and target outcome measures, timelines, and tracking documentation along with a few other details.

DO: Reconvene the group and have them share the strategy and activity from each category they plan to implement over the next year. Allow participants to share their strategies and activities.

Category: Student Perception of Meal Quality

Strategies Related to School Environment

- Activity 1: The staff will maintain **a pleasant**, **safe**, **and clean physical environment** daily in the school cafeteria to encourage student participation.
- Activity 2: The staff will **display posters and signs in the cafeteria** each year to promote healthy eating among students.
- Activity 3: The staff will **upgrade one aspect within the cafeteria environment** (i.e., freshly painted walls, seating arrangements, serving dishes, baskets for displays, updated signs, etc.) each year.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

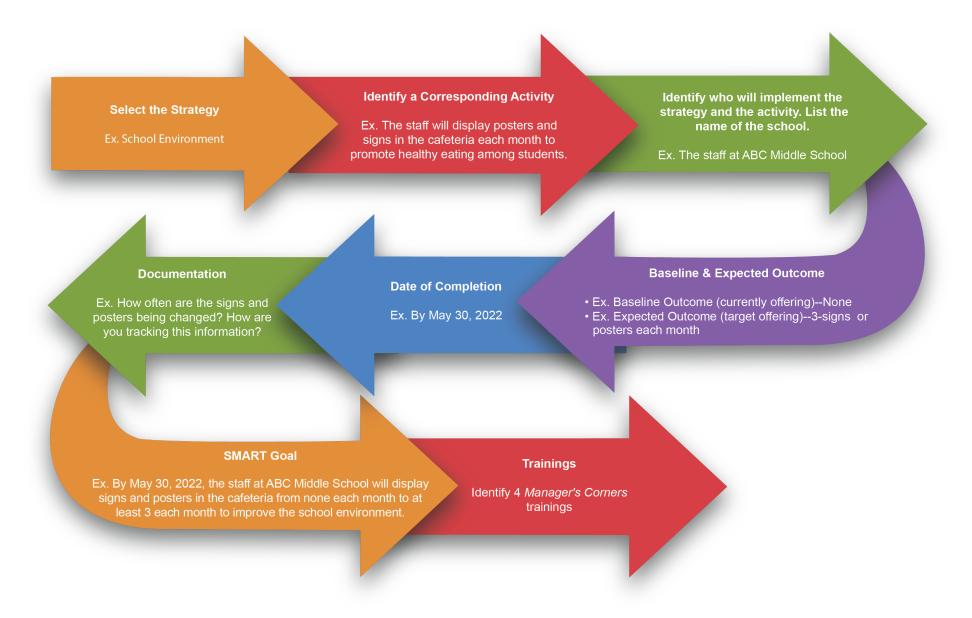
Strategies Related to Nutrition Education

- Activity 1: The staff will provide students with nutrition education each month (semester).
- Activity 2: The staff will work with the school/classes to incorporate food from classroom themes/lessons on the menus each month (semester).
- Activity 3: The staff will provide nutrition education messages on the website or on menus each week.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

Strategies Related to Marketing Efforts

- Activity 1: The staff will provide teachers with promotional materials each month (semester).
- Activity 2: The manager will develop a student advisory committee each year.
- Activity 3: The staff will host a **student recipe competition** each year.
- "Other" activity option: This allows managers to include a different activity that is not listed above, but it should be related to the concept of the strategy.

Student Perception Goal and Action Plan Process



Student Perception of Meal Quality Improvement Goal and Action Plan

Identify one (1) strategy under Student Perception that you want to implement in your operation.

Select an activity that corresponds with the chosen strategy.

Why did you select the strategy and activity?

Identify who will be doing the activity and where will the activity take place (name of school)?

Baseline Outcome: What are you currently doing as it relates to the activity (how often, how many, numbers, frequency, etc.)?

Target Outcome: What is your target goal as it relates to the activity (how often, how many, measurements, numbers, frequency, etc.)?

Date of Completion: When do you anticipate to reach your goal?

Documentation: What type of documentation will illustrate the accomplishment of the goal (i.e., menus, photos, etc.)? Who will be responsible for developing the documentation?

Goal: Write out your goal.

Identify four (4) Manager's Corner lessons that you plan to train your staff as it relates to your selected strategy and activity.

SAY: You will identify one of the strategies and an activity listed under each category to incorporate in your operation over the next year. Choose one strategy and activity for meal quality and one strategy and activity for student perception. Once you select your strategy and activity, we will work on how to build out your action plan with specific baseline and target outcome measures, timelines, and tracking documentation.

You will work through the process flow, which will enable you to think through all the goal-setting components to create your SMART goal and action plan.

