

# Chapter 22

## Working in the Kitchen

### You Will Discover . . .

- ◆ the sources of food contamination.
- ◆ how to handle food safely.
- ◆ ways to keep the kitchen clean.
- ◆ the causes of common kitchen accidents.
- ◆ ways to prevent common kitchen accidents from occurring.

### Key Words

- ◆ contamination
- ◆ E. coli
- ◆ salmonella
- ◆ perishable
- ◆ flammable
- ◆ conduct
- ◆ utensils

When Samantha gets home from school, she washes her hands in warm, soapy water and looks for a snack. She finds some leftover chicken in the refrigerator, but because it smells funny, she throws it out. Samantha knows that eating unsafe food can make you very sick. Do you practice food and kitchen safety?

## ➤ Keeping Food Safe

Keeping food safe can prevent **contamination**, or becoming infected with harmful bacteria. By following some simple procedures when handling and preparing food, you can reduce the risk of food contamination. In mild cases, people may experience headaches, stomach cramps, and fever. In more severe cases, however, medical attention may be necessary.

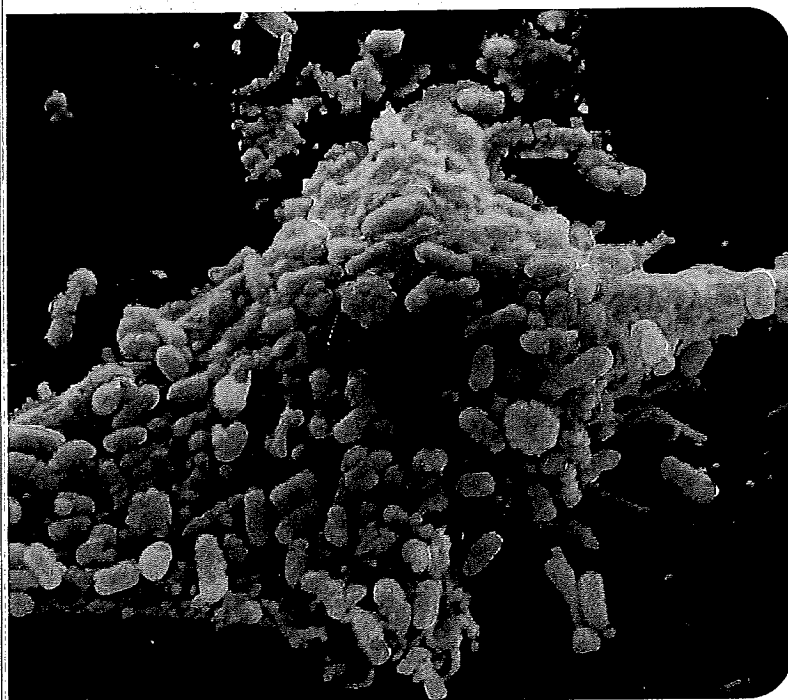
A few types of bacteria cause most food poisoning.

**E. coli** is the most deadly form of food poisoning.

E. coli bacteria are found in contaminated water, raw or rare ground beef, and unpasteurized milk. For this reason, you should only eat hamburger that has been fully cooked. Another common type of food poisoning is caused by salmonella (SAL-muh-NEHL-uh) bacteria.

**Salmonella** are often found in raw or undercooked foods, such as meat, eggs, fish, and poultry. Salmonella grow quickly at room temperature and can be spread by hands and cooking utensils. Thoroughly cook all meat, poultry, fish, and eggs. Wash your hands, knife, and cutting board with soap and hot water whenever you cut raw meat, fish, or poultry.

