Food Safety Manual for the Food Service Worker

(Revised September 2007)

TESTING SITES & HOURS OF OPERATION

All offices are open Monday - Friday, excluding major holidays

Central Regional Office
1645 E. Roosevelt St.
Phoenix, AZ 85006
(SE corner of 16th St & Roosevelt)
9:00am - 11:30am &
1:00pm - 4:30pm

Eastern Regional Office
1255 W. Baseline Rd., Bldg C, Ste #270
Mesa, AZ 85202
(SW corner of Baseline & Alma School SW building of office complex)
9:00am - 11:30am &
1:00pm - 4:30pm

Northern Regional Office
3101 E. Shea Blvd., #220
Phoenix, AZ 85028
(SW corner of 32nd St. & Shea)
9:00am - 11:30am &
1:00pm - 4:30pm

Western Regional Office
8910 N. 43rd Ave, #101
Glendale, AZ 85302
(SW corner of 43rd Ave. & Olive)
9:00am - 11:30am &
1:00pm - 4:30pm

Testing is conducted on a walk-in basis at our four locations.
Allow enough time to complete the test. All exams are picked up at 11:30am and 4:30 pm.
No testing is done on holidays. For further information, please call 602-506-2960.

FEES & ADDITIONAL INFORMATION

The card fees are as follows: food service worker card $16.00, certified manager card $5.00, duplicate copies with original are $3.00 each. Volunteer cards are free. Your card must stay with your employer for the duration of your employment. The cards are valid for 3 years. Once your card expires, you must retest to obtain a new card.

NOTE: We do not keep records of your card in our computer. Therefore, if you lose your card or it expires, you will have to re-test in order to get a new one.

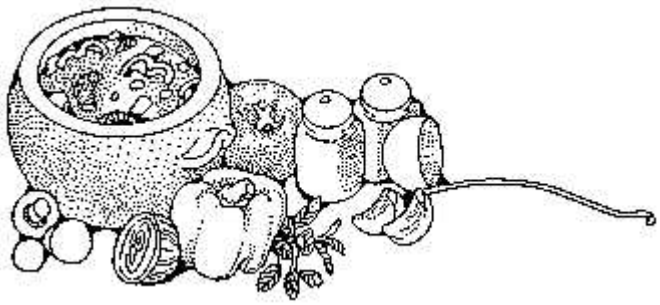
Please have exact change. Cash only. No bills larger than $20.00 will be accepted.
Credit cards, debit cards and checks are NOT accepted.

Additional copies of this booklet are available at: http://www.maricopa.gov/EnvSvc

FOOD HANDLER CLASSROOM RULES

- The exam consists of 25 questions, a passing grade is 20 or more correct answers.
- You may only take the test once a day. If you do not pass you may come back another day or have the option to be referred to a class.
- If you do not pass the test, we are unable to show you the questions that were missed.
- Cheating will not be tolerated.
- Talking is not allowed while taking the test. If you have any questions, please raise your hand and the clerk will respond to you.
- Certified Food Service Manager Cards require your original certificate and a legal/valid photo ID.
- You may take the study booklet home with you.
- Please keep all your personal belongings on the floor.
- Due to space limitations, the room is reserved for those who are studying and waiting to take the test.
- Anyone who creates a disturbance will be asked to leave.
- No food or beverages are permitted within the office or testing area.
- No profanity or foul language will be tolerated.
- Turn off all cell phones, pagers or any electronic device that may create a disturbance.
- Exams are available in the following languages: English, Spanish, Chinese, Vietnamese, and Serbo-Croatian.

A permit holder shall immediately discontinue operations and notify the Department if an imminent health hazard may exist, such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, onset of an apparent foodborne illness outbreak, gross insanitary occurrence or condition, or other circumstance that may endanger public health.



Why Read this Manual?

Think about a restaurant where you recently ate or worked. Was the hot food hot and the cold food cold? Did the server have clean hands? Was there soap in the restroom? And paper towels? Was there trash on the floor? Was the table, equipment and counter clean? Maricopa County Environmental Services notices these things because any place where food is prepared and served to the public must be kept safe. You, your friends and family are also the public, and you should be interested in keeping a food establishment safe.

The fact is that people can get sick if food sits at room temperature, or if germs get into food or drinks. "Clean" is not the same as "safe." Hands may look clean, but if they have germs on them, they are not safe. If germs are in the food they are like poison, it is not safe.

According to the Center for Disease Control, it is estimated that each year in the United States alone there are 76 million cases of foodborne illness resulting in 325,000 hospitalizations and 5,000 deaths. This is why all food service workers, like you, must learn how to prevent illness by serving safe food. These safe habits will also help keep you and your family healthy. This manual will teach you these food safety methods.

After you read and study this manual, you will be ready to take the Food Service Worker Test. When you pass the test, you will receive a Food Service Worker Card; which is your license to work in food service.

What Makes People Sick from Food?

People can get sick when they eat food that has germs. Germs are too tiny to see with your eyes. If you do not wash your hands the proper way or keep food at the correct temperature, your customers may get sick from these germs. This is called **food-borne illness**, which is commonly called food poisoning. Some foods are more likely than others to support the rapid growth of germs that cause foodborne illness; these are called **potentially hazardous** foods. **Potentially hazardous** foods are moist, protein-rich foods that support the rapid growth of **germs**. These include meat, fish, poultry, eggs, dairy products, sliced melons and bean sprouts. However, the term also includes many other cooked foods such as rice, refried beans, soups, gravies, sauces and potatoes. Such foods must be held at proper temperature to avoid rapid multiplication of germs.

Unlike parasites, **bacteria** and **viruses** are not always killed by freezing. They will survive and start growing again under the right conditions. Not all **bacteria** and **viruses** are the same. Some make you sick by growing inside your body. Others make you sick by producing poisons called **toxins** in food if the food is not kept at the correct temperature. It is important to understand when a food is contaminated with germs the food will usually smell fine, look safe and taste good but can make someone very sick.

Germs grow very fast when they are kept warm in the "**Danger Zone**". Germs may still be found in or on dry foods such as tortilla chips, breads and cereals, but they are unlikely to grow there. All food service workers are responsible for making sure that the foods they serve are safe and wholesome. This study guide is designed to give you a basic understanding of how you can store, prepare and serve food safely. Almost all foodborne illnesses can be prevented by following the procedures outlined in this guide.

Germs are alive and need different conditions to survive and multiply, but in general they need the following conditions to grow: **food, moisture, temperature** and **time**. This guide examines ways on:

- How to prevent **bacteria**, **viruses**, and chemical poisons from transferring (**contaminating**) into food while it is under your control.
- Ways you can control the growth of harmful **germs** that may already be present in the foods you prepare and
- How to destroy the harmful **bacteria** in the food.

Four Causes of Food-borne Illness

1. There are different kinds of germs; **bacteria** are the most common. They are everywhere, they can grow fast, spoil food or cause foodborne illness. Some **bacteria** produce toxins which are poisonous and may make people sick. One kind of **bacteria** that you may have heard about is ***Salmonella***; it is in dairy foods, poultry and eggs and it can cause very serious foodborne illness.

2. A **virus** is another kind of **germ** that causes **foodborne illness**. **Hepatitis A** is spread by a **virus**. Someone can have the **virus** and not know it. When a food worker with the **virus** does not wash his or her hands well after using the toilet, the **virus** can get on the food workers hands. This is one reason why there is a law that all food workers must wash their hands. Touching food with your bare hands is not allowed when handling **ready-to-eat food**. Suitable utensils such as spatulas, tongs, deli tissue, single-use, non-latex gloves, or dispensing equipment must be used.

3. **Parasites** are tiny worms or bugs that live in fish and meat. If they are frozen at a specific temperature long enough or cooked long enough, **parasites** will be destroyed.

4. **Chemicals**, such as rat bait or cleaners can cause some **foodborne illness**. You must be sure to keep all chemicals away from food.

Review Questions

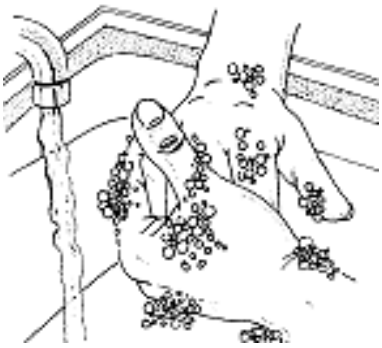
1. What is a foodborne illness?
2. What is a potentially hazardous food?
3. What are the conditions in order for potential hazardous foods to grow?
4. What 4 things can cause foodborne illness? Which one is the most common?

