

# Standards, Regulations, and Laws

## SECTIONS

8.1 Foodservice Standards and Regulations

8.2 Employment Laws

## WRITING ACTIVITY

### Write an Explanation

An explanation is a description of how or why something happens. Write a paragraph explaining why the government regulates the food-service industry.

### Writing Tips

- 1 First, plan the points you want to make in an outline or list.
- 2 Use helper words and phrases, such as because or since.
- 3 Organize the paragraph by addressing each subject, one at a time.

### EXPLORE THE PHOTO

Food inspectors check foodservice operations to make sure they follow standards and regulations. *What do food inspectors check?*



# Foodservice Standards and Regulations

## Reading Guide

### Before You Read

**What You Want to Know** Write a list of what you want to know about foodservice standards and regulations. As you read, write down the heads in this section that provide the information.

### Read to Learn

#### Key Concepts

- **List** the industry standards of quality used to evaluate food.
- **Summarize** the roles of various government agencies in the foodservice industry.
- **Explain** how facilities maintenance can help uphold foodservice standards.

#### Main Idea

Foodservice standards provide standard quality levels that a business should provide to its customers. Government laws and regulations increase the safety of food products.

### Graphic Organizer

Use a table like this one to list the 10 standards of quality used in the foodservice industry to evaluate food. List one standard in each box.

Standards of Quality

### Content Vocabulary

- standard
- solid waste
- violation
- environmental impact statement
- regulation
- material safety data sheet (MSDS)
- grading
- accident report log
- inspection
- genetically engineered food
- irradiated food
- Food Code

### Academic Vocabulary

- performance
- enforce

*What rules keep foodservice environments safe?*

## ACADEMIC STANDARDS

### Mathematics

**NCTM Data Analysis and Probability** Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

### Science

**NSES B** Develop an understanding of chemical reactions.

### Social Studies

**NCSS VI I Power, Authority, and Governance** Evaluate the extent to which government achieves its stated ideals and policies at home and abroad.

**NCSS VI H Power, Authority, and Governance** Explain and apply ideas, theories, and modes of inquiry drawn from political science to the examination of persistent ideas and social problems.

**NCTE** National Council of Teachers of English

**NCTM** National Council of Teachers of Mathematics

**NSES** National Science Education Standards

**NCSS** National Council for the Social Studies



#### Graphic Organizer

Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) for a printable graphic organizer.

# Industry Standards

Imagine that you have just received a shipment of eggs from a supplier. How would you know if the eggs were safe or of good quality? Foodservice industry standards let you know for sure. Government laws and regulations increase the safety of food products. They also regulate safety in the workplace.

A **standard** is an established model or example used to compare quality. With standards in place, managers and food safety professionals can judge a business's **performance**, or the way a foodservice business operates. If a standard is not met, the foodservice operation is written up as being in violation. A **violation** means not following a rule. The operation may pay a fine. It could even be closed down if the violation is serious.

The main goal of the foodservice industry is to provide good quality food and service to customers. To do this, all of these quality standards must be considered: safety, nutritional value, appearance, consistency, flavor, texture, convenience, ease of handling, packaging, and storage.

**Reading Check** Explain What happens if a foodservice standard is not met?

# Governmental Regulations

The foodservice industry is governed by regulations. A **regulation** is a rule by which government agencies enforce minimum

standards of quality. Federal, state, and local governments **enforce** these regulations. To enforce means to ensure that laws and regulations are followed.

## USDA Regulations

The U.S. Department of Agriculture (USDA) grades and inspects poultry and poultry products, eggs and egg products, and meat and meat products. The USDA also controls food grading, processing plant inspections, and the use of pesticides, preservatives, and food additives.

## Food Grading

When the USDA inspects food and food products, they apply grades to them. (See **Figure 8.1**.) **Grading** food products involves applying specific quality standards to those products. Some products must be graded. Others are graded on a voluntary basis.

A product receives a grade based on its quality when it is packaged. The package is then stamped with the grading seal. Changes in the product may occur during handling and storing that can affect the food's quality. There are different grades for different kinds of products. For example, there are three grades of chicken and eight grades of beef.

## Food Inspections

Inspections are conducted to ensure that food is sanitary and labeled correctly. An **inspection** is a test of a business's practices against standards. These inspections are conducted by the Food Safety and Inspection Service (FSIS). The FSIS is a public health

### FIGURE 8.1 Food Grading Stamps

**Make the Grade** The USDA has many grades that show quality in a variety of foods.

*Why do you think grading foods is important?*



agency that is part of the USDA. The FSIS checks that egg, poultry, and meat products are wholesome, safe, and correctly packaged and labeled. Inspected food is stamped to show it meets safety standards. (See **Figure 8.2.**)

## FDA Regulations

The Food and Drug Administration (FDA) is part of the U.S. Department of Health and Human Services. The FDA enforces the Food, Drug, and Cosmetic Act of 1938. This law covers food and the packaging of foods other than fish, poultry, and meat.

In 1992, the FDA stated that food would be judged by its characteristics, not by the process used to make it. This also applies to genetically engineered and irradiated foods.

**Genetically** (jə-'ne-ti-k(ə-)lē) **engineered food** is food that is made by recombining genes. Genes can be omitted or held back, or new genes can be spliced into a food. These foods may become new varieties, such as the combination of broccoli and cauliflower to create broccoflower. Genes may also be combined to improve foods, packing them with more nutrients than they would have naturally.

**Irradiated** (i-'rā-dē-,āt-ed) **food** is food that has been exposed to radiation to kill harmful bacteria. Beef, lamb, and pork are the three foods most commonly exposed to radiation. Other food products that may be irradiated include spices and some fruits and vegetables.