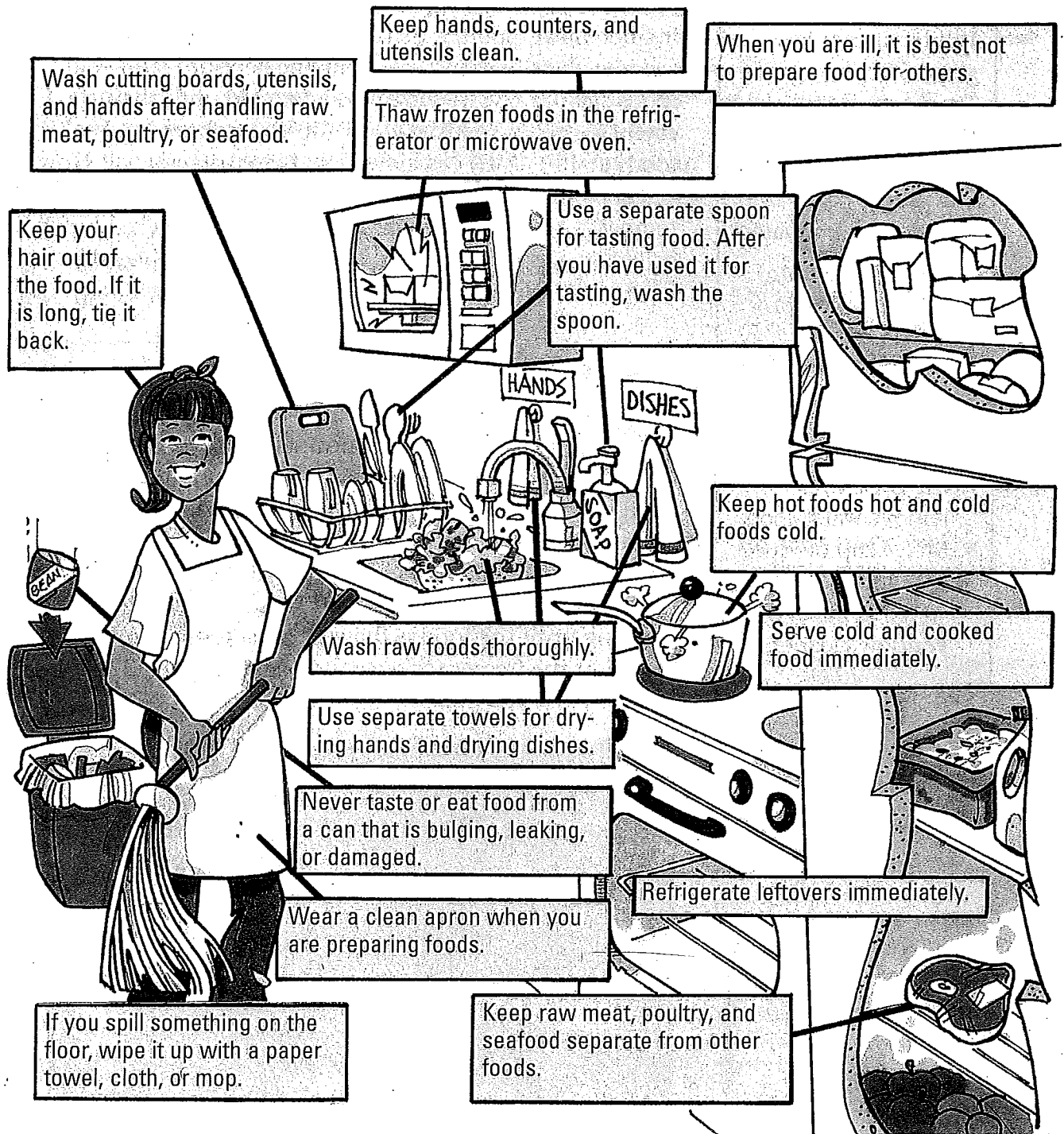
**Fig. 22-1** E. Coli is the most deadly form of food poisoning.



You should always clean up the kitchen as you cook. Wipe up spills immediately and clean off the countertops. As you finish using pots, pans, and cooking utensils, wash them in hot, soapy water. By keeping the kitchen clean, it will be a more healthful and pleasant place to work. See Fig. 22-2.

Fig. 22-2

# Ways to Prevent Food Contamination



## DID YOU KNOW?

### Vinegar Cleans.

White vinegar is a great cleaning agent. Try these cleaning tips:

- Soak cloudy glasses in vinegar to remove hard water deposits.
- Clean the coffee maker by pouring vinegar through it.
- Pour a cup of vinegar in the dishwasher during the rinse cycle to remove water spots.
- Mix  $\frac{1}{4}$  cup of vinegar with a quart of water to make a window cleaner.

