

No Time To Train

Short Lessons for School Nutrition Assistants

Protecting Quality Through the Flow of Food

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians

Type of Lesson: Short, face-to-face training session

Time Needed to Conduct the Lesson: 20 minutes

Lesson Description: In this lesson, school nutrition assistants/technicians will identify procedures for protecting food quality. The activity uses a flow of food path through a foodservice system and corresponding procedures to ensure quality food. The lesson is designed for managers to teach school nutrition assistants/technicians.

Lesson Objectives:

At the end of this lesson, the participant will be able to

1. Discuss food quality.
2. Identify possible processes with time and temperature that protect food quality.

Get Ready to Train

The format for the **No Time to Train** lessons includes an overview, preparation checklist, lesson at a glance with timeline for conducting the lesson, references, an instructor's script and handouts. The manager/instructor will use the script to present the lesson to the participants. The script gives directions to the manager/instructor—**DO, SAY, ASK, LISTEN, AND ACTIVITY**—for delivering the lesson.

No special audiovisual or electronic equipment is needed to conduct the lesson. The lesson can be presented in the cafeteria, media center, or classroom.

Preparation Checklist

Directions: Use the Preparation Checklist to prepare for the training session. Track your progress by checking off tasks as they are completed.

Done <input checked="" type="checkbox"/>	Lesson Tasks
	<p>Gather Materials</p> <p>Materials Needed:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Flow of Food Through a Foodservice System
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Flow of Food Through a Foodservice System (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Pencils (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation form (one for each participant)
	<p>Prepare for Lesson</p> <p>Before the Training:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handout 1: Flow of Food Through a Foodservice System (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handout 2: Flow of Food Through a Foodservice System (Answers) (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Session Evaluation form (one for each participant).
	<p>On Training Day:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Place pencils on tables (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute Handouts 1 and 2.
	<p>On the Instructor’s Table:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Flow of Food Through a Foodservice System
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Flow of Food Through a Foodservice System (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation forms

Lesson at a Glance
(20 minutes)

Time	Topic	Task	Materials
1 minute	Introduction and Overview	Instructor introduces the topic of food quality and the flow of food through the kitchen.	Instructor's Script
12 minutes	Objective 1: Discuss food quality. Objective 2: Identify possible processes with time and temperature that protect food quality.	Participants complete a process of a foodservice system path with a corresponding term identification activity. Handout 1.	Handout 1: Flow of Food Through a Foodservice System
5 minutes	Wrap Up and Review	Handout 2: Instructor leads discussion of the participants' answers.	Handout 2: Flow of Food Through a Foodservice System (Answers)
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Session Evaluation form

Reference:

Gregoire, M. B. & Spears, M. C. (2007). *Food service organizations: A managerial and systems approach* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

U.S. Department of Agriculture, Food and Nutrition Service, & National Food Service Management Institute. (2002). *A guide to centralized foodservice systems*. University, MS: Author. <http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=81>

U.S. Department of Agriculture, Food and Nutrition Service, & National Food Service Management Institute. (2009). *Food safety fact sheets*. <http://nfsmi.org/ResourceOverview.aspx?ID=109>

U.S. Department of Agriculture, Food and Nutrition Service, & National Food Service Management Institute. (2009). *Serving it safe seminar trainer's guide* (3rd). University, MS: Author.

U.S. Department of Health and Human Services Public Health Services, Food and Drug Administration. (2009). *FDA food code*. Retrieved October 21, 2011 from <http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/ucm186451.htm>

Instructor's Script



ASK:

When I say “high-quality food” what comes to mind?



LISTEN:

Ask for and listen to responses.



SAY:

This is a difficult question to answer because all of us have different foods we like for different reasons. We have a very wide range of foods available to us and each of those foods has different characteristics that define its quality. When we speak of high-quality food, we are referring to those characteristics that an individual food has that make it most desirable.

In our school nutrition program, the buyer must purchase high-quality foods. Poor-quality food cannot be improved through preparation. However, high-quality food can quickly become poor-quality food through a combination of factors including temperature, time, and mishandling.

It is important to understand that quality may be compromised long before the menu item is actually prepared for service. Every food we serve takes a potentially dangerous journey through the kitchen starting at the receiving dock and ending on the customer's plate.