### **FIGURE 8.2** Food Safety and Inspection Service Stamps

**Safe Food** The Food Safety and Inspection Service checks to ensure that food is wholesome and safe to eat. *What is the difference between grading and inspection?*



### **FIGURE 8.3** Irradiated Foods

**Radiation and Food** Beef, lamb, pork, spices, and some fruits and vegetables are sometimes irradiated to kill harmful bacteria. *Why do you think irradiation is necessary for some foods?*



The FDA oversees irradiation to ensure that the foods are safe. (See **Figure 8.3.**) Irradiated foods must have a label to show they have been irradiated.

## Labels

The FDA also requires that nutrition labels be placed on food packages. This is a result of the 1990 Nutrition Labeling and Education Act. The nutrition label shows the percent of daily dietary value in the food. This is usually based on a daily 2,000- or 2,500-calorie intake. (See **Figure 8.4** on page 200.) The nutrition label also shows the number of calories per serving, the total calories, and the amount of vitamins and minerals, fat, cholesterol, sodium, carbohydrates, and protein in the food.

## Menus

Since 1997, the FDA has regulated health claims made by restaurants, such as low-fat menu items. These claims must meet FDA standards as listed in the Nutrition Labeling and Education Act. For example, the FDA standard for low fat is 3 grams or fewer per serving. A foodservice business must be able to provide nutritional information to any customer who asks for it. If the menu does not make any special claims, this information is not needed.

## FIGURE 8.4 Nutrition Labels

**Nutrition Facts** Nutrition labels provide valuable information. *What does this nutrition label tell you about the food it represents?*

<b>Nutrition Facts</b>	
Serving Size 1/2 cup (114 g)	
Servings Per Container 4	
Amount Per Serving	
<b>Calories 90</b>	<b>Calories from Fat 30</b>
% Daily Value*	
<b>Total Fat 3 g</b>	<b>5%</b>
Saturated Fat 0 g	0%
Trans Fat 0 mg	
<b>Cholesterol 0 mg</b>	<b>0%</b>
<b>Sodium 300 mg</b>	<b>13%</b>
<b>Total Carbohydrate 13 g</b>	<b>4%</b>
Dietary Fiber 3 g	12%
Sugars 3 g	
<b>Protein 3 g</b>	
Vitamin A 80%	Vitamin C 60%
Calcium 4%	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65 g 80 g
Sat Fat	Less than 20 g 25g
Cholesterol	Less than 300 mg 300 mg
Sodium	Less than 2,400 mg 2,400 mg
Total Carbohydrate	300 g 375 g
Fiber	25 g 30 g
Calories per gram:	
Fat 9	Carbohydrates 4 Protein 4

### Food Code

The FDA also recommends foodservice standards in the Food Code. The **Food Code** gives guidelines for handling food safely. It is updated every two years. It is not a law, so states can choose to use it or write their own code, using the Food Code as a guide.

## A TASTE OF HISTORY

1906

The Pure Food and Drug Act is passed

1908

Supreme Court Justice Thurgood Marshall is born

### Food and Drug Watchdogs

In 1883, Dr. Harvey W. Wiley was appointed chief of the U.S. Department of Chemistry. This department was a predecessor to the Food and Drug Administration. Wiley recognized the need for food and drug scrutiny. He set out to put a stop to inferior food products and false medical remedies. He and his staff performed many investigations and made their findings public. Their determination led to the original Pure Food and Drug Act, passed on June 30, 1906.

### History Application

Research the Pure Food and Drug Act of 1906. Write a paragraph that describes how this Act affected the food and drug industry, and the public.

**NCSS VI | Power, Authority, and Governance** Evaluate the extent to which government achieves its stated ideals and policies at home and abroad.

## Environmental Regulations

The Environmental Protection Agency (EPA) decides how solid waste is managed in the United States. **Solid waste** includes packaging material, containers, and recyclables. These regulations are enforced by federal, state, and local agencies. The EPA recommends that businesses reduce solid waste. This can be done by eliminating packaging where possible. It also recommends that reusable food containers be cleaned and sanitized before reusing them. Dispose of containers that hold chemicals. Never reuse them for food products.

The National Environmental Policy Act (NEPA) of 1969 protects the environment from damage caused by building development. Whenever a new restaurant is planned, an environmental impact statement (EIS) must be completed. An **environmental impact statement** describes the impact of the proposed facility and any negative effects it might have on the environment.

## OSHA Regulations

The Occupational Safety and Health Administration (OSHA) has two main responsibilities. It sets standards and inspects workplaces to make sure that employers provide safe and healthful environments. Many standards, such as these three, are the same in all types of workplaces:

- Employers must provide personal protective equipment, such as gloves.
- Manufacturers of hazardous materials must label their products for danger. OSHA also requires that employers have a material safety data sheet (MSDS) for each hazardous material. A **material safety data sheet** identifies any hazardous chemicals and their components. Employers must tell employees where these sheets are located.
- Employers must give employees access to any records of exposure to toxic materials.



- Keep Clean** Built-in sanitation features include this hand-washing station. *What other kitchen rules can you think of that will help ensure sanitation?*

## Safety Check

### ✓ Safe Food Handling

Most states require that foodservice managers take special training and certification in safe food handling. To get this certification, managers must take a course that is approved by the state or local government and pass a test. You can contact your local health department for information about certification requirements for safe food handling.

