



A Client Care Module:

FOOD PREPARATION AND SAFETY TIPS

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Developing Top-Notch CNAs, One Inservice at a Time

A Client Care Module:

Food Preparation & Safety Tips

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WHAT'S COOKING?

If you work in your clients' homes, you may be responsible for fixing snacks or meals for your clients. You may even do their grocery shopping.

If you work in a health care facility, you are probably responsible for serving food to your clients. And, you may spend time helping them eat their meals.

Either way, it's important for you to know the basics about how to prepare, serve and store food. *And*, how to do it safely.

Remember...the kitchen is one of the most dangerous rooms in any house or workplace. Why? The answer is simple: **GERMS!**

Keep in mind that infectious bacteria can sometimes be found *in* and *on* raw foods. Germs can also be spread by people as they are preparing foods.

Keep reading to learn more about basic food preparation and safety. You'll learn the answers to questions like these:

- How can I tell if a dish is safe to use in the microwave?

Let's Start With a Joke!

A lady was picking through the frozen turkeys at the grocery store, but couldn't find one big enough for her family. She asked a stock boy, "Do these turkeys get any bigger?"

The stock boy replied, "No, ma'am, they're dead."

- How can I keep a pot from boiling over?
- What three items in a kitchen contain the most bacteria?
- What's the best way to thaw food?
- What are the symptoms of a food allergy?
- How can I protect my clients from food-borne illnesses?

Remember...you should follow the guidelines in this inservice during your work with clients. But, do yourself a favor, and follow them at home in your own kitchen, too.



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Types of Cookware

Glass

Glass cookware can often be used in the microwave and in the oven and is great for food storage. Glass is not usually recommended for use on top of the stove.

Cast Iron

Once they're heated, heavy cast iron pans remain hot for a long time. Foods cooked in cast iron pans absorb some iron—which is a good thing! It's important to "season" cast iron with oil to keep foods from sticking.

Aluminum

Aluminum conducts heat very well, making it a good choice for cookware. Some people are turning away from aluminum cookware after hearing about how aluminum may be connected to Alzheimer's disease. However, the FDA has found no proof of a link between the use of aluminum cookware and Alzheimer's disease.

Stainless Steel

Stainless steel cookware is easy to clean. Foods cooked in stainless steel may need to be stirred frequently so they heat evenly. People who are allergic to the metal, nickel, should avoid using stainless steel pans.

Non-Stick

There are many different types (and price ranges) of non-stick cookware. Many of them require the use of plastic spatulas and spoons so that the non-stick surface won't be scratched. Most non-stick surfaces are easier to clean if they are allowed to cool down first.

Ceramic

Pottery or ceramic cookware should only be used if it was *specifically made* for cooking. If not, the decorative glaze on the pottery might "leach" into the food. Since most glazes contain lead, this could make the food unsafe to eat!



If you work in clients' homes, you may run into all different kinds of cookware.

Some Common Cooking Abbreviations

T = *tablespoon*

t = *teaspoon*

c = *cup*

oz = *ounce*

A Few Basic Cooking Terms

Sauté means to brown vegetables or meat quickly in a small amount of fat.

Sear means to brown the outside of meat *quickly* at a high temperature.

Braise means to brown meat, then cook slowly in a small amount of liquid.

Scald means to heat milk just to the point that steam rises from it, but *before* it boils.

Marinate means to soak food in a liquid to tenderize or add flavor to it.

Simmer means to cook in liquid over low heat—without boiling the food.

Rolling Boil means to boil food or water until it won't stop boiling when it's stirred with a spoon.

Doubling a Recipe means to multiply all the ingredients of the recipe by two so the finished product serves more people.

Halving a Recipe means to divide all the ingredients of the recipe *by two* so you end up making fewer servings.



Dice means to chop food up into small pieces.