Keeping Contamination Out

Personal Hygiene and Cleanliness

Good personal hygiene practices are an essential part of providing safe food to your customers. Among these hygiene practices, the most important is hand washing. Washing your hands thoroughly and frequently is the most important thing you can do to keep harmful germs out of the foods you prepare. Most of us first learned how to wash our hands as children. Unfortunately, many food service workers fail to put what they've learned into effective practice.

Employees must wash their hands and forearms in an approved and dedicated hand washing sink using the following steps:



1. Moisten hands with warm water and apply hand soap.
2. Vigorously rub hands together scrubbing between your fingers, under your fingernails, your forearms, and the back of your hands. You must continue scrubbing for at least 20 seconds. It is the hand soap combined with the scrubbing action that removes the dirt and germs from your hands.
3. Completely rinse your hands under running water, dry them with a disposable paper towel and turn off the faucet with the same paper towel used to dry your hands.

Teach yourself to be aware of where your hands are at all times. Avoid bad habits like touching your hair or face, or wiping your hands on your clothes or apron. You must wash your hands everytime your hands or gloves become dirty or **contaminated.** Below are some examples of when to wash your hands:

- when you first arrive at work
- when you return to work after breaks
- before you touch food, clean utensils or work surfaces
- after you touch your face or mouth
- after covering a sneeze or a cough with your hands
- after you touch raw eggs, meat, fish, or poultry
- after you touch dirty dishes, garbage, or any other unclean surface
- after you use the toilet and before you start working with food again
- after you smoke or eat

Touching **ready-to-eat foods** with your bare hands is not allowed. **Ready-to-eat** foods are most often foods that will not receive further washing or cooking prior to consumption (Examples: salads, sandwich ingredients, fruit, bread, tortillas, cold salads, garnishes, chips and ice). A **barrier** is required such as non-latex gloves, deli papers, tongs, spatulas or utensils when you work with these foods. Non-latex gloves must be worn if you wear nail polish, fake nails, have sores, burns or cuts on your hands.

Be aware that neither gloves nor **hand sanitizers** are a substitute for proper hand washing. Before you put gloves on, you must still wash your hands in all the same situations you would if you were not using gloves, and you must switch to clean gloves whenever they become dirty or contaminated.

Smoking, eating or drinking in food preparation, service or storage areas is prohibited. You must wear a hat, hair net or hair restraint when working with open foods.

Do Not Work If You Are Sick

If you feel sick you should let your boss know and not go to work. Not only can you infect the people you work with, but you may also pose a danger of infecting others through the foods you prepare. This is especially true if you are sick with vomiting, fever, diarrhea, cold, flu, a runny nose, or a sore throat. For illnesses such as any of the **BIG FOUR: Hepatitis A virus, *Salmonella typhi*, *Shigella* spp. or *Escherichia coli* $_{0157:H7}$** (***E. coli*** $_{0157:H7}$), you are required you to stay home until a doctor tells you it is okay to go back to work again.

Do not work with foods and tell your boss if you have an **infected** cut, burn or sore on your hand. If the sore or cut is not infected, cover it with a bandage and wear a non-latex glove over the bandage.

Personal Appearance and Behavior

You want to look clean and be clean when you are at work:

- Your clothes and apron must be clean.
- No painted or fake fingernails and fingernails must be cut and trimmed.
- All jewelry, with the exception of a simple wedding band, must be removed prior to handling food.
- Keep your hair clean and wear an effective hair restraint, such as a hat or hair net.
- Do not eat in the kitchen
- Use a lid and straw on your drink cup

Review Questions

1. What is the most important personal hygiene practice?
2. When is it necessary to wash your hands?
3. What are ready-to-eat foods?
4. When must you stay home from work?

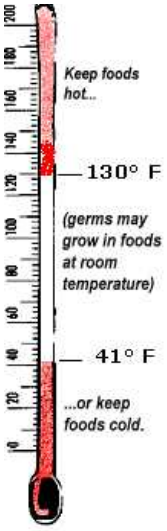
Temperature Control

The Danger Zone

Temperature can be used to control the rapid growth of harmful **bacteria**. Many of the foods you serve are **ready-to-eat.** It is important to guard these foods against **contamination** because they will not be cooked to remove **germs**. Additionally, it is important to prevent the growth of any germs that may already be in the food by holding foods at a safe temperature.

Most **germs** do not grow well at cold temperatures. This is why we refrigerate foods. To be safe, cold foods must be held at 41º F or below. Most **germs** do not grow well at hot temperatures either. This is why hot cooked foods must be held at 130º F or above to keep **germs** from growing rapidly. The range of temperatures between 41º F and 130º F is called the **Danger Zone**. **Germs** grow very quickly in this temperature range. Whenever possible, you must avoid having foods in the **danger zone**. If you are cooling or heating foods, you must do it in such a way that they must pass through the **danger zone** quickly.

Thawing Foods



Improper thawing allows germs to rapidly grow in the outer layers while the core is still frozen. Do not thaw food at room temperature or in warm water. There are three acceptable ways to thaw foods:

1. Whenever possible, transfer the food from the freezer and place it in the refrigerator. This method is the safest since the food is not exposed to the **Danger Zone**. It will take several hours or days depending on the amount (be sure to put different raw meats in separate containers to prevent the juices from transferring or dripping into other foods).
2. Thaw the food under cold running water; never in warm or hot.
3. Thawing food in a microwave oven is appropriate only if the food will be cooked immediately.

Don't be tempted to cook a large roast or whole turkey when it is still partially frozen. The core will not reach a safe cooking temperature by the time the outer layer is done.

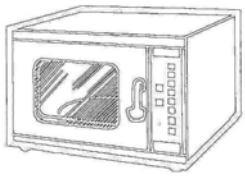
Cooking Temperatures

Cooking foods to the proper temperature is the best way to destroy any harmful germs that may be present in food. The table below shows safe **minimum** cooking temperatures for many common foods.

FOOD	TEMPERATURE	EXAMPLES
poultry	165º F	chicken, turkey, chicken patties
ground meats	155º F	hamburger, meat loaf, sausage, chorizo, gyros
eggs not consumed right away	155º F	custard, scrambled eggs on a buffet line
non-ground meats	145º F	steak, roasts, pork chops, corned beef
seafood	145º F	fish filet, shrimp, mussels
eggs consumed right away	145º F	eggs over easy, scrambled eggs to order

Any food cooked in a microwave oven must be cooked to 165 degrees, stirred at least once during cooking, and then left to stand covered for a minimum of two minutes prior to serving. The only way to know that the food has been cooked to the proper temperatures is to use a calibrated stem thermometer.

Hot Holding



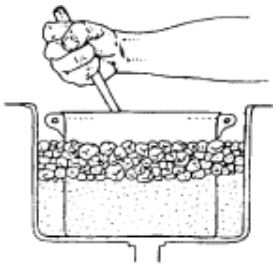
Once the food is cooked to the proper minimum cooking temperature, the food can be served. Some establishments use a steam table, oven or some sort of equipment to keep the food hot. Be sure to stir the food periodically in a steam table to ensure the food is maintained hot throughout. When cooked food is being held hot, the food temperature needs to be held at 130º F or above to ensure that the harmful **bacteria** are not multiplying rapidly in the food.

Cooling Foods

Cooling is a risky step in food preparation since the temperature of the food will be exposed and pass through the **Danger Zone**. Germs can grow very quickly while in the **Danger Zone**. It is very difficult to cool foods fast enough to keep them safe, especially during the summer in Arizona. Most refrigeration equipment are not capable of rapidly cooling large volumes of food. Food should not be left out to cool at room temperature. Once the temperature of the food falls below 130º F, it should be cooled on ice or in the refrigerator.

The best approach to cooling is to avoid it whenever possible. Many popular menu items such as chicken wings, deep fried tacos, and egg rolls are often cooked in two separate steps. But, these foods are much safer if the steps are combined into just one longer cooking step.

To avoid the risk of cooling, businesses plan and prepare all their menu items on a daily basis, discarding any leftovers. Rather than cooking enough of a particular food to last all week, they prepare only enough to last through that day, and hold it hot until served. They prepare the food as closely as possible to the time they serve it.