## SAFETY FIRST

**Cook food immediately after defrosting it. Waiting until later to cook food allows harmful bacteria to grow.**

**Fig. 22-3** Put away leftovers promptly.

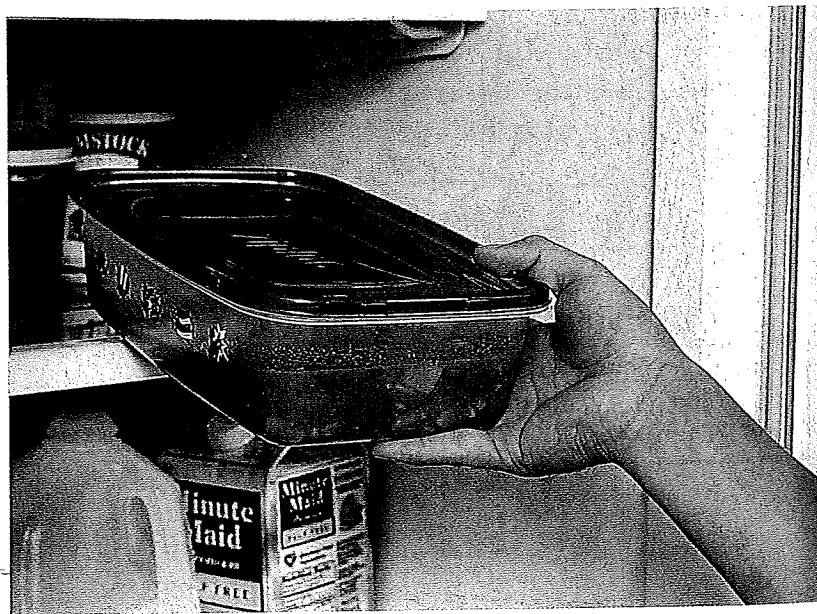
## Handling Food

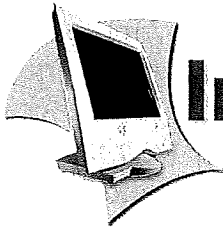
Another way to reduce the risk of food poisoning is to handle perishable foods carefully. Foods that are **perishable** are likely to spoil quickly. Perishable foods include meat, poultry, fish, eggs, and dairy products. Hot foods such as hamburgers should be kept hot, and cold foods such as yogurt should be kept cold until they are eaten. Keep hot foods at 140°F (60°C) or above, and cold foods at 40°F (4°C) or below. Otherwise bacteria will grow.

Foods that have been cooked shouldn't stand at room temperature for more than two hours. For a packed lunch or picnic, use cold packs and a cooler to keep the cold foods cold.

## Storing Leftovers

To keep leftovers from spoiling, refrigerate or freeze them immediately after the meal. Put leftovers in a tightly covered shallow container, and store them in the refrigerator. Many leftovers can also be frozen for use at a later date. When freezing leftovers, pack them in an airtight container, and label them with the name of the food and the date. Freezing food keeps bacteria from growing until the food is thawed. Most foods can be stored in the freezer for several months. See Fig. 22-3.





# Internet ACTIVITIES

1. Search the Internet for information on an illness caused by improperly cooked food. Find out how it is caused, the symptoms, and ways to prevent it.

Key Search Words:

- food poisoning
- cooking safety

2. Search the Internet for information on proper table settings. On plain paper, illustrate different ideas and save them for reference.

Key Search Words:

- table settings
- table etiquette

## ➤ Preventing Accidents

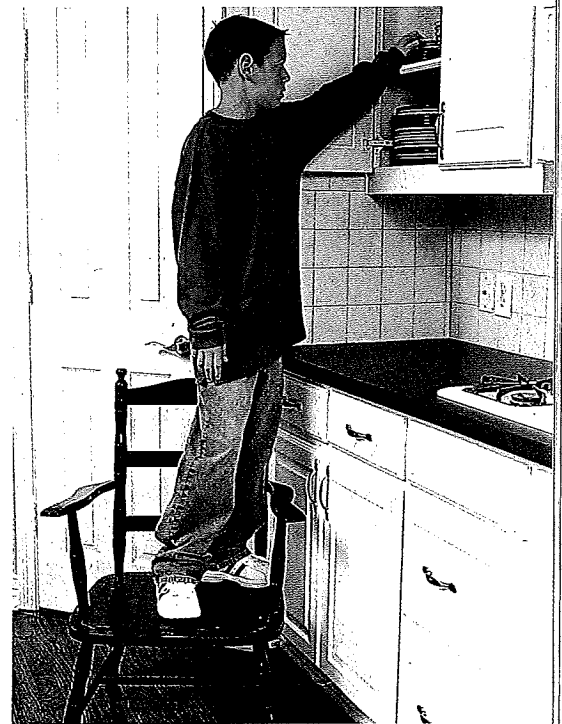
The most common kitchen accidents include falls, burns, fires, cuts, and electric shocks. See Fig. 22-4. These types of accidents are usually preventable if you develop good, safe work habits.