Using a Microwave

- Microwaves cook with extremely high-frequency radio waves. As these waves travel inside the oven, they enter food from the *outside*, heating and cooking as they go.
- Because microwaves bounce unevenly around an oven, food may be left with cold spots. That's why it's important to stir the food and/or turn the dish several times during the cooking process.
- Only use cookware that has been specially made for the microwave. "Leftover" containers such as margarine tubs should not be used in the microwave. These containers can warp or melt, allowing harmful chemicals to get into the food.
- If you're not sure that a particular dish is safe for the microwave, try this test. Fill a glass measuring cup with 1 cup of water. Place it in the microwave. Put the empty dish you are testing next to it. (But don't let the two dishes touch.) Turn the microwave on "high" for one minute. If the empty dish gets hot, it is *not* safe for cooking. If its temperature doesn't change, it is safe for use in the microwave.
- When defrosting, remove food from its packaging first and place it in a microwave safe container. (The foam trays and plastic wraps used to package meat are *not* stable at high temperatures.)
- Never use thin plastic bags, grocery bags, newspaper or aluminum foil in the microwave. These items could catch on fire!
- When cooking in a microwave, arrange food items evenly, with the thinnest part of the food toward the *center* of the dish. Cover the dish loosely.
- Always start out by using the *lowest* cooking time given in a recipe. It's easy to overcook food in the microwave.
- In general, *one cup* of refrigerated food takes *two minutes* to warm up in the microwave.
- Most foods require very little water for cooking. For example, only a tablespoon or two of water is needed when cooking vegetables.
- Do you work with infants? Avoid heating baby food or baby formula in the microwave—because of the uneven heating and the risk of getting it too hot for the baby.
- Be careful not to burn yourself when removing dishes from the microwave. You may need to use pot holders.
- Remember to be careful when removing the cover from a microwaved dish. A lot of steam may suddenly rush out of the dish.
- Let food sit for a few minutes after the microwave finishes. For example, the instructions for a food might say, "Let stand for 1 minute after cooking." Never skip this step! (Microwaved food continues cooking as it sits, distributing the heat more evenly.)



Remember that the power of microwaves vary, so some microwaves take longer to cook than others.

Did you know that more than 90% of American households have at least one microwave oven?



Never operate a microwave oven when it is empty.

Some Basic Cooking Tips

Microwave Tips:

- Separate cold bacon by microwaving it for 35 seconds at full power.
- Soften a stick of butter at 50% power for about 40 seconds.
- Have some stale crackers or chips? Microwave them for 10 seconds at full power.
- Don't add salt to foods before they are microwaved. (Salt draws out moisture.)
- A pound of most vegetables takes six or seven minutes to cook in the microwave.
- Cut the skin of a potato *before* putting it in the microwave. This keeps it from bursting.
- Don't leave eggs in their shell when cooking in the microwave. They may explode!

General Cooking Tips:

- When shaping hamburger patties, poke a hole in the middle. This allows for faster cooking and the holes will disappear during the cooking process.
- Use tongs or a flat utensil to turn meat during cooking. A fork will puncture the meat, releasing the juices and leaving it dry.
- Freezing meat that you feel may be getting too old or that is getting a foul odor will not kill bacteria. Bacteria can only be killed by properly cooking the meat to safe levels.
- To keep a pot from boiling over, put a toothpick between the pot and the lid.
- If something spills over in your oven, sprinkle it with salt, remove it with a metal spatula and then wipe with a damp sponge.
- To clean baked-on food from a pot or pan, put a fabric softener sheet (like Bounce) in the pan. Fill the pan with water and let it sit overnight. Then sponge it clean.
- Always wash and sterilize a can opener after each use. Food left on the blade will spoil and possibly contaminate the product in the next can you open.
- To keep a mixing bowl from sliding around when you're stirring something in it, set the bowl on a damp kitchen towel.
- Always store bread at room temperature. Keep it away from hot spots in the kitchen. (Refrigerated bread gets stale faster.)
- If a soup or stew is too salty, add raw cut potatoes. After they have cooked, remove them and throw them away. (They will have absorbed the excess salt.)
- Keep in mind that a fresh egg will *sink* in water, while a stale one will *float*.
- Store tomatoes with the stem area pointed down, and they'll stay fresher longer.