For some foods, cooling is unavoidable. Knowing ways to quickly cool these foods will minimize rapid bacterial growth and the risk of potential spoilage:

- For foods you can stir like soups, gravy or refried beans, setting up an ice bath and placing the container of food into it will greatly speed up cooling. Splitting large containers of hot food into multiple small shallow containers, no greater than 4 inches in thickness, uncovered allows for faster cooling too. Place them in an area in the refrigerator where there is good air circulation.

- For large solid food like meat loaf or turkey, cut the food into smaller pieces and spread it out on a tray, placing the tray uncovered into the refrigerator with plenty of room for air circulation.

- Ice wands which are filled with water and then frozen can be placed into hot food. Combining these methods, ice bathing while stirring food with an ice wand provides very effective cooling for soups, gravies and sauces. If you are preparing a cold salad, like potato salad or egg salad, from hot ingredients, cool all the ingredients first, prior to mixing.

Whatever the method used, the food must cooled down from 130°F to 70°F within two (2) hours and from 70°F down to 41°F within another four (4) hours.

Six (6) hours may seem like a long time to cool foods, but most foods will not cool this quickly unless you're giving them some help. Use a calibrated stem thermometer to make sure the cooling methods you're using are adequate.

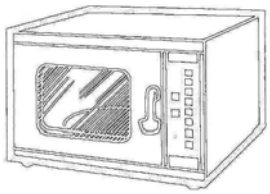
Cold holding

When holding cold **potentially hazardous food** in the refrigerator, salad bar, refrigerated display case, in ice or another approved method, always keep cold foods at 41° F or below. Use the calibrated metal stem thermometer to check the food's temperature.

If you use ice to keep the food cold on a salad bar or food display, be sure that the ice comes up to the level of the food that is in the pan or dish. Be sure to replace the ice as it melts. If the food temperature is maintained between 45°F and 41° F (the code allows for 45 degrees F for refrigeration equipment older than October 2001) the food must be discarded after 4 days but if the temperature is below 41° F, then it must be discarded after 7 days.

Reheating Food

Food that has been cooked and then cooled may need to be heated again. When you reheat food, do it quickly (within one hour) to 165° F, regardless of its original cooking temperature. For example, if you cook meatloaf on Monday to 155º F and you cool it down properly. Now you want to serve leftovers on Tuesday's buffet line, you must reheat the meatloaf to 165º F.

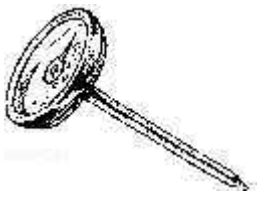


The right way to do this is using stove burners, microwave ovens, convection ovens or steamers. Do not use anything that will heat the food slowly (example: steam table), because it will take too long to pass the "**Danger Zone**." Stir the food if possible to be sure that all parts of it are hot. Then use your calibrated metal stem thermometer to check the temperature.

Do not place cold foods onto a steam table as they will not reheat quickly enough and will be exposed to the **danger zone** for a long time. Food should only be reheated once.

Thermometers

Any refrigeration equipment you use must be equipped with a thermometer that measures the internal temperature. It is a good idea to keep logs as a way of making sure that someone will actually be checking on the temperature regularly.



Use a metal stem thermometer to check foods you are cooking, holding hot or cold, or cooling. Keeping a log of these temperatures is also recommended.

Make sure the thermometer's range includes the temperature you are looking for. You cannot use a cooking thermometer for cold or cooling foods because the range does not go down to 41 degrees. Test the accuracy of your thermometer by placing it in a glass of ice water for a couple of minutes. If it does not give you a reading of 32º F, it needs to be adjusted.

Be aware that stem thermometers usually measure from a point halfway up the stem. To give an accurate reading, the stem must be pushed deep into the food. Thermometers must also be cleaned and **sanitized** between uses. You don't want to insert a dirty thermometer into the food as it may introduce germs into the food.

The Importance of Time

Most (but not all) harmful germs need time to grow to dangerous levels. This is why holding food at safe temperatures is important. This is also why cooling and reheating should take place as quickly as possible. In general, four hours is the longest possible time you want to hold **potentially hazardous food**s in the temperature **danger zone**. Remember that this limit is "additive". For example, if it takes three hours for the cooked potatoes in your potato salad recipe to cool down to 41º F, you do not want the potato salad to sit out above 41 degrees for more than one additional hour.

Many refrigeration units now in use cannot keep foods at 41 degrees. This is particularly true of "prep tables" with trays of foods arranged in the top. Often these tables are on hot cook lines and the food in the trays will not stay cold enough. If this is true of your kitchen, make sure that all foods are pre-chilled before placing them into the prep table and then remove all trays on a strict time schedule discarding the contents. Do not hold any **potentially hazardous food** in the **danger zone** for more than 4 hours.

If you discover that a food has been held at an unsafe temperature, but you're not sure how long, discard it. The rule is "When in doubt, throw it out!"

Food Storage Limits

Food should always be used in the order is was received. All arriving foods should be marked with a date so that you know which inventory to use first and always use the **FIFO** method; First In, First Out.

In addition, any **ready-to-eat potentially hazardous food** must be marked with a discard date at the time of opening or preparation. The discard date depends on the temperature at which the food is held; no more than four days if refrigerated between 41º F and 45º F; no more than seven days if refrigerated at 41º F or less.

Review Questions

1. What is the "Danger Zone?"
2. Why potentially hazardous food must be kept out of the "Danger Zone?"
3. What is the proper cooking temperature for chicken, pork, hamburger, and fish?
4. What is the right way to cool foods?
5. What is the right way to thaw foods?
6. What is the right way to reheat foods?
7. What should you do if your refrigerator is not holding food cold enough?

Foods From Approved Sources

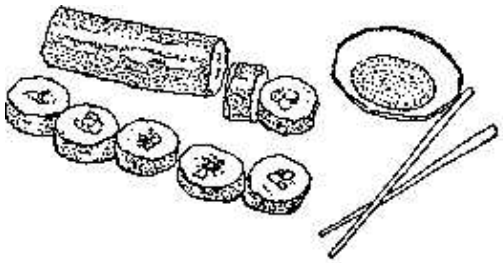
Use food that comes from sources that are approved by the Health Authority. Meat, poultry and dairy products must come from facilities regularly inspected by the "USDA". Look for "Pasteurized" on milk. Shellfish, such as raw clams, oysters, scallops, and mussels, must come from legal sources and carry a tag that states where it came from. These shellfish tags must be saved and kept on file for at least 90 days after the product is sold or consumed. Canned foods, fresh foods and dairy products must come from companies, brokers or dairies that have been inspected by a regulatory agency. All packaged food must have a label or seal on the packaging that says the name of the processor or distributor, the name of the food, and the ingredients.

It is illegal to serve foods prepared at home or from any unlicensed kitchen and the food cannot be sold. Food for the public must be prepared in a licensed kitchen approved for that purpose. Health Inspectors (people trained by the Health Authority) must check the kitchen to make sure food is prepared and stored in a safe manner.

All foods arriving at your workplace must be free of spoilage. All foods served in your workplace or at a special event must come from an approved source and can not be **adulterated**. Packaged food must carry a label indicating where it comes from.

Canned foods must have an intact seal and be discarded if swollen. **Potentially hazardous foods** should be rejected if they arrive at an unsafe temperature. Packaged foods should be rejected or discarded if they arrive damaged.

Vacuum packed foods must be held at a safe temperature and consumed by the date indication on the package.



Food Left At The Table

Once customers have eaten and they leave food like chips, rolls and bread on a plate or at the table, you must throw it away. You CANNOT serve it again. Unopened packages of crackers, jelly, butter, candy or sugar may be served again.

Cross Contamination and Food Storage

As a food handler you must prevent **cross-contamination**. **Cross-contamination** happens when germs are spread or transferred from one place to another, such as when raw or unclean foods get into foods that are **ready-to-eat** or that will not be cooked again before you serve them. Here are some important ways that you can prevent cross-contamination:

- In the refrigerator: Don't let raw meat, fish, poultry or eggs drip onto foods that will not be cooked before serving; store raw meat, fish, and poultry in separate containers on the lowest shelves of the refrigerator.
- Wash your hands immediately after handling raw meat, fish, poultry, or eggs.
- Never store foods that will not be cooked before serving in the same container as raw meat, fish, poultry or eggs.
- Use a hard cutting surface or a board that is smooth and non-absorbent, with no splits or holes where germs can collect.
- Wash, rinse and sanitize the cutting or work surface and all the utensils and knives after cutting raw meat, fish or poultry.
- Properly wash your hands after handling raw foods.