As a school nutrition assistant, you have a high level of control over the quality of the food you serve our customers. You can identify the potential dangers and protect each food to its safe destination and purpose: providing wholesome, flavorful, attractive, and nutritious meals to students.



DO:

Distribute **Handout 1: Flow of Food Through a Foodservice System**



SAY:

Let's look at **Handout 1: Flow of Food Through a Foodservice System**

It is important to understand the flow of food through a foodservice system in order to determine the system that will best protect the quality and wholesomeness of the food. This diagram shows the ten possible processes for the flow of food through a foodservice system. The diagram shows a path from menu planning, purchasing, receiving, storing, preparing, cooking, holding, serving, cooling, and reheating that food follows in a foodservice system.

For the purpose of this activity, we will start with the receiving process of food at the school where the school nutrition assistants accepts the food. Prior to food arriving at the receiving dock, menus were planned and foods were purchased (usually by school nutrition administrators). Great care was taken to secure affordable, high-quality foods for students.



SAY:

Let's review the activity for identifying possible processes for protecting high-quality foods. The job of the school nutrition assistants/technicians is to protect (or safeguard) the quality of the food starting with receiving.

Let's use this diagram as we do a matching activity together. Working in your small groups complete the activity by matching the time and temperature processes on the right to the terms from the Flow of the Food diagram on the left. The procedures described in this activity are practices that can help maintain food quality.



DO:

Organize the participants into small working groups. Allow 5-7 minutes for the groups to complete the activity.



ACTIVITY:

Participants will complete **Handout 1: Flow of Food Through a Food Service System.**



ASK:

Do you have any questions about the processes involved in the flow of food through a foodservice system? Acknowledge and discuss individual responses.



LISTEN:

Listen to individual responses.



DO:

Distribute **Handout 2: Flow of Food Through a Foodservice System (Answers).**



SAY:

Use **Handout 2: Flow of Food Through a Foodservice System (Answers)** to check your answers. This handout may be used as a reference.



LISTEN:

Listen to individual responses. Answer questions to the best of your ability. If there are questions you can't answer, tell participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.



DO:

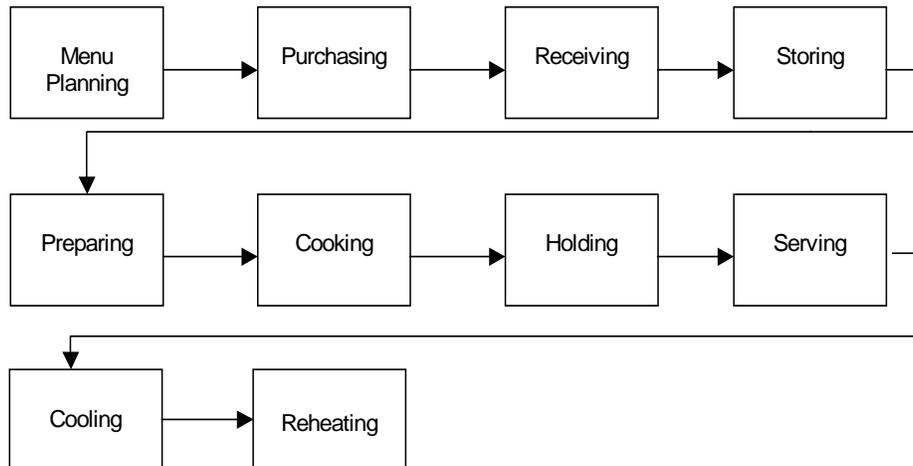
Distribute the Session Evaluation form.



SAY:

Thank you for participating in the lesson today. Please take a couple of minutes to complete the Session Evaluation form. Thank you for your input.

Handout 1: Flow of Food Through a Foodservice System



Use the Flow of Food diagram starting with receiving through storing, preparing, cooking, holding, serving, cooling, and reheating that food follows in a foodservice system. School nutrition assistants/technicians have a high level of control over the quality of the food starting with receiving as you serve your customers.