**CRITICAL THINKING** *Why would the government want to ensure that managers get education in safe food handling?*

OSHA also oversees record keeping of job-related illness and injury. One required form is an accident report log. An **accident report log** shows the details of any accident that happens in a business. If an accident causes three or more employees to be hospitalized, or one or more people to die, that accident must be reported to a local OSHA office within eight hours. OSHA will then investigate to see if any standards were violated.

## State and Local Regulations

Many of the health regulations that affect foodservice operations are written by the state. Local health departments then enforce state regulations. A large city may also have its own health department that enforces regulations within city limits. The county health department enforces regulations in rural areas and small cities. Most national and statewide companies also have standards that are maintained by their own inspectors.

**Reading Check** **Describe** What is the difference between food grading and food inspection?

# Facilities

## Maintenance

There are also standards and regulations about how a facility should be maintained. Foodservice operations must have facilities that are designed so that they can be thoroughly cleaned. Any facility that cannot be thoroughly cleaned would not provide a safe environment for food. Floors, walls, and ceilings, equipment, and facility design are the main areas of a facility that must meet industry standards.

### Floors, Walls, and Ceilings

Industry standards state that floors, walls, and ceilings should be constructed to be durable. They must also meet health and safety regulations. The FDA Food Code recommends that floors should be slip-resistant. They should not be able to absorb materials that are spilled on them.

Walls and ceilings should be light in color. This is especially true in food preparation areas. Light-colored walls and ceilings allow soil to be easily seen. This makes these areas easier to clean. All floors, walls, and ceilings should be kept in good condition. They should not have any holes, cracks, or peeling paint. They should be kept clean and sanitized at all times.

### Equipment

The National Sanitation Foundation (NSF) International maintains sanitation standards for kitchen equipment and tools. In addition, Underwriters Laboratories (UL) classifies electrical equipment that meets NSF International standards. The equipment used in commercial kitchens must have the NSF International and UL stamps. Without these stamps, you may not be able to ensure the safety and quality of the equipment.



**▲ Make Accommodations** Certain accommodations need to be made for those with disabilities. *What types of accommodations can be made in the workplace?*

When equipment is purchased for a professional kitchen, it should:

- Be easy to clean.
- Have smooth, nontoxic, food-contact surfaces that will not absorb bacteria.
- Have surfaces that resist corrosion, and that are nontoxic and chip resistant.
- Be free of surface pits and crevices. Bolts and rivets should be flush with the surface of the equipment, not sticking out. This prevents bacteria from growing in crevices in the equipment.
- Have rounded-off corners or edges.
- Be easy to take apart for cleaning.
- Be for commercial use only.

OSHA also has procedures for cleaning and maintaining equipment. These procedures cover disassembling, cleaning, sanitizing, reassembling, and storing equipment. All foodservice employees must follow these procedures to ensure that kitchen equipment is clean and sanitary. This protects the health of the customers and the employees.

## Science à la Carte

### The pH Scale

The pH scale measures the acidity or alkalinity of a solution on a scale ranging from 0 to 14. A pH of 7 means the substance is neutral. Pure water has a pH of 7. Tomatoes have a 1.8 to 2.4 pH. A pH of less than 7 means the solution is an acid. A pH of more than 7 means the solution is a base.

### Procedure

Break off three or four red cabbage leaves. Cut them into small pieces and add them to 1 cup of boiling water. Boil them for 25 minutes. Remove the red cabbage leaves from the water using tongs. Pour the juice into a small pitcher. Add two to three drops of red cabbage juice to 1 ounce of each of the following substances: vinegar, baking soda in water, milk, orange juice, dish detergent mixed in water, and pickle juice. If the substance turns a pinkish red, it is an acid. If it turns blue, it is a base.

### Analysis

Record your observations. Create a chart to show which items are bases, and which items are acids.


**NSES B** Develop an understanding of chemical reactions.

## Facility Design

There are many different industry standards and state and local regulations that cover all aspects of foodservice business design. These standards generally cover:

- Having an efficient work flow in kitchen and dining room areas.
- Maintaining a low risk of contamination
- Maintaining easy access to safety and emergency equipment.

Facility maintenance standards also apply to the design of restrooms, sinks, ventilation, hand-washing stations, lighting, and waste disposal systems. All of these areas must be able to be cleaned and sanitized thoroughly. Areas that cannot be cleaned well may encourage the growth of bacteria and infestation by pests. Check with local and state agencies to find design standards before you design any foodservice business space.

 **Reading Check** **Determine** What government agency oversees workplace safety?

## SECTION 8.1

### After You Read

### Review Key Concepts

1. **Explain** why standards of quality have been developed to evaluate food.
2. **Summarize** FDA regulations on nutrition labels.
3. **List** the three main areas that must meet industry standards of facilities maintenance.

### Practice Culinary Academics



### Social Studies

4. Research one foodservice standard, law, or regulation at each of the local, state, and federal levels. Summarize the standard, law, or regulation and its purpose. How is it different at the local, state, and federal levels? How is it the same? Write a summary of your findings and present it to the class. List your sources.

**NCSS VI H Power, Authority, and Governance** Explain and apply ideas, theories, and modes of inquiry drawn from political science to the examination of persistent ideas and social problems.



### Mathematics

5. A restaurant's OSHA-mandated accident report log lists 2 injuries in January, 5 in February, 0 in March, 3 in April, 1 in May, and 6 in June. Display this information in a bar graph.

**Math Concept** **Bar Graphs** A bar graph uses vertical bars to display information. When creating a bar graph, you must decide which information to place along the horizontal scale, and which to place on the vertical scale.