The same accidental transfer can occur if raw foods are improperly stored. Never store raw meat, poultry or eggs over **ready-to-eat foods** in a refrigerator or freezer. Reserve the lowest shelves for storing raw meat and eggs.

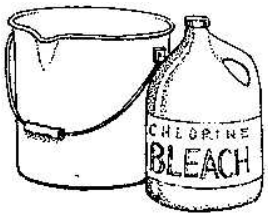
All foods must be stored at least six inches off the floor. Stored foods should always be kept covered. The only exception is foods that are being cooled, which should be left uncovered in the refrigerator until it reaches 41º F or below.

Review Questions

1. What type of food are you allowed to use in your food business?
2. How do you store raw meat in a refrigerator?
3. How can you prevent food from being contaminated?
4. What is cross-contamination and how can it be prevented?
5. What are some **ready-to-eat** foods that are served in your establishment?

Sanitizing

Using a **sanitizer** improperly can be dangerous. Using too much **sanitizer** can be toxic to humans and having too little will not **sanitize** or destroy **bacteria**, so make sure you know how to prepare and use sanitizer. Chlorine bleach is the most common **sanitizer.**
You should always use clean **wiping cloths** to sanitize counter tops, tables, cutting boards and equipment. **Bacteria** grow very quickly in damp cloths. That is why all **wiping cloths** should be stored in the sanitizing solution that is mixed to proper concentration between uses. Use the appropriate test strips to verify the concentration of the sanitizer. Chlorine sanitizing solution should be between 50 and 100 parts per million (ppm); Quaternary Ammonia should be at 200 ppm.



Be sure the sanitizing solution is always at proper concentration by changing the sanitizing solution as needed, usually every 2-3 hours depending on usage. Do not let it become dirty; food debris uses up the sanitizer quickly. Do not mix in other chemicals or soap because it changes the effectiveness of the sanitizer.

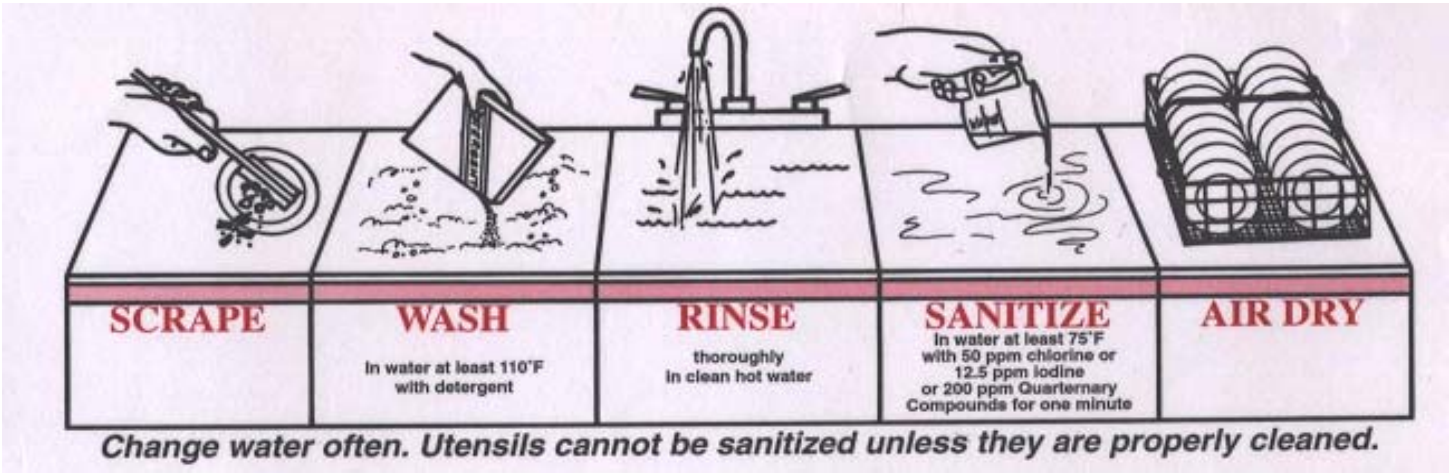
Clean and **sanitize** to prevent **cross-contamination**. Wash, rinse and sanitize each surface that comes in contact with food such as slicers, grinders and cutting boards. Sanitize equipment after each use. Make sure the equipment is broken down for proper cleaning.

Manual Dish Washing

Keeping kitchens and equipment clean is important for food safety. Clean kitchens will discourage unwanted pests like cockroaches and mice. But even surfaces that look clean may still have harmful germs on them that you can't see. Sanitizing removes these germs.

Dishes, utensils, and equipment that touch food must be washed using the following 5 steps:

1. Pre-scrape. Remove leftover food and grease from the dishes and throw it away.
2. Wash. In the 1st sink, thoroughly wash the dishes with detergent and hot water.
3. Rinse. In the 2nd sink, rinse the dishes in clean hot water to remove the soap. (Mixing detergent with sanitizer can prevent the disinfectant from killing the germs.)
4. Sanitize. In the 3rd sink, the dishes must be sanitized in room temperature water. You must make sure that the sanitizer is at the right concentration by using the appropriate chemical test strips. The dishes should remain completely submerged in the solution for at least 30 seconds.
5. Air-dry. Place all dishes and utensils on the drain board or rack and let air-dry. Do not use a towel to dry them because a towel will put germs back on your clean dishes.



Toxic Chemicals and Pest Control

Accidental poisonings from careless use of chemicals in food operations happen frequently. All items such as lotions, medicines, soaps, detergents, sanitizers and other chemicals must be stored separately from food, utensils and food work areas. If the chemical is not necessary to the functioning of the food business, it should not be kept there at all. Any container used for chemicals must be labeled. If the chemical is transferred into another container, such as a spray bottle, this container must be labeled too.

Pest Control

Pesticide use in food facilities is very restricted. No **pesticide** may be applied except by a licensed **pesticide** applicator. Any **pesticide** the licensed applicator uses must be specifically approved for food service use. No **pesticide**s or **pesticide** equipment can be stored at the food business.

Any **pesticide** used should only be used as a last resort, after every available preventive step has been taken. The best way to control cockroaches, mice, flies and other pests is to keep the establishment and garbage areas clean, and to eliminate hiding places and routes of entry and seal all cracks and crevices.

Cockroaches, flies, weevils, mice and rats are some of the pests that can get into a food business. Don't let them in and don't let them eat.

Review Questions

1. What is the difference between washing and sanitizing?
2. What is the right concentration for chlorine sanitizing water?
3. What are some of the critical food contact surfaces that must always be washed and sanitized?
4. What are the 5 steps for washing dishes by hand?
5. How can you prevent pests from getting into your food business?

Acknowledgments

Food Protection Program – Environmental Health Services Division of Seattle and King County and the USDA, FSIS Cooperative Agreement FSIS-C-05-2003.

English Practice Questions

1. What order should you use to wash dishes by hand?
    a. Rinse, wash, sanitize, and air dry.
    b. Sanitize, wash, rinse, pre-scrape and towel dry.
    c. Wash, rinse, towel dry and sanitize.
    d. Pre-scrape, wash, rinse, sanitize and air dry.

2. Food prepared at home or in an unlicensed kitchen are:
    a. Illegal.
    b. Cheaper.
    c. Tasty...yum.
    d. To be served immediately at 165° F.
    e. Answers B and D are correct.

3. What is a substitute for proper hand washing?
    a. Hand sanitizers.
    b. Gloves.
    c. Tongs.
    d. All of the above.
    e. None of the above. There is no substitute for hand washing.

4. Which of the following are potentially hazardous foods?
    a. Potato chips, bread, crackers.
    b. Hamburger, cooked beans, cut melons.
    c. Candy bars, mustard, tortillas.
    d. Cereal, soda pop and dry pasta.

5. Where or when can you smoke and eat in the establishment?
    a. You can smoke and eat in any area of the establishment but only when the food is covered and stored.
    b. You can never smoke or eat in the kitchen or in areas where food is prepared or stored.
    c. You can eat in the kitchen but not smoke.
    d. You can eat in the kitchen but only during a break or lunch.
    e. Answers C and D are correct.

