



Hot and Cold Foods Temperatures

Lesson Overview

Lesson Participants: School nutrition assistants

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

Time Needed to Conduct the Lesson: 15 minutes

Lesson Description: This lesson explains the importance of keeping foods safe by identifying the temperatures in the temperature danger zone.

Lesson Objectives

At the completion of the lesson the participant will be able to

1. Take active steps to reduce the amount of time food is held in the temperature danger zone.

Get Ready to Train

The format for the food safety lesson plans include an overview, preparation checklist, lesson-at-a-glance with timeline for conducting the lesson, script, and lists of references and other resources. The instructor will use the script to present the lesson to the participants. Each script gives directions to the instructor—**DO, SAY, ASK**—to deliver the lesson.

Trainer Tip: The amount of time indicated in this lesson plan does not include the time needed to conduct the Practice Application. To complete the activity, the manager-trainer will coach the school nutrition assistant on the job.

Preparation Checklist

Directions: Use the Preparation Checklist to get ready for the training session. Keep track of your progress by checking off tasks as they are completed.

Done <input checked="" type="checkbox"/> Lesson Tasks	
	Gather Materials Materials Needed:
<input type="checkbox"/>	<ul style="list-style-type: none"> • Trainer’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Food Safety Fact Sheet: <i>Temperature Danger Zone</i> (one for each participant; accessible at http://www.nfsmi.org/DocumentSearch.aspx?searchType=advanced)
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Keep Hot Foods Hot! Keep Cold Foods Cold!</i> mini-poster (accessible at http://www.nfsmi.org/DocumentSearch.aspx?searchType=advanced)
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>On the Serving Line</i> mini-poster (accessible at http://www.nfsmi.org/DocumentSearch.aspx?searchType=advanced)
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Refrigerate for Safety!</i> mini-poster (accessible at http://www.nfsmi.org/DocumentSearch.aspx?searchType=advanced)
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Practice Taking Temperatures Activity Sheet Handout 1</i>(one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • International food safety icons for Refrigeration/Cold Holding and Hot Holding available at www.foodprotection.org/resources/food-safety-icons/icons.php
<input type="checkbox"/>	<ul style="list-style-type: none"> • Pens or pencils (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation/Feedback Form (one for each participant)

**Preparation Checklist
(continued)**

	Prepare for Lesson
	Before the Training:
<input type="checkbox"/>	Make enough copies of Handout 1: Practice Taking Temperatures Activity Sheet for each participant.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Session Evaluation/Feedback Form (one for each participant). You may use the sample NFSMI evaluation form provided at the end of the lesson.
	On Training Day:
<input type="checkbox"/>	<ul style="list-style-type: none"> • Place pens or pencils on tables (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute the food safety fact sheet <i>Temperature Danger Zone</i> (one for each participant).
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute <i>Practice Taking Temperatures Activity Sheet Handout 1</i> (one for each participant).
	On the Trainer's Table:
<input type="checkbox"/>	<ul style="list-style-type: none"> • Trainer's Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Food Safety Fact Sheet: <i>Temperature Danger Zone</i>
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Keep Hot Foods Hot! Keep Cold Foods Cold!</i> mini-poster
<input type="checkbox"/>	<ul style="list-style-type: none"> • International food safety icons for Refrigeration/Cold Holding and Hot Holding available at • www.foodprotection.org/resources/food-safety-icons/icons.php
<input type="checkbox"/>	<ul style="list-style-type: none"> • Trainer's copy of the International Food Safety Icons
<input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Practice Taking Temperatures Activity Sheet Handout 1</i>

Lesson at a Glance
(15 minutes)

Time	Topic	Task	Materials
2 minutes	Introduction and Overview	Introduce topic	<ul style="list-style-type: none"> • Trainer’s Script
3 minutes	Objective 1: Take active steps to reduce the amount of time food is held at these temperatures	Discuss the temperature danger zone for hot and cold foods.	<ul style="list-style-type: none"> • Trainer’s Script • Fact Sheet: <i>Temperature Danger Zone</i> • <i>Keep Hot Foods Hot! Keep Cold Foods Cold!</i> mini-poster.
6 minutes		Discuss the refrigeration and serving temperature for food to keep food safe. Conduct Activity: Name the Icon	<ul style="list-style-type: none"> • Trainer’s Script • Mini-poster <i>Refrigerate for Safety!</i> • Mini-poster <i>On the Serving Line</i> • Food Safety Icon <i>Refrigeration/Cold Holding</i> • Food Safety Icon
2 minutes	Summary and Close	Review Key Points Discuss Practice Application	<ul style="list-style-type: none"> • Script • <i>Practice Taking Temperatures Activity Sheet Handout 1</i>
2 minutes	Session evaluation/feedback	Conduct a short evaluation of the lesson.	<ul style="list-style-type: none"> • Sample evaluation/feedback form or standard form used in your child nutrition program

References

U.S. Department of Agriculture, Food and Nutrition Service, & National Food Service Management Institute. (2000). *Food safety mini-posters*. University, MS: Author Available at: <http://www.nfsmi.org/ResourceOverview.aspx?ID=74>

U.S. Department of Agriculture, Food and Nutrition Service, & National Food Service Management Institute. (2005). *Thermometer information resource*. University, MS: Author. Available at: <http://www.nfsmi.org/documentlibraryfiles/PDF/20080215082332.pdf>

International Association for Food Protection (2005). *Food safety icon*. Des Moines, IA: Author. Available at: <http://www.foodprotection.org/Icons/Iconhome.htm>

Hot and Cold: The Importance of Temperature in Foodservice

Introduction

(2 minutes)

Temperature maintenance of food and equipment is very important for food safety. We know that bacteria grow very rapidly between 41 °F and 135 °F—the temperature range known as the temperature danger zone. At every step from receiving to serving, it is important to limit the time that food is in the temperature danger zone.