### Falls

To prevent falls, follow these guidelines.

- Stand on a short stepladder or a sturdy step stool with a waist-high hand bar to get at high or hard-to-reach items.
- Turn pot and pan handles toward the center of the stove or counter so that the pots or pans won't get knocked over.
- Clean up spilled foods or liquids immediately.
- Keep cupboard doors and drawers closed when not in use.

**Fig. 22-4** Don't stand on a chair to reach items on high shelves. Use a step stool or ask for help.



## CHECK the Facts

**Fire Extinguisher Use.** Every kitchen should be equipped with a fire extinguisher. To use one, follow these steps:

- Pull the ring and stand back several feet from the fire. Aim the nozzle at the base of the flames.
- Squeeze the handle.
- Spray back and forth across the base of the fire.

## Burns

You can prevent most burns in the kitchen by following these safety precautions.

- Use dry potholders when cooking hot foods and liquids or removing them from the stove, oven, or microwave.
- When cooking, remove pan lids by tilting them away from you. This allows steam to escape safely at the back of the pot, away from your hands and face.
- Use medium or low temperatures for cooking greasy foods, such as French fries or fried chicken.

## Fires

Fires can happen too easily in the kitchen. Follow these safety precautions.

- Keep a fire extinguisher in the kitchen where you can reach it quickly and safely. Be sure that you know how to use it properly.
- Don't wear clothing with long, loose-fitting sleeves when cooking. The sleeves can easily catch fire.
- If your hair is long, tie it back.
- Keep all flammable objects, such as paper bags, potholders, kitchen towels, curtains, and plastic containers, away from the stove. **Flammable** means capable of burning easily.
- Avoid leaving the kitchen if you have food cooking. Fire can spread in seconds.
- If a grease fire starts, turn off the heat and smother the fire with a tight-fitting lid. Never use water. It will make a grease fire spread.

## Cuts

To prevent kitchen cuts, observe the following safety rules.

- Keep knives sharp. Sharp knives are safer than dull ones.
- Cut food away from your body. Use a cutting board for all cutting jobs—even if it's only a single apple.
- Wash knives and sharp objects separately from other utensils.

- Store knives in a special compartment in the drawer or in a knife holder. Put them away immediately after cleaning them.
- Never pick up broken glass with bare hands. Sweep it into a dustpan immediately. See Fig. 22-5. Then wipe the floor with several thicknesses of damp paper towels, put the broken pieces into a bag, and place the bag in a trash can.

## CHECK the Facts

Types of Knives. Each knife has a specific purpose.