**Starting Hint** Use the horizontal scale to list the months, and the vertical scale to list the number of injuries. Draw a vertical bar above each month's name to show the number of injuries.

**NCTM Data Analysis and Probability** Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.



Check your answers at this book's Online Learning Center at [glencoe.com](http://glencoe.com).



# Employment Laws

## Reading Guide

### Before You Read

**Use Diagrams** As you read through this section, write down the main idea. Write down any facts, explanations, or examples you find in the text. Start at the main idea and draw arrows to the information that directly supports it. Then, draw arrows from these examples to any information that supports them.

### Read to Learn

#### Key Concepts

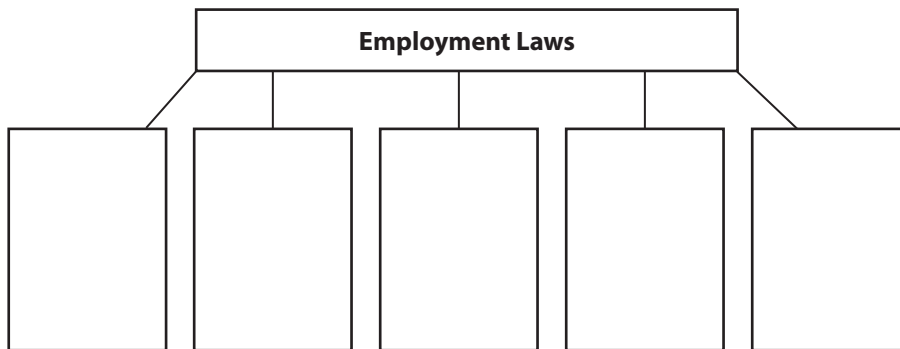
- **Identify** laws related to equal employment.
- **Describe** laws meant to protect workers.
- **Distinguish** between management and employee responsibilities for the working environment.


#### Main Idea

Employment laws protect workers' rights and safety. Laws also protect groups of people from discrimination.

#### Graphic Organizer

Use a concept map to organize the different types of laws that fall under the subheading of Employment Law. Look at the main headings of the section to determine the five different types of laws.



 **Graphic Organizer** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) for a printable graphic organizer.

*Federal, state, and local laws help keep foodservice employees safe.*

### ACADEMIC STANDARDS

#### Mathematics

**NCTM Number and Operations** Understand numbers, ways of representing numbers, relationships among numbers, and number systems.

#### Social Studies

**NCSS V F Individuals, Groups, and Institutions** Evaluate the role of institutions in furthering both continuity and change.

**NCTE** National Council of Teachers of English

**NCTM** National Council of Teachers of Mathematics

**NSES** National Science Education Standards

**NCSS** National Council for the Social Studies

# Equal Employment Opportunities

Laws protect different groups of people from discrimination and make sure that workers are treated fairly. A **law** is an established rule. These include right-to-know laws. These laws require that employers tell employees about their rights in the workplace. Foodservice professionals should know the laws that protect them and follow them responsibly.

There are federal, state, and local laws that make sure that everyone has a chance to get a job. The Equal Employment Opportunities Act, passed in 1972, expanded some of the laws in the 1964 Civil Rights Act. It requires businesses to have affirmative action programs with the goal of preventing discrimination. This applies to all public and private employers involved in interstate commerce. **Interstate commerce** is business that happens over two or more states. This law also applies to restaurants with at least 15 employees who work at least 20 weeks per year. (See **Figure 8.5**.)

## Affirmative Action

After the 1964 Civil Rights Act, employers created programs to locate, hire, train, and promote women and minorities. The goal of these programs is to prevent discrimination. Discrimination might prevent qualified people from getting jobs because of their race or gender. Programs like these are called **affirmative action** plans.

Employers with federal contracts of more than \$50,000 must have affirmative action programs. This might include, for example, a foodservice company that supplies meals to a U.S. military base.

## Age Discrimination

The Age Discrimination in Employment Act of 1967 protects people age 40 and older from being discriminated against in hiring, promotion, and wages. This law helps prevent people from not being hired based solely on their age. Experts predict that by 2030, one in three persons will be age 55 or older. Working beyond a standard retirement age is now more common.

### **FIGURE 8.5 Employment Laws**

**Workers' Rights** The United States has many laws that protect the rights of workers.

*Why do you think these laws are important?*

Employment Laws	Provisions
<b>Civil Rights Act</b>	Employers may not discriminate based on race, color, national origin, sex, or religion; protects U.S. citizens working for U.S. companies overseas.
<b>Equal Employment Opportunities Act</b>	Requires businesses to have affirmative action programs. This includes restaurants with at least 15 employees who work at least 20 weeks per year.
<b>Age Discrimination in Employment Act</b>	Protects people 40 years of age and older from being discriminated against in any aspect of employment.
<b>Americans with Disabilities Act</b>	Prevents employers from refusing to hire or promote disabled persons, and ensures that all employees are treated equally. This law also requires public facilities make "reasonable accommodations" for the disabled.
<b>Immigration Reform and Control Act</b>	Only U.S. citizens and people who are authorized to work in the United States may be legally hired.
<b>Immigration and Nationality Act</b>	Prevents employers from hiring immigrants for low-skill, low-paying jobs without providing them with pension or insurance benefits.
<b>Federal Employment Compensation Act</b>	Protects employees who are injured or disabled due to work-related accidents.