6. Cross-contamination is:
    a. When germs spread from one place to another.
    b. Nothing to be concerned about.
    c. When you wipe blood in a cross motion.
    d. Protein-rich foods that support the rapid growth of harmful bacteria.

7. Potentially hazardous foods are:
    a. Dry, protein-rich foods that support the rapid growth of bacteria.
    b. Dry, fat-rich foods that support the rapid growth of bacteria.
    c. Moist, fat-rich foods that support the rapid growth of bacteria.
    d. Moist, protein-rich foods that support the rapid growth of bacteria.

8. Which of the following must be cooked to 145° F?
    a. Poultry and stuffing.
    b. Ground meats and eggs not served immediately.
    c. Non-ground meats and seafood.
    d. All of above must be cooked to 130º F and kept at that temperature.

9. What must you use to sanitize equipment, tables, and other work surfaces that come into direct contact with food?
    a. You must use a wiping cloth that has been soaked in a solution of water and an approved sanitizer at proper concentration.
    b. You must use a wiping cloth that has been soaked in a solution of water, soap, and chlorine.
    c. It is not necessary to sanitize things that cannot be completely submerged in the dish sink compartments.
    d. You must pour liquid chlorine on the equipment at the end of the workday when all of the food is put away.

10. Which is the correct way to wash your hands?
    a. Rinse hands with hot, running water and dry on a paper towel.
    b. Wash hands with soap and warm water for at least 60 seconds and dry with a cotton towel.
    c. Wash hands for at least 20 seconds by scrubbing with soap and warm water, rinsing, and drying with a paper towel.
    d. Scrub hands in a sanitizer bucket and dry with a cotton towel.

11. Washing your hands thoroughly and frequently is the most important thing a food service worker can do to keep germs out of the food he/she prepares. As a food service worker, it is important that you wash your hands:
    a. After you use the restroom.
    b. After you smoke or eat.
    c. After handling raw eggs or meat.
    d. After touching any part of your part of your body or uniform.
    e. All of the above.

12. Any ready-to-eat potentially hazardous food kept at 41° F. after opening or preparation, must be thrown away:
    a. The next day
    b. No more than seven days.
    c. Within 5 days.
    d. In two weeks.
    e. Time is not important as long as it was cooked to the right temperature.

13. If any chemical is transferred to a plastic spray bottle or a different container:
    a. You must be careful not to spill any on the floor.
    b. The bottle or container should only be filled half way to prevent spillage.
    c. The amount needs to be measured to track inventory.
    d. You must properly label the container or spray bottle with what it contains.
    e. All of above.

14. Thermometers are required in kitchens to:
    a. Monitor temperatures of food in the refrigerator and freezer, and check hot holding temperatures on steam table.
    b. Check concentration of sanitizer solution.
    c. Check if the temperature of the refrigerator was below 41° F. or above 130° F.
    d. All of the above.

15. Potentially hazardous food that has been cooled needs to be reheated to what temperature?
    a. Reheat to 130° F in a steam table or other hot holding equipment.
    b. Reheat to 145° F or hotter.
    c. Reheat slowly in the oven to 155° F, stirring at least twice.
    d. Reheat quickly to 165° F or hotter.
    e. Answers C and D are correct.

16. Which is the correct way to wash dishes, utensils and equipment?
    a. Pre-scrape wash, rinse and sanitize; then air dry.
    b. Pre-scrape, wash, rinse and air dry them completely with a cotton towel.
    c. Pre-scrape, wash, sanitize and rinse; then dry with paper towels.
    d. Pre-scrape, wash and rinse, then air dry.

17. A proper way to thaw frozen chicken is:
    a. Let it thaw at room temperature or the counter.
    b. Thaw it in a sink at room temperature.
    c. Place it in the refrigerator.
    d. Let in thaw in stagnant warm or hot water.
    e. None of above.

18. Cooked rice was left in the Danger Zone overnight. What should you do with the rice?
    a. Throw the rice away; it may not be safe to eat.
    b. Reheat the rice to 165° F before it is served.
    c. Put the rice immediately in the refrigerator for later use.
    d. Smell the rice to see if it is safe to serve.
19. The best way to control cockroaches, mice, flies and other pests is:

a. Apply pesticide every day.
b. Just sweep the floor.
c. Pour chlorine in the sink drain.
d. To keep the establishment and garbage area clean, and eliminate hiding places and routes of entry.
e. All of above.

20. As you enter the kitchen to start your working day. What should you do before handling food?
    a. Start food preparation.
    b. Wash hands thoroughly with warm water and soap for at least 20 seconds.
    c. Take clean dishes out of the dishwasher.
    d. Rinse off hands quickly.

21. Why are all food service workers required to understand and apply food safety knowledge?
    a. To reduce workplace accidents such as cuts and burns.
    b. To reduce the amount of food thrown away due to spoilage.
    c. To prevent the spread of illnesses through food.
    d. To reduce the number of complaints from customers.

22. What are potentially hazardous foods?
    a. Moist, protein-rich foods that support the rapid growth of bacteria.
    b. Moist, fat-rich foods that support the rapid growth of bacteria.
    c. Foods that will not be cooked or heated anymore to destroy bacteria.
    d. Foods that are very easy to choke on.

23. What are the steps for proper hand washing?
    a. Use warm water and soap to wash your hands, rub your hands together for 20 seconds, rinse your hands and dry you hands with a disposable paper towel.
    b. Use warm water and soap to wash your hands, rub your hands together for 1 minute, rinse your hands, and dry you hands with a clean cloth.
    c. Rinse your hands under warm water for 20 seconds, dry your hands with a disposable paper towel.
    d. Dip your hands in a solution of water and chlorine for at least 30 seconds and dry your hands with a disposable paper towel.
24. Germs can be spread from a food service worker. Which of the following is the <u>best</u> thing you can do as a food service worker to prevent spreading germs?
    a. Keep the floors and walls clean.
    b. Cool down hot foods quickly.
    c. Wash hands as often as necessary and do not touch ready-to-eat foods with bare hands.
    d. Keep hot foods hot and cold foods cold.

25. A hand washing sink must be properly stocked and available so food service workers may wash their hands. What must be at hand washing sinks at all times?
    a. Hot and cold running water, soap, and single-use paper towels.
    b. Hot running water, nailbrush, paper towels, and hand sanitizer.
    c. Hot and cold running water, nailbrush, and single-use paper towels.
    d. Hot running water, soap, and hand sanitizer.

26. When you wear gloves, you must:
    a. Put on new gloves every hour.
    b. Still wash your hands.
    c. Wash the gloves daily to remove food.
    d. Clean your nails daily.

27. Which of the following are ALL examples of ready-to-eat foods?
    a. Raw meats, uncooked rice and uncooked beans.
    b. Sandwiches, cut watermelon, bread, cold salads and ice.
    c. Raw shrimp, dough and pancake batter.
    d. Raw chicken, frozen pizza and frozen fries.

28. If you have a runny nose and a sore throat, the best thing to do is:
    a. Take some medicine before going to work.
    b. Go to work but only handle food while wearing gloves.
    c. Go to work only if you feel good.
    d. Stay home as you may potentially get people sick.

29. Where or when can you smoke and eat in the kitchen or service area?
    a. You can smoke and eat in any area of the establishment but only when the food is covered and stored.
    b. You can never smoke or eat in the kitchen or in areas where food is prepared or stored.
    c. You can eat in the kitchen but you cannot smoke.
    d. You can eat in the kitchen but only during a break or lunch.

30. How should you wash dishes by hand?
    a. Pre-scrape off the leftover food, wash with soap and hot water, rinse with hot water, sanitize for 30 seconds and air dry.
    b. Pre-scrape off the leftover food, rinse with hot water, wash with soap and hot water, sanitize for 30 seconds and air dry.
    c. Pre-scrape off the leftover food, wash with soap and hot water, sanitize for 30 seconds, air dry.
    d. Pre-scrape off the leftover food, wash with soap and hot water, rinse with hot water, air dry, and sanitize for 30 seconds.
    e. None of the above are correct.

31. Why are some foods, such as chicken and cooked rice, called potentially hazardous foods?
    a. The foods might have chemicals that can make people sick.
    b. The foods let bacteria grow when stored at unsafe temperatures.
    c. The foods are not from approved sources.
    d. The foods are not nutritious if cooked the wrong way.