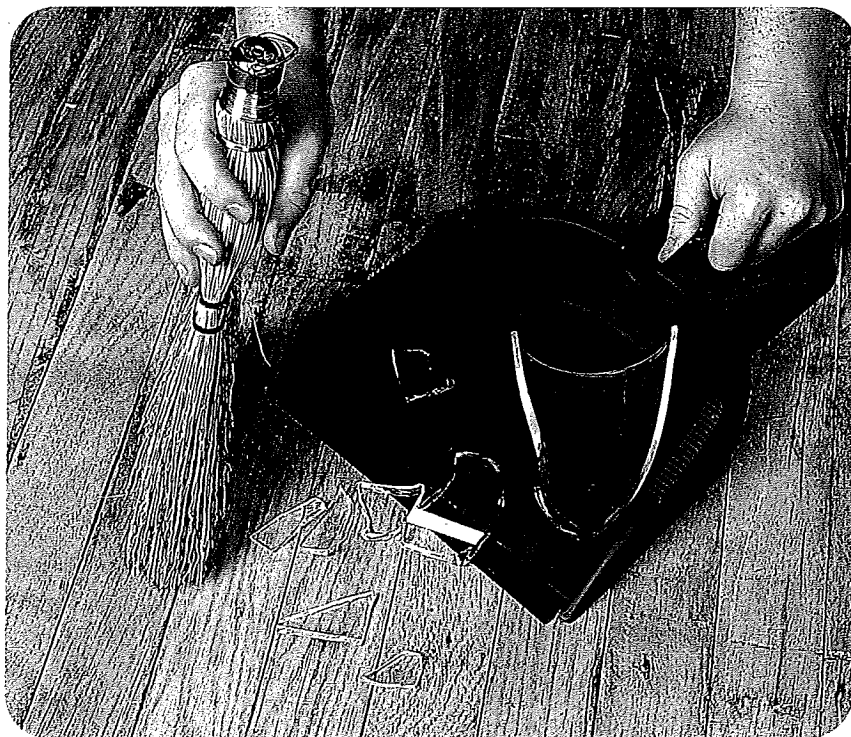
- A paring knife is used for trimming and peeling fruits and vegetables.
- A chef's knife is used for chopping and mincing.
- A bread knife has a scalloped edge and is used to cut through breads without tearing them.
- A carving knife is used to slice meat.
- A cleaver is used to cut through thick meats and bone.

## Electric Shocks

Electrical appliances make kitchen tasks easier, but they can also cause electric shocks. To prevent shocks, take the following precautions.

- Avoid using any appliance with a frayed or worn cord.
- Dry your hands before using electrical equipment.
- Disconnect appliances by pulling out the plug, not by tugging on the cord.
- Keep portable appliances unplugged when not in use.
- Always unplug a toaster before trying to pry food from it. Forks, knives, or other metal utensils can **conduct**, or carry, electricity and cause an electrical shock.

**Fig. 22-5** Carefully sweep broken glass into a dust pan.



# A CLOSER LOOK

## ...at Kitchen Tools & Cookware

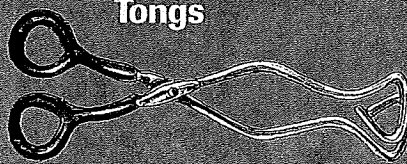
You can cook just about anything if you have the basic kitchen utensils, cookware, and appliances and know how to use them. Preparing food will be easier, more enjoyable, and safer when you select the right tools for the job.