**Skilled Workers** Workers over age 60 can make a positive impact in the workplace. *How do you think older workers can positively impact a foodservice workplace?*

## Sexual Harassment

The Equal Employment Opportunity Commission (EEOC) defines **sexual harassment** as unwelcome advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. Such behavior includes jokes, gestures, and repeated requests for dates. If behavior like this affects an employee's work or creates an intimidating, hostile, or offensive workplace environment, it violates Title VII of the Civil Rights Act of 1964.

### Create a Policy

Employees need to know what type of behavior is considered sexual harassment. An employer is responsible for the harassment if he or she does not take action. Sexual harassment policies should cover:

- Communication of the policy to all employees.

- Supervisor training in harassment cases.
- A formal system for complaints and how they will be investigated and solved.
- A plan for action on any complaints received. Businesses must protect the person who brought the complaint.
- Disciplinary action for any person guilty of harassment.
- Follow up on all harassment cases.

## Americans With Disabilities

The Americans With Disabilities Act (ADA) became law in 1990. This law makes it illegal to put a person with a disability in a lower-paying job only because of the disability. It is also illegal to offer different pay to a person with a disability doing the same job as a person without disabilities. The ADA also prevents employers from refusing to hire or promote disabled persons.

The ADA defines **disability** as a physical or mental impairment that substantially limits one or more major life activities. The law requires public facilities to provide a reasonable accommodation or adjustments to the workplace for employees and customers with disabilities. This might mean adding access ramps near stairs, or **adapting**, or positively changing, customer bathrooms to accommodate wheelchairs. Reasonable accommodation allows employees with disabilities to enjoy the same benefits and privileges of employment that employees without disabilities enjoy.



**Reading Check Explain** Why are anti-discrimination laws established for the workplace?

## Employee Protection Laws

The workplace is also subject to laws that govern wages, the right to work in this country, and injuries and death in the workplace. These laws ensure that employees can earn a fair wage, work legally, and be compensated in case of injury on the job.

## Wage and Labor Laws

The hourly minimum wage is determined by the federal government. The U.S. Department of Labor does issue certificates for a lower rate for some employees, such as apprentices, student learners, and full-time college students. Most states also have an hourly minimum wage. Some state minimum wages may be higher than the federal minimum wage. Employers must pay their employees whichever is higher.

## Immigration Laws

Before immigrants can be hired in the United States, they must receive special work permits from the government. Immigrants are also protected by workplace laws. It is against the law to hire immigrants for low-skill, low-paying jobs without giving them pension or insurance benefits.

The Immigration Reform and Control Act (IRCA) of 1986 states that only U.S. citizens and people who are authorized to work in the United States may be legally hired. All employers also must follow the Immigration and Nationality Act (INA) of 1952. This law states that employers must fill out an Employment Eligibility Verification Form, also called an I-9, for each person they hire. These forms may be checked by the U.S. Immigration and Naturalization Service to **determine**, or find out, an employee's immigration status.

## Workers' Compensation

Workers' compensation laws make sure that injured or disabled workers can still have an income while they are unable to work. Federal employees are covered under the Federal Employment Compensation Act, passed in 1993. Money is awarded in cases of death or disability that happen on the job. If an employee is killed on the job, benefits are paid to the surviving family. Workers' compensation insurance is part of an employee's benefits. State and federal rules and regulations govern workers' compensation.

## Workplace Injuries and Deaths

Since the Occupational Safety and Health Administration's (OSHA) beginning in 1971, workplace injury and illness rates have dropped by 40%. Deaths have dropped by 50%. OSHA's mission is to ensure employee safety and health by setting and enforcing standards, providing training and education, and working with employers to improve workplace safety and health. OSHA also provides posters and information supplements to employers and employees to make sure that workers know their rights.

One of the most common types of workplace injury is musculoskeletal disorders. A **musculoskeletal disorder** (*məs-kyə-lō-'ske-lə-təl*) is caused by repeated trauma to muscles or bones. These disorders include carpal (*'kär-pəl*) tunnel syndrome, which causes pain in the wrists and hands; lower back pain, which can affect movement and lifting; and tendinitis (*'ten-də-'nī-təs*), which happens when a tendon in the body is overused. Tendinitis can cause swelling and pain.

## Ergonomics

Because of the high rate of musculoskeletal disorders among workers, OSHA studies ergonomics. **Ergonomics** (*ər-gə-'nä-miks*) is the science of efficient and safe interaction between people and the things in their environment. An ergonomic workplace is arranged so that you can use equipment safely and efficiently. Kitchen equipment and tools can be arranged so that they are easy to use, and work tables can be placed at a height that makes them comfortable to use.

The study of ergonomics also helps manufacturers create tools that conform to the shape and movement of the human body. Kitchen tools that have been created with a focus on ergonomics may include special handles or grips. These features may help you complete a task more quickly.



**Determine** Who decides the minimum wage that employers can pay employees?



- Safety Equipment** Workers may be able to prevent injuries by wearing safety equipment. *What safety equipment is this employee using, and what is its function?*

## Who Is Responsible?

Each of the laws discussed in this section affects a foodservice worker on the job every day. Knowing these laws helps employees and employers understand their rights and responsibilities under the law. This means a safer workplace.

- **Employee Responsibilities** Employees must be aware of their rights under the law. You must follow laws and provide correct information about yourself and your job.
- **Managerial Responsibilities** Managers are required to post certain notices, such as the minimum wage laws and annual injury/accident reports. Managers must keep accurate records. They are responsible for knowing the law and enforcing it. They must also train employees to understand and follow laws.