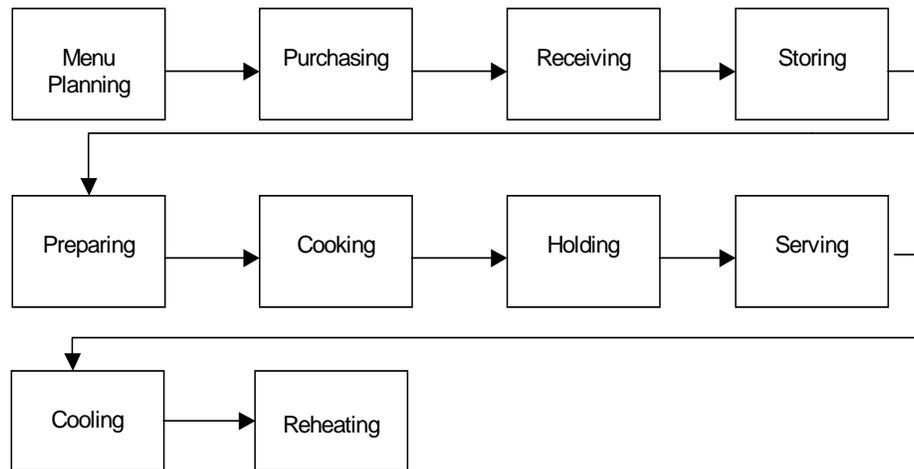
Instructions: Match the eight terms on the left with the corresponding procedures on the right.

1. ___ Reheating
 - a. Temperature of foods delivered to a foodservice operation is important for quality and safety. Refrigerated foods should be 41 °F or below and frozen foods should show no sign of thawing and refreezing. Accept or reject refrigerated, frozen, or dry food deliveries at the receiving area.
2. ___ Serving
 - b. Food is a perishable product so it is important to store it at the appropriate temperature for an appropriate time. Dry storage areas should be maintained at 50–70 °F, refrigerated storage areas should be maintained at 41 °F or below, and frozen storage areas should be maintained at 0 °F– -10 °F.
3. ___ Cooking
 - c. Keep foods refrigerated until it is time to begin preparation, When possible, take out only a small amount at a time as needed during preparation.

Handout 1: Flow of Food Through a Foodservice System (Continued)

4. ____ Cooling
- d. The appropriate temperature for cooking foods is based on temperatures that will kill bacteria associated with that specific food. Always follow the standardized recipe precisely. Use calibrated cooking equipment. Many foods should be cooked in batches or just-in-time. Use quality scorecards to evaluate food quality standards.
5. ____ Preparing
- e. According to the *FDA Food Code*, all hot foods must be maintained at 135 °F or above. All cold foods must be maintained at 41 °F or below. When temperatures of food are above 41 °F or below 135 °F, they are in the temperature danger zone—temperatures at which bacteria grow rapidly. In addition to food safety concerns, extended holding of high-quality products can rob them of flavor, texture, color, and shape.
6. ____ Holding
- f. The presentation of food is important because we eat with our five senses: sight, smell, taste, touch, and sound. Temperature is especially important because serving food at the proper temperature not only enhances the quality of the product but can also reduce the possibility of a foodborne illness.
7. ____ Storing
- g. Food has to go through the temperature danger zone (41 °F–135 °F) during the cooling process. Bacteria grow rapidly in the temperature danger zone, so the time that food spends at these temperatures has to be minimized to limit bacterial growth. Important cooling temperatures and times include the following:
1. Hot food must be cooled from 135 °F to 70 °F within 2 hours, and then the hot food must be cooled from 70 °F to 41 °F in an additional 4 hours.
 2. Foods prepared at room temperature (70 °F) must be cooled to 41 °F within 4 hours.
8. ____ Receiving
- h. According to the *FDA Food Code*, all leftover foods or precooked, processed foods that have been previously cooled or leftover food as an ingredient must be reheated to 165 °F for 15 seconds within 2 hours.

Handout 1: Flow of Food Through a Foodservice System Activity (Answers)



Use the Flow of Food diagram starting with receiving through storing, preparing, cooking, holding, serving, cooling, and reheating that food follows in a foodservice system. School nutrition assistants/technicians have a high level of control over the quality of the food starting with receiving as you serve your customers.

Instructions: Match the eight terms on the left with the corresponding procedures on the right.

