# Receiving and Storage

## Lesson 10 Overview

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<th><strong>Time</strong></th>
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## Purpose
To explain the relationship between receiving, food storage, and food safety

## Objectives
At the conclusion of this lesson, employees will be able to:

- Inspect incoming food using correct procedures
- Store foods in dry, cold, and frozen storage using correct procedures
- Use FIFO (First In, First Out) procedures

## Definitions

**FIFO:** A method of stock rotation in which new supplies are shelved behind old supplies, so that the old supplies are used first. FIFO stands for First In, First Out.

**IQF:** Individually quick frozen.

## Materials

- Two or three examples of acceptable products to serve and two or three examples of unacceptable products to serve (due to damage upon receiving, damage in storage, or lengthy storage)
- Flipchart and markers
- Thermometers to check food temperatures
- Sample receiving logs or temperature logs
- Sample invoice
- Mini Poster: Food Storage Basics
- Handout 1: Icebreaker
- Handout 2: Receiving Process and Storage Practices
- Lesson Evaluation
- Answer keys for Handout 1 and Lesson Evaluation
Lesson 10 Overview (cont.)

Activities

Activity 1: Icebreaker. The purpose of the icebreaker is to help employees identify the relationship between receiving, proper storage, and cost containment. Set up a table of products. Include two or three products that are acceptable to serve and two or three products that are unacceptable to serve (due to damage upon receiving, damage in storage, or lengthy storage). Include items that are potentially unsafe to eat among the unacceptable products. If actual products are not readily available, use pictures of products with a written description of the age of the product, damage, or potential for foodborne illness. Number each item. Ask the employees to determine if each product is acceptable or unacceptable. For unacceptable products, have them identify the problem and estimate the cost of the item. Use Handout 1.

Evaluation

Use the Lesson Evaluation to assess the employees’ knowledge of the concepts presented in this lesson.

References


Lesson 10 Content

Activity 1: Icebreaker

Note: The materials needed for Activity 1 are a copy of Handout 1 for each employee, two or three acceptable products to serve, and two or three unacceptable products to serve (due to damage upon receiving, damage in storage, or lengthy storage). Include products that are potentially unsafe to eat among the unacceptable products. (See the answer key to Handout 1 for some suggested unacceptable products.) Set the products up on a table. Number each item. If actual products are not readily available, use pictures of products with a written description of the age of the product, damage, or potential for foodborne illness. The purpose of Activity 1 is to help employees identify the relationship between receiving, proper storage, and cost containment.

Tell: Look at each product on the display. Decide if it is acceptable or unacceptable to serve. If a product is unacceptable, explain why. Then, estimate the cost of each unacceptable product. Write your answers on Handout 1.

Discuss: Employees’ responses.

Discuss: Food safety concerns with unacceptable products.

Emphasize: The relationship between receiving, proper storage, and cost containment.

Note: See the answer key for Handout 1 for suggested answers to this activity.

Introduction

Tell: Receiving and storage procedures are designed to keep food safe and contain food costs.

Not following standard procedures can result in:

- Unsafe food
- Increased food costs
Lesson 10 Content (cont.)

**Principles of Receiving**

**Tell:** Receiving means checking foods or meals delivered from vendors for:
- Correct item
- Specified quantity
- Quality
- Food safety criteria

Accept or reject food based on receiving criteria.

**Steps in the Receiving Process**

**Note:** Make sure the employees have a copy of Handout 2. Go over the steps in the receiving process and refer to the steps listed on Handout 2. If necessary, use a flipchart to write down the points. Make sure the mini poster “Food Storage Basics” is available for the employees to see. Also, have a sample invoice ready to show employees when referring to invoices.

**Tell:** The steps in the receiving process are:
- Plan for delivery and have tools for receiving ready.
- Visually inspect all items and look for signs of container damage.
- Check and record temperatures of frozen and refrigerated items.
- Check off items on invoice.
- Check for substituted products.
- Reject unacceptable goods and note this rejection on the invoice.
- Sign the invoice (meaning you agree to pay the bill).
- Date the food packages.

**Tools for Receiving**

**Tell:** The tools for receiving are:
- Thermometers
- Temperature logs

**Ask:** How do you take the temperature of foods received?
Lesson 10 Content (cont.)

Tools for Receiving (cont.)

**Note:** Take a thermometer and demonstrate as you explain how to take the temperature of foods received.

**Tell:** You can take the temperature of foods received by:
- Placing the thermometer under the top layer of goods
- Placing the thermometer through a hole in an unopened case
- Placing the thermometer inside the package
- Placing the thermometer between the folds of a folded package

**Note:** Go over how to record temperatures on a temperature log.

**Ask:** What are the signs of food spoilage?

**Note:** If necessary, write the following answers on a flipchart.

**Tell:** Signs of food spoilage are:
- The color of the food
- The odor of the food
- Dented or bulging cans
- Freezer burn
- Melted products
- Products frozen together that should be frozen individually (IQF)

**Principles of Storage**

**Note:** As you go over the principles of storage, write the main points on a flipchart.
Lesson 10 Content (cont.)

Principles of Storage (cont.)

Tell: Storage means placing the products in the proper storage area.
- Store items using FIFO (First In, First Out). To do this, store new supplies behind old supplies so that the old supplies are used first.
- Store food and chemicals in separate areas.
- Date foods and place new foods behind current stock.
- Keep food in clean, sturdy containers to prevent pest and rodent infestation.
- Keep food off the floor and away from the walls.
- Keep the shelving and floor clean.

Types of Storage

Note: Refer the employees to Handout 2 and to the mini poster “Food Storage Basics” as you go over the practices for dry, refrigerated, and frozen storage. If necessary, use a flipchart to write down the points.