Vegetable Peeler



Rotary Beater



Tongs

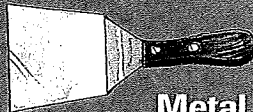


Chef's Knife



Paring Knife

Bread Knife



Metal Spatula

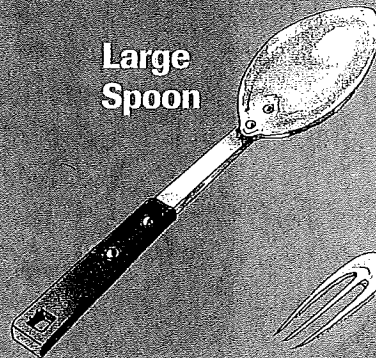


Wire Whisk



Rubber Scraper

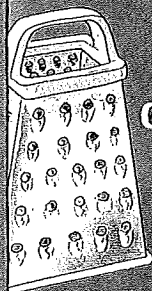
Large Spoon



Kitchen Fork



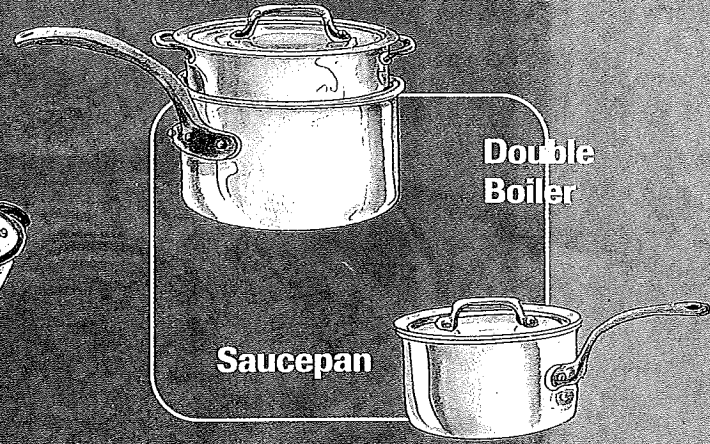




**Grater**



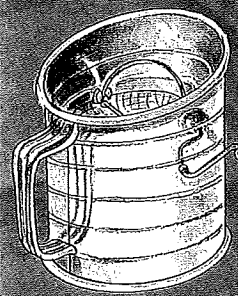
**Colander**



**Double Boiler**

**Saucepan**

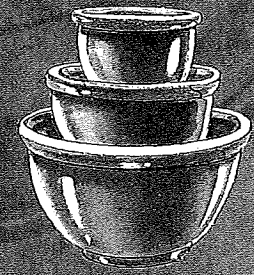
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**Sifter**



**Casseroles**



**Mixing Bowls**



**Chef's Knife**



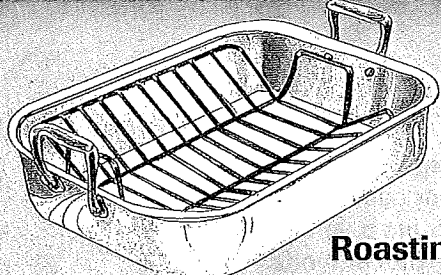
**Paring Knife**



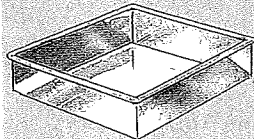
**Kitchen Fo**



**Cake Pan**



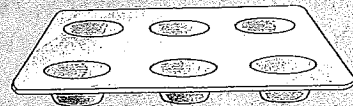
**Roasting Pan**



**Square Cake Pan**

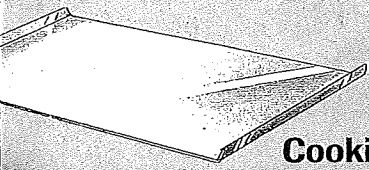
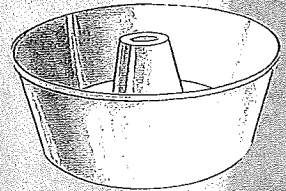


**Pie Pan**

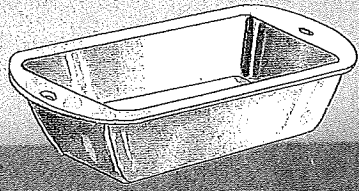


**Muffin Pan**

**Tube Pan**



**Cookie Sheet**



**Loaf Pan**

## ➤ Small Equipment

Not all kitchen tools and cookware are essential. For example, you don't have to have a vegetable peeler to peel a carrot. You can also do the job with a paring knife. However, a kitchen equipped with the basic tools and cookware makes food preparation much easier.

Many types of **utensils**, or kitchen tools, and cookware are available. The most commonly used utensils include those for cooking, mixing, and slicing or cutting. A hand mixer is a small appliance. Commonly used small appliances include toasters, food processors, and blenders. See Fig. 22-6.

The best cookware to use depends on the type of food you are cooking and where you are cooking it. For instance, you could use a metal cake pan to bake cookie bars in a conventional oven, but not in a microwave oven.

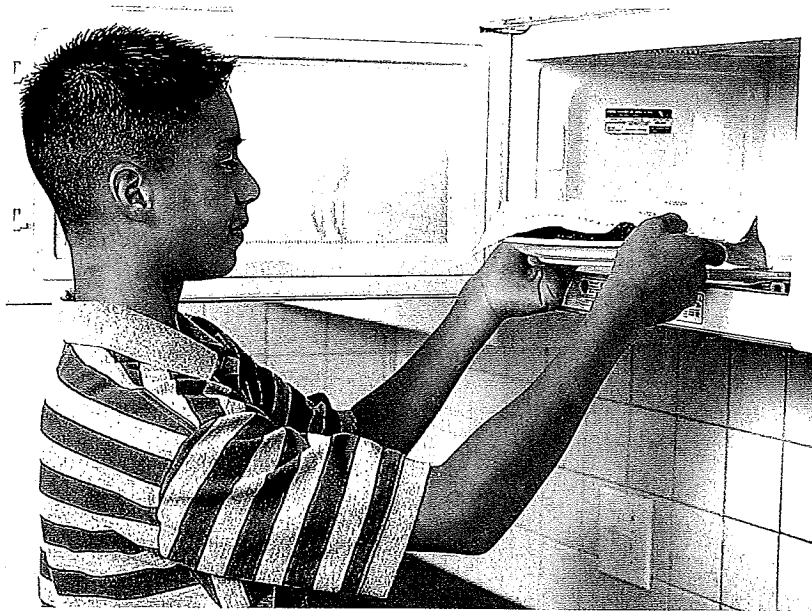
**Fig. 22-6** A food processor can be used to mix or cut a variety of ingredients or foods.