DO: Create 2 breakout rooms with the respective mentors. Allow participants 25 minutes to identify their strategies and activities to discuss and develop their action plans.

SAY: We will go into 2 breakout rooms with your respective mentors. You will be given 25 minutes to identify your strategies and activities for Student Perception. You will also follow the E-STAR SMART Goal Action Plan Framework and Process to walk through the steps to create your action plan that includes the specific baseline and target outcome measures, timelines, and tracking documentation along with a few other details.

DO: Reconvene the group and have them share the strategy and activity from each category they plan to implement over the next year. Allow participants to share their strategies and activities.

SAY: Now, we will do a round robin and have each of you share the strategy and activity from each category you plan to implement over the next year. For the sake of time, just provide the strategy and activity. This concludes the *Practical Skills for Quality Meals: A Five-Step Process* training.

ASK: Are there any questions?

DO: Answer participants' questions.

Key Terms

Batch cooking	To prepare a menu item in small amounts, so it will be at its peak of quality when placed on the service line
Chiffonade	Finely slice or shred leafy vegetables or herbs
Culinary technique	A step-by-step food preparation method
Fabrication	The process of slicing and dicing food; often used to describe slicing or dicing fresh fruits and vegetables
Food production record	A menu worksheet required by Federal regulations that demonstrates that the meals planned have been prepared and served
Hazard Analysis Critical Control Point (HACCP)	A specific approach for identifying food safety hazards that involves finding potential food safety issues in your program and implementing preventative measures
Mise en place (meez-un-plahss)	French phrase meaning "to put in place," referred to by cooking professionals as the preparation and assembly of all necessary ingredients and equipment prior to food production
Nutrient analysis	Calculated nutrient content of foods, recipes, and/or menus
Quality scorecard	Provides target standards for foods that dictate how the finished product should look and taste
Recipe category	A component of a standardized recipe that makes it easier to sort recipes in a file box or on the computer; usually represents a specific meal component such as main dish or vegetable for USDA recipes

School meal quality	 Characteristics of food that affect its acceptability by consumers, including: Food appearance (size, shape, color, gloss, and consistency) Texture Flavor Nutritional value Freshness Students' perceptions of school lunch and willingness to select (variety, flavor, attractiveness of food on the serving line, choices that allow students to meet cultural and ethnic preferences, access to fresh foods, etc.) Meal quality can be measured against developed quality standards or by assessing consumers' perceptions of meal quality (e.g., satisfaction surveys, taste-testing ballots, etc.). 	
Serving size	The amount of a single portion	
Standardized recipe	A recipe that has been tried, adapted, and retried several times for use by a given foodservice operation, and has been found to produce the same quality results and yield every time the exact procedures are used	
Tare	To reset an electronic or spring-style scale to zero; also known as "zero the scale," and is used to weigh ingredients without weighing the container	
Time standard	A specific amount of time in which a task should be completed when preparing one batch of a recipe	
Units of measure	 Fixed quantities that are accepted as standards of measurement and can denote volume, weight, time, or temperature; two units of measure most frequently used on production: Liquid Measures Dry Measures 	
Yield	The resulting amount of product at the completion of the preparation process	

References

- Centers for Disease Control and Prevention. (2018). *Food allergies.* https://www.cdc.gov/healthyschools/foodallergies/index.htm
- Child, J., Bertholle, L., & Beck, S. (2010). *Mastering the art of French cooking.* New York: Random House.
- Culinary Institute of America. (2011). *The professional chef* (9th ed.). New Jersey: John Wiley & Sons, Inc.
- Garden-Robinson, J., Kaufman, N.B., & Beck, P. (2018, January). *Ingredient substitutions*. https://www.ag.ndsu.edu/publications/food-nutrition/ingredient-substitutions
- Gisslen, W. (2018). Professional cooking (9th ed.). New Jersey: John Wiley & Sons, Inc.
- Labensky, S., Hause, A.M., & Martel, P. (2018). *On cooking: A textbook of culinary fundamentals*. (6th ed.). New York: Pearson.
- U. S. Department of Agriculture, Food and Nutrition Service. (2017). *Accommodating children with disabilities in the school meal programs*. https://www.fns.usda.gov/cn/2017-edition-accommodating-children-disabilities-school-meal-programs
- U.S. Department of Agriculture, Food and Nutrition Service. (2018). *Food buying guide for child nutrition programs interactive web-based tool*. https://foodbuyingguide.fns.usda.gov/
- U.S. Department of Health and Human Services, U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition. (2017). *FDA food code*. https://www.fda.gov/media/110822/download



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