32. When must you wash your hands?
    a. At least every 30 minutes.
    b. When your supervisor tells you.
    c. When the customers can see your hands.
    d. Each time your hands or gloves become contaminated.

33. What should you do if the gloves you are using to handle food become contaminated?
    a. Remove the gloves, store them in a clean place, wash your hands, and put the same gloves back on.
    b. Remove the gloves, throw the gloves away, and put on new gloves.
    c. Remove the gloves, throw the gloves away, wash your hands, and put on new gloves.
    d. Remove the gloves, handle the food with your bare hands but only if they are clean, and put the gloves back on when you have time.

34. Are you allowed to work in the kitchen if you have a contagious illness?
    a. Yes.
    b. It depends on the type of contagious illness you have.
    c. Never.
    d. Only if no one can tell if you are sick.

35. What are the steps for washing dishes by hand?
    a. Pre-scrape the excess food, wash with soap and hot water, rinse with hot water, sanitize, and air dry.
    b. Pre-scrape the excess food, rinse with hot water, wash with soap and hot water, sanitize and air dry.
    c. Pre-scrape the excess food, wash with soap and hot water, sanitize, and air dry.
    d. Pre-scrape the excess food, wash with soap and hot water, rinse with hot water, air dry, and sanitize.

36. What is the proper concentration for a chlorine solution used to sanitize food contact surfaces?
    a. You must use a capful of chlorine for every gallon of water.
    b. The concentration chlorine is not important.
    c. The concentration must be between 50 and 100 parts per million, which can be measured with a chlorine paper test strip.
    d. The concentration must be at 200 parts per million, which can be measured with a chlorine paper test strip.

37. What is the difference between washing and sanitizing?
    a. There is no difference.
    b. Washing makes things look clean and sanitizing make them smell good.
    c. Washing removes contamination and sanitizing whitens.
    d. Washing removes contamination and sanitizing destroys microorganisms.

38. What is the proper minimum temperature for cooking seafood?
    a. 130° F
    b. 140° F
    c. 145° F
    d. 155° F
    e. 165° F

39. What is the correct procedure for reheating food?
    a. The food should be quickly reheated to a minimum temperature of 165° F before placing it in the steam table.
    b. First the food must reach room temperature and then it can be reheated to 165° F within 2 hours.
    c. If the food will be held in a steam table, it can be reheated to any temperature.
    d. Reheating procedures are not important as long as the food is handled properly before hand.

40. Which of the following is a way to prevent cross-contamination?
    a. Sanitizing utensils and equipment weekly.
    b. Changing gloves every hour.
    c. Storing chemicals 6 inches above the floor.
    d. Storing raw meat, fish and poultry or eggs separate and on the lowest shelves of the refrigerator.

41. Which of the following must be cooked to a minimum of 165° F?
    a. Poultry.
    b. Ground meats.
    c. Beef and pork
    d. Seafood
    e. Answers C and D are correct.

42. Bare hand contact is not allowed when handling:
    a. The garbage
    b. Food crates
    c. Ready-to-eat foods
    d. Spoiled foods

43. Raw eggs for immediate service must be cooked to what temperature?
    a. Greater than 130° F.
    b. Greater than 145° F.
    c. Greater than 70° F.
    d. Greater than 100° F.

44. What order should you use to manually wash dishes?
    a. Rinse, wash, sanitize, and air dry.
    b. Sanitize, wash, rinse, and towel dry.
    c. Wash, rinse, towel dry and sanitize.
    d. Pre-scrape dishes, wash, rinse, sanitize and air dry.

45. If you see cockroaches in your food business, you should:
    a. Spray “roach killer” around the garbage areas and inside the kitchen to prevent them from coming back.
    b. Squash the ones you can see and hope that more won’t come back
    c. Tell your boss, so he can call a licensed pest control applicator.
    d. Buy professional pesticide equipment so you can kill cockroaches as soon as you see them.

46. The safest way to thaw (defrost) foods is:
    a. In a container at room temperature.
    b. In a sink with hot running water.
    c. In the sink at room temperature over night.
    d. In the refrigerator.

47. What are potentially hazardous foods?
    a. Moist, protein-rich foods that support the rapid growth of bacteria.
    b. Moist, fat-rich foods that support the rapid growth of bacteria.
    c. Dry, protein-rich foods that support the rapid growth of bacteria.
    d. Dry, fat-rich foods that support the rapid growth of bacteria.

48. Cold potentially hazardous foods must be held at a minimum of:
    a. 41° F
    b. 55° F.
    c. 65° F.
    d. 70° F.
    e. None of above.

49. If you are sick with fever and diarrhea, you should:
    a. Wash your hands extra long when you get to work.
    b. Take medicine and continue to work.
    c. Stay home and advise your employer of your illness.
    d. Make frequent trips to the restroom.

50. While working in the kitchen, you noticed a spray bottle of glass cleaner and degreaser on a shelf above the food preparation table. What should you do?
    a. Ask who put the chemicals there.
    b. Remove the chemicals and tell your supervisor.
    c. Be careful when preparing the food to avoid chemical spill on the food.
    d. Leave the chemicals where they are and continue handling food.
    e. None of above.

51. Sick food workers may have germs that can make customers sick. If a food worker is sick with diarrhea or vomiting, what should the food worker do?
    a. Prepare food in the back of the kitchen away from customers.
    b. Go home or stay away from food and food-contact surfaces.
    c. Work with food, but wash hands often and wear gloves.
    d. Only wash dishes or equipment.

52. What is the best way to get rid of roaches
    a. Smash them with your foot or a heavy object.
    b. Use a powder pesticide instead of a spray.
    c. Leave the lights on all the time, even when the business is closed.
    d. Seal areas where the roaches can hide and keep the establishment clean.

53. Hamburgers must be cooked to what minimum temperature?
    a. 130º F.
    b. 145º F.
    c. 155º F.
    d. 165º F.

54. Food must cool down from 130º F to 70º F within how many hours?
    a. 1 hour.
    b. 2 hours.
    c. 4 hours.
    d. 6 hours.
    e. Overnight.

55. What is the correct procedure for thawing food?
    a. At room temperature for 2 hours, then 2 more hours in a low temperature oven.
    b. In a hot water bath.
    c. Inside a refrigerator, in the microwave or under cold running water.
    d. In a sink at room temperature if the food is in its original packaging.

56. How should food be cooked in the microwave?
    a. The food must be stirred at least once during cooking, and then left to stand covered for a minimum of 2 minutes. Check the food with a metal stem thermometer before you serve it to make sure it reached at least 165º F.
    b. The food must be stirred at least twice during cooking, and then left to stand uncovered for a minimum of 1 minute. Check the food with a metal stem thermometer before you serve it to make sure it reached at least 130º F.
    c. The method for cooking food in the microwave is no different from the methods used for the stove or oven.
    d. Food should NEVER be cooked in the microwave. Microwaves are only used for reheating food.

57. Ready-to-eat foods should NOT be handled using:
    a. Utensils.
    b. Tongs.
    c. Scoops.
    d. Wax paper.
    e. Bare hands.

58. A food worker needs to cool a pan of refried beans using the shallow pan method. What should the food worker do?
    a. Put the hot beans in a shallow layer no more than four inches deep, and refrigerate without a cover.
    b. Put the hot beans in the refrigerator with a tight lid to protect them from contamination.
    c. Cool the hot beans on the counter for a few hours – so that the food doesn't warm up the refrigerator – and then refrigerate.
    d. The beans should be loosely covered with plastic wrap and refrigerated.

59. Food must cool down from 70º F to 41º F within in how many hours?
    a. 1 hour.
    b. 2 hours.
    c. 4 hours.
    d. 6 hours.

60. Why must cooked potentially hazardous foods such as cooked vegetables and fried chicken be kept hot until served?
    a. To finish cooking the food.
    b. To make the food taste better.
    c. To keep the food moist.
    d. To keep the food from getting cold.
    e. To keep bacteria from growing in the food.

61. When using disposable gloves, how often do you need to change your gloves and/or wash your hands?
    a. You need to change your gloves often but no need to wash your hands as the gloves protect them.
    b. You do not need to change gloves unless the gloves get damaged.
    c. You need to wash your hands and put on new gloves whenever the gloves get damaged or contaminated.
    d. You need to use hand sanitizer and put on new gloves whenever the gloves get damaged or contaminated.