**Reading Check List** What are the responsibilities of management when it comes to employment laws?

## SECTION 8.2

### After You Read

#### Review Key Concepts

1. **Describe** the provisions of the Equal Employment Opportunities Act.
2. **Distinguish** between the Immigration Reform and Control Act (IRCA) of 1986 and the Immigration and Nationality Act (INA) of 1952.
3. **Identify** employee responsibilities in the working environment.

#### Practice Culinary Academics

##### **Social Studies**

4. Choose one of the laws presented in this section. Think about how that law affects foodservice operations in your area. For example, the Americans With Disabilities Act may have required changes in construction. Write a list of your conclusions, and share your findings with the class.

**NCSSVF Individuals, Groups, and Institutions** Evaluate the role of institutions in furthering both continuity and change.



#### Mathematics

5. The Americans With Disabilities Act requires your restaurant's bathrooms to have a wheelchair-accessible stall that is at least  $4\frac{2}{3}$  feet deep. If your bathroom stalls are currently  $4\frac{1}{2}$  feet deep, how much must they be extended?

##### **Math Concept Subtracting Mixed Numbers**

Before subtracting fractions or mixed numbers with unlike denominators, you must convert them to equivalent fractions with common denominators. Find the lowest common denominator of all fractions in the problem.

**Starting Hint** Rewrite  $4\frac{2}{3}$  and  $4\frac{1}{2}$  as equivalent fractions with a common denominator. In this case, their lowest common denominator is 6. Then, subtract to get the answer.

**NCTM Number and Operations** Understand numbers, ways of representing numbers, relationships among numbers, and number systems.



Check your answers at this book's Online Learning Center at [glencoe.com](http://glencoe.com).

**Chapter Summary**

The USDA and the FDA recommend regulations for the foodservice industry. Foods inspected by the USDA receive a grade, stamp, or approval that shows that the product meets safety standards. Foodservice professionals must

evaluate the quality of the food they serve and follow strict standards for safe food handling. Laws protect workers from discrimination and give employees the right to work in a safe and healthful environment.

**Content and Academic Vocabulary Review**

1. Use each of these vocabulary words in a sentence.

**Content Vocabulary**

- standard (p. 198)
- violation (p. 198)
- regulation (p. 198)
- grading (p. 198)
- inspection (p. 198)
- genetically engineered food (p. 199)
- irradiated food (p. 199)
- Food Code (p. 200)
- solid waste (p. 200)

- environmental impact statement (p. 200)
- material safety data sheet (MSDS) (p. 201)
- accident report log (p. 201)
- law (p. 205)
- interstate commerce (p. 205)
- affirmative action (p. 205)
- sexual harassment (p. 206)
- disability (p. 206)
- musculoskeletal disorder (p. 207)
- ergonomics (p. 207)

**Academic Vocabulary**

- performance (p. 198)
- enforce (p. 198)
- adapting (p. 206)
- determine (p. 207)

**Review Key Concepts**

2. **List** the industry standards of quality used to evaluate food.
3. **Summarize** the roles of various government agencies in the foodservice industry.
4. **Explain** how facilities maintenance can help uphold foodservice standards.
5. **Identify** laws related to equal employment.
6. **Describe** laws meant to protect workers.
7. **Distinguish** between management and employee responsibilities for the working environment.

**Critical Thinking**

8. **Debate** the pros and cons of genetically engineered or irradiated foods as a class. How can these processes affect the foodservice industry?
9. **Analyze** the importance of the foodservice industry's strict standards concerning the temperature of foods. Why is this important? What are the consequences of not following these standards?
10. **Understand** USDA grading. Certain food products are graded by the USDA. If a food product is graded, can you go without inspecting it yourself? Why or why not?

## Academic Skills

**English Language Arts**

- 11. Write a Memo** Imagine you are employed as a legal consultant to the owner of a foodservice operation. The owner is hiring some new employees and wants a summary of the laws he will have to remember when making his decision of whom to hire. Write a memo summarizing the laws that would affect hiring decisions in a foodservice establishment.

**NCTE 5** Use different writing process elements to communicate effectively.

**Science**

- 12. Genetic Engineering** Genetically engineered foods are appearing in every grocery store and food supplier.

**Procedure** Research one genetically engineered food product. Discover how the food was modified, and for what purpose. Discover what the genetically engineered food is used for, and what has been the result of its use. Also, find any controversies surrounding the use of the product and what the international reaction has been to the product.

**Analysis** Write a short essay to explain your findings. Cite your sources.

**NSES C** Develop an understanding of the molecular basis of heredity.

**Mathematics**

- 13. Determine Egg Weights** The USDA assigns different classifications to eggs based on their size. The USDA assigns a size classification of jumbo when the net weight of a dozen eggs is 30 ounces. The phrase net weight means the weight of the eggs only (total weight minus the weight of the container). Write an algebraic equation showing the relationship between the total weight, the net weight of the eggs, and the container weight for a package of a dozen jumbo eggs. If the total weight is 31.5 ounces, what is the weight of the container?

**Math Concept Writing Expressions Involving**

**Subtraction** When writing any algebraic expression, use variables, such as  $x$  and  $y$ , to represent any unknown values. For expressions involving subtraction, pay particular attention to the order of terms.

**Starting Hint** The equation should contain three values: total weight, container weight, and net weight of the eggs. Determine which two of those values are unknown, and represent those unknown amounts with variables in the equation. Determine which of those values is known, and use that actual value in the equation.