Fruit will keep better if you don't wash it until just before serving.

Have you ever wondered whether an egg is fresh or hardboiled? Just spin the egg. If it wobbles, it's raw. If it spins easily, it's hardboiled.



To unscrew the lid off a jar, put on a pair of latex gloves. You'll get a better grip.

Staying Safe in the Kitchen

Cooking is the leading cause of home fires and fire injuries. Hundreds of people are killed every year by a kitchen fire. To stay safe in any kitchen, follow these guidelines:

- Keep cooking areas clean and uncluttered. A dirty oven or stove top may contain “leftover” grease which can catch fire.
- If you are frying, grilling or broiling food, stay in the kitchen! If you must leave to attend to your client, even for a short period, turn off the stove.
- When simmering, baking, roasting, or boiling foods, check them *regularly* and use a timer to remind you that food is cooking.
- Never put a glass casserole or lid on the stove or over a burner. If it gets hot and explodes, bits of glass will shoot out in all directions.
- Get in the habit of turning a burner off *before* you remove the pot or pan.
- Did you know that an electric burner can reach a temperature of 1000 degrees or more? This means it can catch clothing on fire even *after* it’s been turned off.
- Don’t wear long, loose sleeves that might hang over the stove while you’re cooking. People have been known to set themselves on fire this way—with both electric and gas ranges. (If your clothing does catch fire, remember to stop, drop and roll!)
- Never try to carry a burning pot or pan to the kitchen sink or outdoors.
- Never, never pour water on flaming fat or oil — *you’ll end up spreading the fire*. If the fire is inside a pan, slap on the lid. If outside, turn off the heat and douse the flames by tossing on a handful of baking soda or salt.
- If the fire is inside the oven, turn the oven off and close the door tightly. This should smother the fire. (Remember: a fire must have oxygen to continue burning.)
- A fire extinguisher should be available in every kitchen. If you know how to use one, grab it and put out the fire!
- If the flames don’t go out right away or you suspect that fire may be smoldering somewhere in the cabinets or woodwork, don’t hesitate to call the fire department.
- If anything catches fire in a microwave, keep the door closed and turn off or unplug the microwave. (Opening the door allows oxygen to “feed” the fire.) Don’t use the oven again until it has been checked out by a serviceman.
- Be careful not to overload the electrical outlets in a kitchen. Unplug appliances—like toasters and coffee makers—when you’re not using them.
- If an appliance doesn’t work properly or smells funny when in use, report it to your client and/or your supervisor.
- Wipe up any spills promptly—whether they are on appliances, the stove top or oven.



Turn pot handles inward, away from the edge of the stove.

Keep flammable objects at least three feet away from the top of a stove. This includes pot holders, dish towels and curtains.



Heat oil slowly and never leave hot oil unattended.

Food-Borne Illness

The food supply in the United States is the safest in the world. However, we still need to be aware of the types of bacteria that can cause food-borne illness. Any of these illnesses can be fatal, especially in children, the elderly and people with weak immune systems. Here are the five most common culprits:

- **Salmonella** is the most common food-borne illness. The symptoms are nausea, abdominal cramps, diarrhea, fever and headache. Salmonella is found most often in poultry, red meats, eggs and milk.
- **Staphylococcus aureus** causes nausea, vomiting, diarrhea and dehydration. These bacteria can be found in ham, warmed-over foods, dairy products and other high-protein foods.

- **Clostridium perfringens** likes to grow in cooked meat, poultry and gravy. It causes abdominal pain and diarrhea.
- **Clostridium botulinum** are the bacteria that cause botulism, one of the deadliest types of food-borne illness. The symptoms are dizziness, double vision and problems with both swallowing and breathing. These bacteria are most often found in improperly processed canned goods.
- **E. coli** is another deadly form of food-borne illness. These bacteria cause diarrhea, severe abdominal pain, nausea, vomiting and fever. E. coli can be found in raw and undercooked ground beef and other red meats, imported cheeses and unpasteurized milk.



Every year, over 9,000 Americans die from food-borne illness.