62. What types of foods support rapid bacterial growth?
    a. Frozen lemonade and orange juice.
    b. Moist / high protein.
    c. Dry cereals.
    d. Any food cooked on a Tuesday.

63. Why must potentially hazardous foods be cooked to proper temperatures?
    a. To make the food smell, look or taste better
    b. To lower the acidity of the food.
    c. To raise the water activity of the food.
    d. To kill the germs that might cause food-borne illness.
    e. All of the above.

64. You should not go to work if you are sick with what symptoms?
    a. Vomiting
    b. Fever
    c. Diarrhea
    d. All of the above

65. Quick cooling of leftover food through the Danger Zone is required for food safety. Why is it important to cool food quickly?
    a. To keep foods from losing nutrients.
    b. To keep bacteria from growing rapidly in the food.
    c. So the hot food doesn't warm up the refrigerator.
    d. So the food is easier to reheat later.

66. Which of the following must be cooked to 165° F?
    a. Poultry.
    b. Ground meats.
    c. Non-ground meats
    d. Seafood.
    e. Eggs for immediate service.

67. Ready-to-eat food is:
    a. Food that just got delivered from an approved source.
    b. Food that needs to be reheated to 165° F before serving.
    c. Moist, protein-rich foods that support the rapid growth of bacteria.
    d. Food that will not be cooked or reheated before being served to the customer.

68. What is the minimum length of time that dishes and utensils need to be sanitized?
    a. 10 seconds
    b. 30 seconds
    c. 1 minute
    d. 10 minutes

69. Raw fish must be cooked to what minimum temperature?
    a. 145° F.
    b. 155° F.
    c. 165° F.
    d. 180° F.

70. You are responsible for checking in an arriving food order. Part of the order was raw chicken, which did not come in refrigerated. What should you do?
    a. Put chicken in the walk-in cooler right away.
    b. Put chicken in the freezer.
    c. Refuse the chicken and send it back.
    d. Put up all the foods and decide later what to do with the raw chicken.

71. Sanitizer must be made and used correctly to work properly. Which of the following is the correct way to make or use a sanitizer?
    a. Use test strips to make sure the sanitizer is not too strong or too weak.
    b. Mix the right amount of sanitizer with the right amount of water.
    c. Change the sanitizer often to make sure it stays clean and fresh.
    d. All of the above are correct.

72. What are some of the food contact surfaces that must always be washed and sanitized?
    a. Bathrooms, floors, and walls in the kitchen.
    b. Break room, the surface of the griddle, and dining room tables.
    c. Cutting boards, knives, utensils, and equipment.
    d. Floor of the service area, the outside of equipment and display cases, and counter tops.

73. What is the best way to control cockroaches, mice, flies and other pests?
    a. Keep the business and garbage areas clean and eliminate hiding places and routes of entry.
    b. Use cats.
    c. Use pesticides often.
    d. Keep all food on the counter tops, not on the floor.

74. Why is temperature control so important?
    a. It is used to kill germs with heat during cooking and to stop their growth by keeping the food hot or cold.
    b. It is used to make sure that the food tastes right.
    c. It is used to prevent customers from burning themselves by eating food that is too hot.
    d. It is used to keep the food business at a comfortable temperature for the workers and customers.

75. Germs cannot grow or multiply rapidly at what temperatures?
    a. Colder than 41º F and hotter than 130º F.
    b. Hotter than 41º F and colder than 130º F.
    c. Colder than 130º F and hotter than 41º F.
    d. Hotter than 45º F and colder than 165º F.

76. Raw chicken must be cooked to what minimum temperature?
    a. 130º F.
    b. 145º F.
    c. 155º F.
    d. 165º F.

77. Which one of these foods must be cooked to at least 155°F?
    a. Vegetables.
    b. Chicken and turkey.
    c. Hamburger and sausage.
    d. Pork chops.

78. When using ice to keep foods cold, the food container must be surrounded by ice to the level of the food. Which is the best way to tell if the food is staying cold enough?
    a. Lift the containers to see if the ice is melted.
    b. Put lids on the food containers.
    c. Use a thermometer to check the temperature of the ice.
    d. Use a thermometer to check the temperature of the food.

79. What is the proper way to cool food?
    a. Leave the food at room temperature for 2 hours and then store it in the refrigerator.
    b. Always cool the food in the same container in which it was cooked.
    c. The methods you use to cool the food are not important so long as the food is reheated to above 165º F.
    d. The food should be cooled in uncovered, shallow containers inside the refrigerator.

80. When cooling food, the temperature of the food must reach ___ within 2 hours and 41º F within in 4 hours?
    a. 70º F
    b. 90º F
    c. 100º F
    d. 110º F

81. Where must you wash your hands?
    a. In any sink that is free and accessible.
    b. Only in an authorized and designated hand wash sink.
    c. In the authorized hand sink or in the dish wash sink if the hand sink is not working or available.
    d. In the sanitizer bucket.

82. Cold potentially hazardous food must be maintained at what minimum temperature?
    a. Below 41° F. at all times.
    b. Between 41° F. and 130° F at all times.
    c. Above 41° F. at all times.
    d. 130° F or below
    e. At any temperature if the food is packaged and from an approved processor.

83. How long can a ready-to-eat potentially hazardous food be stored in the refrigerator once it has been opened or prepared?
    a. For seven days if the food has been maintained below 41° F the entire time.
    b. For 10 days but only if the food tastes, smells or looks good.
    c. For 14 days if the food has been held below 41° F the entire time.
    d. As long as you want as long as the FIFO rule (first in, first out) is applied.

84. What is the best way to get rid of roaches?
    a. Use a powder pesticide instead of a spray.
    b. Leave the lights on all the time, even when the business is closed.
    c. Seal areas where the roaches can hide and keep the establishment clean.
    d. Smash them with your foot or a heavy object.

85. Which of the following is NOT an acceptable way to handle ready-to-eat foods?
    a. Using utensils
    b. Using tongs
    c. Using wax paper
    d. Using bare hands

86. The best way to destroy any harmful germs that may be present in foods is to:
    a. Add salt to the food.
    b. Keep food at room temperature.
    c. Cook foods to the right temperature.
    d. Keep food below 41° F at all times.

87. Hot, cooked potentially hazardous food must be maintained above what temperature?
    a. Above 130° F at all times.
    b. Between 41° F and 130° F. at all times.
    c. Above 41° F at all times.
    d. At any temperature if the food is already completely cooked.

88. Potentially hazardous food should not be kept in the “Danger Zone” for more than:
    a. 2 hours
    b. 4 hours
    c. 8 hours
    d. 12 hours

89. Why must potentially hazardous food be kept out of danger zone?
    a. To prevent altering the smell and color of the food.
    b. To prevent the bacteria from rapidly growing and multiplying.
    c. To prevent frozen foods from thawing.
    d. Because customers like to eat foods that are either very hot or very cold.

90. Which one of the following must be cooked to at least 165° F?
    a. Vegetables
    b. Chicken
    c. Hamburger
    d. Pork chops

91. What is usually the riskiest step in food preparation?
    a. Cooling.
    b. Cold holding.
    c. Thawing.
    d. Hot holding.
    e. Reheating.

92. You notice your glove is torn; what should you do?
    a. Replace the glove.
    b. Place a glove over the torn one.
    c. Rinse your hand in the three-compartment sink and put on new gloves.
    d. Remove your gloves, wash your hands with soap and water for at least 20 seconds in the hand wash sink and put new gloves on.

93. Which of the following must be cooked to at least 155° F?
    a. Poultry.
    b. Ground meats.
    c. Beef.
    d. Seafood.
    e. Pork.

94. Who is responsible for making sure food is safe and wholesome?
    a. Food Service Manager
    b. Employees
    c. Shift Manager
    d. All of the above

95. If you have a cut on your hand, you must:
    a. Call in sick.
    b. Continue working and hope that the bleeding stops.
    c. Stop the bleeding, cover it with a bandage and wear a non-latex glove.
    d. Keep your hand elevated so that the bleeding stops.

96. You can prevent food-borne illness by:
    a. Serving foods that are delicious and nutritious.
    b. Washing your hands, using gloves and keeping foods at the right temperature.
    c. Washing your hands at the beginning and end of your shift.
    d. Spraying pesticides on the kitchen floor so pests would not get in the foods.