**NCTM Algebra** Represent and analyze mathematical situations and structures using algebraic symbols.

## Certification Prep

**Directions** Read the questions. Then, read the answer choices and choose the best possible answer for each.

- 14.** Who is covered under the Federal Employment Compensation Act of 1993?
- veterans
  - people with disabilities
  - federal employees
  - minors
- 15.** Who oversees the conducting of food inspections?
- the restaurant owner
  - the Food and Drug Administration
  - the county government
  - the Food Safety and Inspection Service

*Sharpen your test-taking skills to improve your kitchen certification program score.*

**Test-Taking Tip**

When answering multiple-choice questions, ask yourself if each option is true or false. This may help you find the best answer.

## Real-World Skills and Applications

## Civic Responsibility

- 16. Interview a Foodservice Worker** Research local, state, or federal standards for the foodservice industry. Write down 10 regulations that local foodservice operations must follow. Then, find a foodservice employee or manager, and interview him or her on how restaurants can follow these regulations. Take notes during your interview. When you have finished the interview, transcribe your notes. Write a short summary of the foodservice employee's or manager's recommendations, and turn in the summary and your interview notes to your teacher.

## Critical Thinking Skills

- 17. Evaluate Your Home Kitchen** Follow your teacher's instructions to go online and search for a restaurant inspection checklist. Choose one and print it out. Then, go through your home kitchen and use the checklist to evaluate it. Note for each item whether your kitchen passes, fails, or whether that item does not apply to a home kitchen.

## Technology Applications

- 18. Make a Slide Presentation** Follow your teacher's instructions to form teams. Work as a team to develop a slide presentation on one of the following topics: ergonomics in foodservice operations, workers' compensation, or wage and labor laws. Use slide presentation software to create your presentation. Display your presentation to the class. As a class, discuss the information that was presented in each presentation, and evaluate each.

## Financial Literacy

- 19. Calculate Minimum Wage** Imagine that you have been assigned to a committee responsible for examining your state's minimum wage. You have been asked to give a recommendation for the next federal minimum wage increase. Your state's current minimum wage is \$5.85 per hour. You have gathered information that shows that during the past three years, the average cost of living has risen by 10%. Figure out what the new state minimum wage should be.

## Culinary Lab



*Use the culinary skills you have learned in this chapter.*

## Know the Law

- 20. Create a Chart** Work as a team to research and then create a chart listing and explaining the laws presented in this chapter.

- A. Make a chart.** Follow your teacher's instructions to form teams. Working in teams, make a chart listing the titles of the various laws and regulations presented in this chapter.
- B. Perform research.** Use print and Internet resources to research the items on your team's chart.
- C. List employment laws.** List each law and regulation by name and explain how each one impacts employees in the workplace.
- D. Create a poster.** Select one law or regulation from the chart and create an educational poster that would inform foodservice employees about this law or regulation. Display the posters in class.

## Create Your Evaluation

Look at each team's poster and write a brief evaluation of how well the poster conveys information about the law or regulation that it is meant to portray. Assess how quickly you can tell which law is being displayed and how helpful the poster would be in a work environment. Answer these questions:

- Would it raise the awareness of someone unfamiliar with the law?
- Does it contain enough information to be helpful?



# Management and Supervision

*Overseeing the operations of a foodservice business is vital.*

**P**eople in foodservice management are responsible for overseeing the proper handling of food in commercial kitchens, storerooms, hotels, and restaurants. These managers and supervisors have strong backgrounds in business math, accounting, and record-keeping, along with basic computer skills. Being multilingual is often an asset, as managers must be able to communicate effectively with diverse groups of employees and customers.

Along with training staff and managing budgets, foodservice managers and supervisors are responsible for maintaining a safe and sanitary work environment, so an understanding of food and workplace safety is essential.

## Herman Schumacher, Food and Beverage Manager

**Q** What is your current position?

**A** I am a food and beverage manager with Wyndham Hotels®.

**Q** What education and training did you receive?

**A** After high school graduation in my home country of the Netherlands, I worked in many restaurants trying to gain as much culinary knowledge and experience as I could. Like other food and beverage managers, I started in the business by attending culinary school. Afterward, I decided to work on a cruise ship because I wanted to see the world while honing my culinary skills. To become a manager, I realized that I would need to return to school and earn another degree in Hospitality Management.

**Q** How do your past experiences help you on the job today?

**A** I believe that each job experience helps to prepare me for the next one. For example, working aboard a cruise ship taught me speed



and dexterity in cooking and also how to multi-task. I feel that the sum total of my life experience has prepared me for my future success.

**Q** Are you still learning?

**A** Yes. I believe that a successful chef is one who approaches each day as an opportunity to learn and improve his or her skills. I learn something new every day. That is one of the reasons I love my job so much.

**Q** Where do you see yourself in five years?

**A** My goal is to eventually become the general manager of a hotel.

**Q** What advice would you offer new managers?

**A** Focus on the fundamentals. Communication and strong interpersonal skills are valuable assets in becoming a food and beverage manager.

## Career Ingredients

<b>Education or Training</b>	Most employers require a culinary degree and restaurant experience. Completion of business, accounting, and management courses are helpful.
<b>Academic Skills Required</b>	English Language Arts, Mathematics
<b>Aptitudes, Abilities, and Skills</b>	A background in foodservice, business math, and computer basics, along with strong interpersonal, communication, and leadership skills. Also, the ability to organize and solve problems. Multilingual skills are an asset.
<b>Workplace Safety</b>	Basic kitchen and dining room safety, sanitation, and food handling rules must be followed and enforced.
<b>Career Outlook</b>	Openings will be plentiful in the near future as the foodservice industry continues to expand.
<b>Career Path</b>	Advancement depends on skills, training, and work experience.