If you suspect your client has a food-borne illness:

- Tell your supervisor immediately.
- Keep the suspected food, but make sure it won't be eaten by someone else. (The food may need to be tested for bacteria.)
- Follow the rules about reporting food-borne illnesses to the local health department.

Keeping Bacteria Out of the Kitchen

The three major areas in a kitchen where bacteria like to grow are:

1. Sponges and rags
2. Countertops
3. Cutting boards

- Sponges and rags stay moist most of the time. Bacteria love warm, moist environments.
- Even if a sponge dries out, the bacteria on it can live for at least two days.
- Bacteria also love to find small cracks and crevices in countertops and cutting boards.

So, how can you wipe out bacteria on these surfaces?

- Cutting boards should be scrubbed with detergent and then treated with a bleach solution between uses.
- Wooden cutting boards can also be sanitized in the microwave. Place the cutting board in the microwave and "cook" on high for ten minutes.
- Wet sponges can be bacteria-free after one minute of microwaving. It takes three minutes in the microwave to sanitize a wet cotton rag.



Keeping Food Safe For Your Clients

Remember...you can't always see, smell or taste the bacteria that cause food-borne illnesses. It takes from thirty minutes to several weeks to get sick from contaminated food. There are four basic steps to follow to ensure the safety of food. They include:

1. **CLEAN:** Wash hands and surfaces frequently.

- Wash your hands immediately *before and after* handling raw meat or poultry or its packaging.
- Raw meat, chicken and fish do not need to be washed before cooking. (Washing these foods might get rid of some surface bacteria, but it also spreads the bacteria around the kitchen.)

2. **SEPARATE:** Don't cross-contaminate.

- When bacteria cross from one food to another through contact with the same surface, it's called *cross-contamination*.
- Separate raw meat, poultry and seafood from other food in your grocery cart by putting them in plastic bags.
- Store raw meats on the *bottom* shelf of the refrigerator so the juices can't drip on other foods.
- Store eggs in their original carton—even if the refrigerator has special "egg holders".
- Don't use the same platters and utensils for meat before and after it's cooked.

3. **COOK:** Cook foods to proper temperatures.

- Never serve ground beef if it is still pink inside.
- Cook fish until it is opaque and flakes easily with a fork.
- Cook eggs until they are firm, not runny.
- Bring sauces, soups and gravies to a boil before serving.

4. **CHILL:** Refrigerate foods promptly.

- Refrigerate food quickly to keep bacteria from multiplying.
- Make sure the refrigerator is set at 40 degrees and the freezer at 0 degrees.
- Refrigerate food and leftovers within two hours. For quick cooling, put leftovers into *shallow* containers.
- Don't pack a refrigerator too full. Cold air has to be able to circulate to keep food safe.
- Never thaw foods by sitting them out on the counter at room temperature.
- If you must thaw something quickly, cover it with cold water. Change the water every thirty minutes to keep the water cold.
- Food can also be thawed in the microwave, but only if it's going to be cooked immediately after thawing.



Never taste food that looks or smells strange to see if it's still good. Just throw it away.

You may have heard that putting hot food into a refrigerator will harm the fridge, but that's not true! It's better to chill the food quickly than to let it cool down at room temperature.



One out of every four refrigerators is NOT cold enough!

AND, ABOVE ALL...WHEN IN DOUBT, THROW IT OUT!

Watch Out For Food Allergies!

About 45 million Americans suffer from allergies, but only 2% of them are allergic to foods. **The foods that cause allergic reactions most often are:**

- Eggs
- Cow's milk
- Peanuts and walnuts
- Soy
- Wheat
- Fish and shellfish

Most allergic reactions develop within minutes of eating a certain food. However, it can take several hours for the reaction to develop.

Food allergies can be fatal. (About 150 Americans die every year from a food allergy.)

The symptoms of a food allergy include:

- A tingling sensation in the mouth
- Swelling of the tongue and throat
- Difficulty breathing
- Hives
- Vomiting
- Abdominal cramps
- Diarrhea
- A drop in blood pressure
- Loss of consciousness

The best way to deal with a food allergy is to avoid the food that causes it! There are no medications for curing a food allergy, but epinephrine is usually given to *control* a severe reaction.