97. Where should raw meat, seafood and poultry be stored so they don't contaminate other foods in the refrigerator?
    a. Above the fruits and vegetables.
    b. Below and away from other foods
    c. The top shelf of the refrigerator
    d. On paper towels in case of meat drips.

98. All foods must be reheated to what minimum temperature?
    a. 130° F.
    b. 145° F.
    c. 165° F.

d. It does not matter as long as the food smells good.

99. Where must you store chemicals such as cleaners and sanitizers?
    a. Away from any food or clean equipment and utensils.
    b. At least 6 inches above the floor.
    c. With equipment and clean utensils.
    d. On the shelf above food and utensils.

100. Washing your hands is required:
    a. Before you start working with food.
    b. After you touch your face or mouth.
    c. After using the restroom.
    d. All of the above.

101. Which of the following kills germs?
    a. Washing.
    b. Sanitizing.
    c. Rinsing.
    d. Air drying.
    e. None of the above.

102. At which minimum temperature must cold potentially hazardous foods be kept?
    a. 65° F or below.
    b. 41° F or below.
    c. 55° F or below.
    d. 60° F or below.
    e. 70° F or below.

103. Equipment used to keep foods hot includes steam tables, soup warmers and deli hot cases. Which is the <u>only</u> way to be sure the equipment is keeping the food at the proper temperature?
    a. Be sure the food is steaming.
    b. Set the temperature control knob on “high”.
    c. Put lids on the foods.
    d. Use a thermometer to check the temperature of the food.

104. Which of the following foods would be approved for use in your establishment?
    a. Homemade food.
    b. Potentially hazardous foods that arrive at your establishment at room temperature.
    c. Any food that is from an approved source, properly labeled, and in proper condition.
    d. Any meat product that is packaged and labeled but does not have a valid mark of inspection.

105. If you wanted to serve leftover steak, what temperature must it be reheated to?
    a. 130º F.
    b. 145º F.
    c. 155º F.
    d. 165º F.

106. Which is the most important way to keep potentially hazardous foods safe?
    a. Keep foods out of the Danger Zone
    b. Store foods at room temperature
    c. Cool foods in covered containers in the refrigerator
    d. Wash foods in soapy water.

107. Ground meats such as hamburger or sausage must be cooked to what temperature?
    a. Greater than 130°
    b. Greater than 145°
    c. Greater than 155°
    d. Greater than 125°

108. Which of the following foods would be approved for use in your establishment?
    a. Any homemade food.
    b. Potentially hazardous foods that arrive at your establishment at room temperature.
    c. Any food that is from an approved source, properly labeled, and in proper condition.
    d. Any meat product that is packaged and labeled but does not have a valid mark of inspection.

109. At which minimum temperature must you keep hot potentially hazardous foods?
    a. 130° F or above.
    b. 145° F or above.
    c. 155° F or above.
    d. 165° F or above.

110. If you wanted to serve leftover steak, what temperature must it be reheated to?
    a. 130º F.
    b. 145º F.
    c. 155º F.
    d. 165º F.

111. If you wanted to serve leftover refried beans from the night before that were properly cooled, what temperature must they be reheated to?
    a. 130º F.
    b. 145º F.
    c. 155º F.
    d. 165º F.

112. Which of the following is NOT likely to cause foodborne illness?
    a. Raw onions left in the "Danger Zone" for 5 hours.
    b. Fish delivered at 65º F.
    c. Cooked potatoes that took 8 hours to cool to 41º F.
    d. Chicken cooked to 155º F.
    e. All of the above are likely to cause foodborne illness.

113. An acceptable, safe way to thaw frozen food is to:
    a. Place it on the counter or in the sink overnight.
    b. Place it in the refrigerator.
    c. Immerse it in the sanitizer bin.
    d. All of the above are correct.

114. Cross-contamination is the spread of germs from one place to another. Which of the following would most likely <u>cause</u> cross-contamination?
    a. Cleaning and sanitizing cutting boards after using them with raw meat.
    b. Using the same cutting board for raw meat and bread without sanitizing.
    c. Washing hands after handling raw meat.
    d. Washing hands after taking out the garbage.

115. How must raw meat and raw eggs be stored in the refrigerator?
    a. On the floor of the walk-in cooler away from other foods.
    b. In separate containers stored on the lowest shelves of the refrigerator.
    c. Raw eggs can be stored on the top and raw meat on the lowest shelves.
    d. In the walk-in cooler on a shelf that is easily accessible.

116. Cooling foods quickly is very important. The best thing to do is:
    a. Stack the food in covered containers in the refrigerator.
    b. Use an oscillating fan.
    c. Keep the food in the same container it was cooked in, stirring every 20-30 minutes until it is cold.
    d. Place the food in a shallow pans in the refrigerator uncovered.

117. What is correct procedure for thawing food?
    a. Inside a refrigerator or under cold running water.
    b. In a container at room temperature.
    c. In a sink with hot running water.
    d. In a sink at room temperature if the food is in its original packaging.

118. Potentially hazardous foods are:
    a. Milk, meat, cooked rice and eggs.
    b. Sweet foods such as cakes and pies.
    c. Foods that do not require refrigeration or are shelf stable.
    d. All of above.

119. Which is a correct way to wash your hands?
    a. Rinse hands with hot, running water and dry on a paper towel.
    b. Wash hands for at least 20 seconds by scrubbing with soap and warm water, rinsing, and drying with a paper towel.
    c. Wash hands with soap and warm water for at least 60 seconds and dry with a cotton towel.
    d. Scrub hands in a sanitizer bucket and dry with a cotton towel.

120. Ground meats such as hamburger or sausage must be cooked to what temperature?
    a. 145°
    b. 155°
    c. 130°
    d. 165°

121. Shellfish tags must be kept for:
    a. 1 week
    b. 30 days
    c. 90 days
    d. Until the Health Inspectors sees them.

122. When cooling potentially hazardous foods you should:
    a. Let the food cool at room temperature for a few hours first
    b. Put foods into large containers and cover tightly with lids.
    c. Use shallow, uncovered pans to cool food in the refrigerator.
    d. Use an ice bath and stir product to cool rapidly.
    e. Answers C and D are correct.

123. Potentially hazardous food should not be kept the “Danger Zone” for more than how many hours?
    a. 2 hours.
    b. 4 hours.
    c. 8 hours.
    d. 10 hours.
    e. You can leave it in the Danger Zone as long as you want.

124. When open food is left at the dining table:
    a. You may reuse it unless the customer took a bite of it.
    b. You should not serve it to a customer but employees may eat it.
    c. You should donate it to a shelter.
    d. You must throw it away regardless whether it was used or not.

125. What is the most important thing you can do to keep harmful germs out of the foods you prepare?
    a. Wash your hands thoroughly and frequently and use glove whenever necessary.
    b. Keep children out of the kitchen.
    c. Remove all jewelry prior to working with food.
    d. Make sure you wear a hair net.

Scroll Down for Answers

1.	d	26.	b	51.	b	76.	d	101.	b
2.	a	27.	b	52.	d	77.	c	102.	b
3.	e	28.	d	53.	c	78.	d	103.	d
4.	b	29.	b	54.	b	79.	d	104.	c
5.	b	30.	a	55.	c	80.	a	105.	d
6.	a	31.	b	56.	a	81.	b	106.	a
7.	d	32.	d	57.	e	82.	a	107.	c
8.	c	33.	c	58.	a	83.	a	108.	c
9.	a	34.	c	59.	c	84.	c	109.	a
10.	c	35.	a	60.	e	85.	d	110.	d
11.	e	36.	c	61.	c	86.	c	111.	d
12.	b	37.	d	62.	b	87.	a	112.	a
13.	d	38.	c	63.	d	88.	b	113.	b
14.	a	39.	a	64.	d	89.	b	114.	b
15.	d	40.	d	65.	b	90.	b	115.	b
16.	a	41.	a	66.	a	91.	a	116.	d
17.	c	42.	c	67.	d	92.	d	117.	a
18.	a	43.	b	68.	b	93.	b	118.	a
19.	d	44.	d	69.	a	94.	d	119.	b
20.	b	45.	c	70.	c	95.	c	120.	b
21.	c	46.	d	71.	d	96.	b	121.	c
22.	a	47.	a	72.	c	97.	b	122.	e
23.	a	48.	a	73.	a	98.	c	123.	b
24.	c	49.	c	74.	a	99.	a	124.	d
25.	a	50.	b	75.	a	100.	d	125.	a