## Career Pathways

<b>Food and beverage managers</b>	Responsible for a foodservice operation's entire food and beverage department. They coordinate the daily operations of all kitchen services and are also responsible for tracking costs, profits, and losses.
<b>Assistant managers</b>	Oversee the dining room and the kitchen staff under the guidance of the manager.
<b>Dining room managers</b>	Responsible for supervising and scheduling staff, as well as managing the dining room during meal service. Dining room managers must be outgoing and customer focused. A dining room manager is sometimes be called a maitre d'.
<b>Executive chefs</b>	Responsible for menu development, food orders, and supervising the cooking staff. Executive chefs must have many years of experience.
<b>Production managers</b>	Responsible for supervising the kitchen staff and all food preparation. Knowledge of cost control and quality food preparation is essential.
<b>Purchasing agents</b>	In charge of buying all the food and equipment necessary for food production. Effective communication and negotiation skills are important.
<b>Storeroom supervisors</b>	Responsible for receiving, issuing, and properly storing all food products. Attention to detail and accurate record-keeping skills help them maintain inventory control.

**Critical Thinking** What classes have you taken in school that might help you prepare for a career in foodservice management and supervision?



Culinary certification programs often incorporate management skills. To demonstrate an understanding of education, training, experience, and personality requirements, write a job posting for a dining room manager or maitre d', including all necessary skills.

### COMPETITION PRACTICE

Imagine that you are applying for the maitre d' position from the Get Certified practice. The interviewer wants you to role-play with another student who will pose as a customer with a complaint. Respond professionally, offering a solution that will satisfy everyone.

Evaluate your efforts based on the following rating scale:

1 = Poor; 2 = Fair; 3 = Good; 4 = Great

Judge your role-play on:

- The words you chose and the way you spoke to the customer.
- How well you maintained a professional demeanor.
- The solution you offered.

# Successful Foodservice Managers

*Foodservice managers are responsible for many aspects of a food organization. Using your research and interview with a foodservice manager, you will create a visual to share what you have learned with your class.*



## My Journal

If you completed the journal entry from page 167, refer to it to see how you use leadership skills in your daily life. Add any additional notes about how you think those leadership skills can help you succeed in foodservice management.



## English Language Arts

**NCTE 4** Use written language to communicate effectively.

**NCTE 12** Use language to accomplish individual purposes.

## Project Assignment

### In this project, you will:

- Research the job responsibilities of a foodservice manager.
- Identify and interview a person who is a foodservice manager.
- Create a visual to display the skills needed to be a foodservice manager.
- Present the visual to your class to share what you have learned.

### Applied Culinary Skills Behind the Project

Your success in culinary arts will depend on your skills. Skills you will use in this project include:

- Listing the leadership qualities an effective manager needs.
- Describing how a foodservice manager uses time and human resources.
- Understanding the basic and complex job responsibilities of a foodservice manager.
- Explaining how a manager can help market the business.
- Determining how the manager is involved with foodservice regulations and laws.

### English Language Arts Skills Behind the Project

The English Language Arts skills you will use for this project are writing, interviewing, and speaking skills. Remember these key concepts:

#### Writing Skills

- Use correct spelling and grammar.
- Consider your audience.
- Organize your questions in the order you want to ask them.

#### Interview Skills

- During the interview, record responses and take notes.
- Listen attentively.
- Use standard English to communicate.

#### Speaking Skills

- Communicate effectively.
- Adapt and modify language to suit different purposes.
- Thoughtfully express your ideas.

## Step 1 Research Job Tasks of Foodservice Managers

Research the job responsibilities of a foodservice manager. Write a summary of your research to:

- Describe the skills needed to be a manager in the foodservice industry.
- Identify the training and experience a manger needs.
- Explain how the skills of a leader and a manager are similar.
- Determine how managers use human resources.
- List the ways a manager helps with marketing.
- Identify why it is important for a manager to know foodservice regulations.

## Step 2 Plan Your Interview

Use the results of your research to write a list of questions to ask a local foodservice manager. Your questions may include:

- What types of leadership skills do you feel are necessary for your job?
- What are some of your basic and complex job responsibilities?
- How do you manage people successfully?
- How do you successfully manage your and your coworkers' time in the business?
- How is management structured in your business?

## Step 3 Connect with Your Community

Identify a person in your community who is a foodservice manager. Consider that managers may be found at restaurants, hotels, arenas, and theaters. Conduct your interview using the questions you prepared in Step 2. Take notes during the interview and write a summary of the interview.



## Culinary Project Checklist

### Plan

- ✓ Research the skills of a foodservice manager and summarize your findings.
- ✓ Plan an interview with a foodservice manager.
- ✓ Write a summary about your interview.
- ✓ Create a visual to display the skills needed to be a successful foodservice manager.

### Present

- ✓ Make a presentation to your class to discuss the results of your research and interview.
- ✓ Invite students to ask any questions they may have. Answer these questions.
- ✓ When students ask you questions, demonstrate in your answers that you respect their perspectives.
- ✓ Turn in the summary of your research, your interview questions, and the interview summary to your teacher.

## Step 4 Create Your Visual

Use the Culinary Project Checklist to plan and create your visual. Make a poster, video, slide show, or other visual that illustrates how to be a successful foodservice manager.

## Step 5 Evaluate Your Culinary and Academic Skills

Your project will be evaluated based on:

- Depth of interview questions.
- Content of your visual presentation.
- Mechanics—presentation and neatness.



**Rubric** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) for a rubric you can use to evaluate your final project.



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**Expert Advice** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) to read an article by a culinary expert from Johnson & Wales University about the documents and systems used by foodservice managers.