Objectives

(3 minutes) **Temperature Danger Zone**

At the end of the lesson, you will be able to

1. Take active steps to reduce the amount of time food is held in the temperature danger zone.

SAY:

Let's begin by reviewing the temperature danger zone. Print the food safety fact sheet, *Temperature Danger Zone* and the *Keep Hot Foods Hot! Keep Cold Foods Cold!* mini-poster.

DO:

Show the *Keep Hot Foods Hot! Keep Cold Foods Cold!* mini-poster.



SAY:

The temperature danger zone is the temperatures between 41 °F and 135 °F. This is the temperature range in which bacteria multiply most rapidly. If food is held in the temperature danger zone for too long, bacteria counts can grow high enough to cause a foodborne illness. That is why foodservice employees take active steps to reduce the amount of time food is held at these temperatures.

SAY:

Let's review the temperatures on the temperature mini- poster.

Q. What is the low and high temperature in the temperature danger zone?

A. 41 °F to 135 °F

Q. What is the temperature for holding foods?

A. 41 °F or below

Temperature danger zone.

(6 minutes)

SAY:

It is important to keep food safe when stored in the refrigerator. Let's review some ways that will help ensure safe food during refrigeration.

DO:

Show the mini-poster *Refrigerate for Safety*



SAY:

Refrigerated food should be stored at 41 °F or below. Temperatures of the refrigerator and food should be checked and documented routinely.

DO:

Show the mini-poster *On the Serving Line*



SAY:

At the serving step, hot food should be kept at 135 °F or above and cold food should be kept at 41 °F or below. Cooling and reheating should be done as quickly as possible to limit the time that the food is in the temperature danger zone.

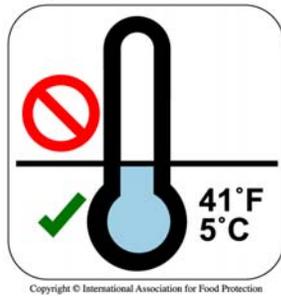
Temperature is even important in clean up! Water temperature is important when washing, rinsing, and sanitizing dishes.

Activity: Name the Icon

DO:

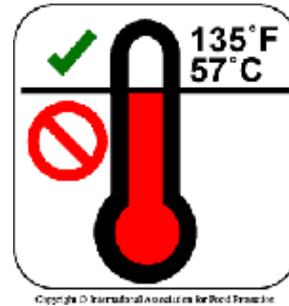
Show each icon. Ask participants to identify the message in the icon. Provide the correct answers. Relate the discussion to the lesson.

Note to Trainer: A larger template of the icons is provided on the Food Protection web site at <http://www.foodprotection.org/resources/food-safety-icons/icons.php>



Answer

Refrigeration/Cold Holding



Answer

Hot Holding

Practice Application

(2 minutes)

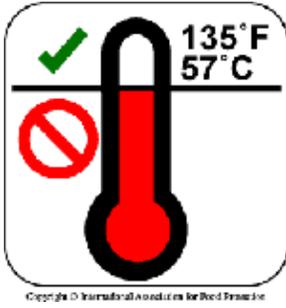
SAY:

Checking the temperature of food and the temperatures of equipment is important. During the next week, let's practice taking and recording temperatures in the kitchen. We want to be sure the foods we are storing and serving to students is held safely. Go through the kitchen and use *Practice Taking Temperatures Activity Sheet Handout 1* to record temperatures of the food in the areas listed. Compare the temperature you record to the safe temperature range given. How are we doing? It takes all of us to keep food safe and out of the temperature danger zone.

Identify the Icon Activity



Identify the Icon Activity



Practice Taking Temperatures Activity Sheet

Handout 1

Directions: Record the temperatures for hot and cold foods. Once you have reviewed the temperatures, answer the questions at the end of the table.

Food Item	Safe Temperature Range	Current Temperature
Cold Holding Temperature	41 °F or lower	
Hot Holding Temperature	135 °F or higher	

Are there any temperatures that are out of the safe range?

Name an action to take to correct any problem with temperatures? (For example, the problem with the equipment was reported to the manager)

FOOD SAFETY AND HACCP TRAINING REPORT

(Complete this report and File in HACCP Section 2-9: Training)

TRAINING TITLE: **No Time To Train: Food Temps**

DATE:

LOCATION:

INSTRUCTOR:

Training Agenda/Outline is attached: **Yes** **No**

PARTICIPANT NAME	SCHOOL