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**Fig. 22-7** You can use a microwave oven to prepare a snack or a meal. What foods do you microwave at home?

## ➤ Large Equipment

Large kitchen equipment includes stoves, convection ovens, microwave ovens, refrigerators, and dishwashers. The cost of large kitchen equipment varies, depending on the extra features that are included. For example:

- Refrigerators may have the freezer on the side, on the top, or on the bottom. Some are self-defrosting and have extra freezer space, ice makers, or ice cube and water dispensers.
- Dishwashers vary in the number and depth of racks they contain. Quiet-running models tend to be more expensive.
- Stoves usually come with conventional ovens. Some stoves also include microwave ovens, while others include convection ovens.
- A convection oven uses a high-speed fan to circulate hot air throughout the oven, which speeds up the cooking. Conventional ovens may be self-cleaning or continuous cleaning. An automatic timer that can turn the oven on or off is another possible feature.
- Microwave ovens are fast, convenient, and easy to use. They come in a variety of sizes and have a range of power settings. See Fig. 22-7. You will learn more about microwave ovens in Chapter 25.

# Career CHOICES

## Flavorist

Identifies the chemical compounds in food flavors. Conducts experiments to test different flavors. Blends and creates flavors.

## Food Server

Presents menu to guests. Suggests menu items and answers questions regarding foods. Brings beverage and food orders to guests. Checks with guests to see that they are satisfied. Clears the table and presents the check.

## Caterer

Provides food for parties, special dinners, and receptions. Meets with clients to discuss menus. Delivers and serves food. Cleans dining area when clients are done.

## Health Inspector

Visits foodservice locations to document health conditions. Evaluates areas for food safety hazards. Recommends safe food-handling practices to restaurant and cafeteria managers.

**Food servers are the link between the kitchen and the customers. Are you interested in working in the food service industry?**



### AT School

Select three of the careers listed. Research the education, training, and work experience required for each career. Compare the results to select a career to investigate further.

### IN THE Workplace

Name five types of businesses that would likely have onsite foodservice facilities. Compare your answers with your classmates' answers.

# Chapter 22 Review & Activities

## Chapter Summary

- Handling, preparing, and storing food safely can prevent food contamination.
- Perishable foods must be kept at the proper temperature to avoid spoiling. Keep hot foods hot and cold foods cold.
- Most kitchen accidents can be prevented by developing safe work habits.

## Knowledge You Gained

1. What causes food poisoning?
2. What should you do to keep leftovers from spoiling?
3. What are the four most common types of kitchen accidents?
4. Name four ways to prevent kitchen falls.
5. Give three examples of knives and their uses.

## Apply Your Learning

1. Imagine that your class is having a dinner party for parents. Your job is to make sure that the food served is safe to eat. Write down all the procedures you would follow to make the food safe.
2. Find out how to treat a minor burn, or cut. Write a paragraph explaining the proper first-aid procedure and list the supplies you would need.
3. **Kitchen Safety.** Work in teams to design a brochure about kitchen safety. The brochure should include illustrations and written safety guidelines. Post your team's brochure in the classroom. Remember to share them with family members at home.

## Words You Learned

1. What can happen to a person as a result of food **contamination**?
2. Give an example of how you could be infected with **E. coli**.
3. Explain how you can avoid **salmonella** poisoning.
4. Give two examples of **perishable** foods.
5. Name some **flammable** items found in a kitchen.
6. What type of kitchen appliances can **conduct**?
7. Give an example of two kitchen **utensils**.