- h Reheating
 - Temperature of foods delivered to a foodservice operation is important for quality and safety. Refrigerated foods should be 41 °F or below and frozen foods should show no sign of thawing and refreezing. Accept or reject refrigerated, frozen, or dry food deliveries at the receiving area.
- f Serving
 - Food is a perishable product so it is important to store it at the appropriate temperature for an appropriate time. Dry storage areas should be maintained at 50–70 °F, refrigerated storage areas should be maintained at 41 °F or below, and frozen storage areas should be maintained at 0 °F– -10 °F.
- d Cooking
 - Keep foods refrigerated until it is time to begin preparation. When possible, take out only a small amount at a time as needed during preparation.

Handout 1: Flow of Food Through a Foodservice System Activity (Answers)

4. g Cooling
- d. The appropriate temperature for cooking foods is based on temperatures that will kill bacteria associated with that specific food. Always follow the standardized recipe precisely. Use calibrated cooking equipment. Many foods should be cooked in batches or just-in-time. Use quality scorecards to evaluate food quality standards.
5. c Preparing
- e. According to the *FDA Food Code*, all hot foods must be maintained at 135 °F or above. All cold foods must be maintained at 41 °F or below. When temperatures of food are above 41 °F or below 135 °F, they are in the temperature danger zone—temperatures at which bacteria grow rapidly. In addition to food safety concerns, extended holding of high-quality products can rob them of flavor, texture, color, and shape.
6. e Holding
- f. The presentation of food is important because we eat with our five senses: sight, smell, taste, touch, and sound. Temperature is especially important because serving food at the proper temperature not only enhances the quality of the product but can also reduce the possibility of a foodborne illness.
7. b Storing
- g. Food has to go through the temperature danger zone (41 °F–135 °F) during the cooling process. Bacteria grow rapidly in the temperature danger zone, so the time that food spends at these temperatures has to be minimized to limit bacterial growth. Important cooling temperatures and times include the following:
1. Hot food must be cooled from 135 °F to 70 °F within 2 hours, and then the hot food must be cooled from 70 °F to 41 °F in an additional 4 hours.
 2. Foods prepared at room temperature (70 °F) must be cooled to 41 °F within 4 hours.
8. a Receiving
- h. According to the *FDA Food Code*, all leftover foods or precooked, processed foods that have been previously cooled or leftover food as an ingredient must be reheated to 165 °F for 15 seconds within 2 hours.



National Food Service Management Institute
The University of Mississippi

Session Evaluation

Instructions:

Completely fill in the circle of your answer. Use a #2 pencil.

Please select only one response for each statement. Do not fold or crease this sheet.

Title of Meeting: _____	Trainer's Code: _____
Session Topic: _____	Date: _____
Time Slot: _____	Location: _____
Length of Event (hrs/min): _____	

Attendee Status:

- | | | |
|--|---|--|
| <input type="radio"/> District director | <input type="radio"/> Major city director | <input type="radio"/> Private consultant/trainer |
| <input type="radio"/> State agency staff | <input type="radio"/> Site-level manager | <input type="radio"/> Foodservice assistant |
| <input type="radio"/> Educator | <input type="radio"/> Other (please list) _____ | |

Reaction to this Session		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Please read the following statements related to the session. Rate your level of agreement by using the scale 5 (Strongly Agree) to 1 (Strongly Disagree).						
1.	The session objectives were clearly presented.	⑤	④	③	②	①
2.	The session objectives were achieved.	⑤	④	③	②	①
3.	I can apply what I learned in this session to my job.	⑤	④	③	②	①
4.	Attending the session increased my skill on the topic.	⑤	④	③	②	①
5.	Attending the session increased my knowledge on the topic.	⑤	④	③	②	①
6.	I would recommend this session to others.	⑤	④	③	②	①
7.	Overall, the session met or exceeded my expectations.	⑤	④	③	②	①

Comments about this Session
<p>The information I found MOST useful was:</p> <hr/> <hr/> <hr/>
<p>Please share any additional comments:</p> <hr/> <hr/> <hr/>

National Food Service Management Institute - The University of Mississippi



National Food Service Management Institute
The University of Mississippi