Dry Storage Practices
- Store dry foods in a well-ventilated room, at least six inches off the floor and away from the walls.
- The temperature of the dry storage area should be maintained between 50 °F and 70 °F.
- Use FIFO (First In, First Out).
- Avoid storing food under exposed waste or sewer lines.
- Store opened packages in closed, sturdy, labeled containers.
- Store chemicals, cleaners, and pesticides away from food products.
- Keep the shelving and floor clean.

Frozen Storage Practices
- Store foods between 0 °F and -10 °F.
- Use FIFO (First In, First Out).
- Properly wrap food to prevent freezer burn.
- Defrost the freezer as needed.
- Keep the shelving and floor clean.
Principles of Storage (cont.)

Refrigerated Storage Practices

- Store foods at 41 °F or below.
- Store raw meat on the bottom shelf in a leak-proof dish away from other foods.
- Store dairy products away from strong odor foods, if possible.
- Use FIFO (First In, First Out).
- Store foods to allow cool air circulation on all surfaces.
- Prevent condensation from dripping on food.
- Check and record temperatures frequently.
- Keep refrigerator and freezer doors closed.
- Keep the shelving and floor clean.

Outcomes of Using Proper Receiving and Storage Practices

**Tell:** Proper receiving and storage practices impact:
- Food quality
- Food safety
- Cost containment

**Discuss:** How proper receiving and storage practices impact:
- Food quality
- Food safety
- Cost containment

Lesson Evaluation

**Note:** The material needed is a copy of the Lesson Evaluation for each employee. Go over the directions with the employees before having them answer the questions.

**Discuss:** Employees’ responses.
Handout 1
Icebreaker

Directions: Look at the products on display. Circle or underline if each product is “acceptable” or “unacceptable.” If “unacceptable,” identify the problem and estimate the cost of the product.

1. Acceptable or unacceptable product:
   Estimated cost of product:

2. Acceptable or unacceptable product:
   Estimated cost of product:

3. Acceptable or unacceptable product:
   Estimated cost of product:

4. Acceptable or unacceptable product:
   Estimated cost of product:

5. Acceptable or unacceptable product:
   Estimated cost of product:
Handout 1: Answer Key

Icebreaker

Directions: Look at the products on display. Circle or underline if each product is “acceptable” or “unacceptable.” If “unacceptable,” identify the problem and estimate the cost of the product.

Answers will vary depending on the products used for the display. The following are possible answers for unacceptable products.

1. Acceptable or unacceptable product: Canned green beans with can dented and bulging. Dented cans suggest food spoilage, possibly botulism or other foodborne pathogen.

   Estimated cost of product: $2.12

2. Acceptable or unacceptable product: Frozen ground beef appearing to be freezer-burned with whitish, gray spots on the meat. The meat appears to have thawed and refrozen. The freezer-burned areas also may be due to broken packaging. The product will have an “old” flavor and may be unsafe to eat.

   Estimated cost of product: $27.39

3. Acceptable or unacceptable product: Frozen IQF chicken with individual pieces frozen in one lump. IQF chicken is chicken that is individually quick frozen. Each item should be separate in the package. If the pieces are frozen together in one lump, the chicken has thawed and refrozen.

   Estimated cost of product: $37.99

4. Acceptable or unacceptable product: Milk with use-by date that expired the day before. Either too much milk was ordered or received, or FIFO was not in place.

   Estimated cost of product: $1.99

5. Acceptable or unacceptable product: Canned ham with receiving date from the previous year. FIFO was not in place or the item was ordered but never put on the menu for use. If the can is intact, the product may be safe to eat; however, it may have an “old” flavor.

   Estimated cost of product: $19.88
Handout 2
Receiving Process and Storage Practices

Receiving
Steps in the Receiving Process:
- Plan for delivery and have tools for receiving ready.
- Visually inspect all items and look for signs of container damage.
- Check and record temperatures of frozen and refrigerated items.
- Check off items on invoice.
- Check for substituted products.
- Reject unacceptable goods and note this rejection on the invoice.
- Sign the invoice (meaning you agree to pay the bill).
- Date the food packages.

Storage
Dry Storage Practices:
- Store dry foods in a well-ventilated room, at least six inches off the floor and away from the walls.
- The temperature of the dry storage area should be maintained between 50 °F and 70 °F.
- Use FIFO (First In, First Out).
- Avoid storing food under exposed waste or sewer lines.
- Store opened packages in closed, sturdy, labeled containers.
- Store chemicals, cleaners, and pesticides away from food products.
- Keep the shelving and floor clean.

Refrigerated Storage Practices:
- Store foods at 41 °F or below.
- Store raw meat on the bottom shelf in a leak-proof dish away from other foods.
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Frozen Storage Practices:
- Store foods between 0 °F and -10 °F.
- Use FIFO (First In, First Out).
- Properly wrap food to prevent freezer burn.
- Defrost the freezer as needed.
- Keep the shelving and floor clean.
Lesson Evaluation

Directions: Give short answers for each question.

1. Juan is putting up stock in the dry storage area. He is told to remember to use FIFO. Describe how Juan will put the stock on the shelves using FIFO.

2. Adele is checking in the food order. One case of canned vegetables is damaged. The cans are dented and bulging. What should she do?
Lesson Evaluation: Answer Key

Directions: Give short answers for each question.

1. Juan is putting up stock in the dry storage area. He is told to remember to use FIFO. Describe how Juan will put the stock on the shelves using FIFO.

   Juan will move the stock on the shelves to the front and put the new stock behind the older stock.

2. Adele is checking in the food order. One case of canned vegetables is damaged. The cans are dented and bulging. What should she do?

   She should speak with her supervisor if she does not have the authority to make a decision about the damaged food. The adult day care center should refuse to accept the damaged vegetables. Adele should be sure a credit is written before signing the invoice.