If a client appears to be suffering from a food allergy, get help immediately!

If one of your clients has a food allergy, read food labels carefully. For example, Mrs. Jones has a severe allergy to peanuts. She must avoid peanuts, all foods that contain peanuts and all foods cooked in peanut oil.

Cooking For Clients on a Low Fat Diet

Some of your clients may be on a low fat diet, either because of a problem like heart disease or diabetes or to lose weight. Here are some tips for preparing low fat foods:

- Try cooking food in the microwave using little to no fat.
- Consider using non-stick cookware with an oil spray—such as Pam. You can also avoid adding fat altogether by cooking foods in water or broth.
- Remove the fat from soups and stews by dropping ice cubes into the pot. The fat will stick to the cubes as you stir. Take the ice cubes out *before* they melt too much.
- Trim fat from meats before cooking.
- Remember that a portion of meat should be about the size of a deck of cards.
- Removing the skin from chicken reduces the amount of fat.
- Serve canned tuna packed in water instead of oil.
- Cook with plain, low fat yogurt instead of sour cream and you'll save 44 grams of fat!
- Serve skim or 1% milk instead of whole milk.
- Whip mashed potatoes with low fat buttermilk or yogurt instead of milk or cream.



Serve lots of fruits and vegetables to a client on a low fat diet.

Cooking For Clients on a Low Salt Diet

You may work with a number of clients who have to watch their salt intake. This might include clients who have had strokes, who have edema or who suffer from hypertension. Here are some tips for low salt cooking:

- Discourage your clients from eating fast food—which is very high in sodium.
- To remove excess salt, *rinse* canned vegetables with water before cooking.
- If you buy groceries for your clients, look for low salt or salt-free canned goods.
- Offer snacks that are low in sodium like fresh fruits and vegetables.
- Remember that salt substitutes are really not a good idea because they encourage people to have a taste for salt. It's better for your clients to get in the habit of flavoring their foods with other spices.



Don't keep a salt shaker on the table or get one with *really* small holes.

Remember that elderly people:

- *May have less ability to fight off bacteria.*
- *May lose their sense of smell and taste...so they may not always be able to tell when meat is spoiled or milk is sour.*

Cooking For Clients with Weak Immune Systems

Some of your clients may have weak immune systems as a side effect of chemotherapy or from some disease process such as AIDS or kidney disease. These clients have an increased risk of developing—and dying from—a food-related infection. They may have a special diet ordered by the doctor. In addition, it's good for you to keep these general guidelines in mind:

- Make sure all milk and cheese products have the word "pasteurized" on the label.
- Avoid all moldy foods (including aged cheeses like blue cheese or Roquefort).
- Be sure to serve *well-cooked* meat, poultry, fish and shellfish.
- Consider using a meat thermometer to make sure that meats have been cooked thoroughly.
- Don't serve raw eggs or foods that contain raw eggs. When cooking eggs, make sure the yolk and the white are *firm*...not runny.
- Wash all raw fruits and vegetables thoroughly.
- Avoid serving nuts that are still in their shells.
- Encourage your client to stay away from salads from the deli case.
- Avoid serving cream-filled pastries.
- Watch out for raw or unpasteurized honey. It could cause a food-borne illness.
- Watch out for foods that are past their expiration date. (Remember: a "use by" or "sell by" date tells you when a food is at its best. An expiration date tells you when the food stops being safe to eat.)



Always reheat leftovers until they are steaming hot to make sure that any bacteria have been killed.



Developing Top-Notch CNAs, One Inservice at a Time

A Client Care Module:

Food Preparation & Safety Tips

Are you "In the Know" about food preparation and safety? Circle the best choice or fill in your answer. Then check your answers with your supervisor!

EMPLOYEE NAME
(Please print):

DATE: _____

- ***I understand the information presented in this inservice.***
- ***I have completed this inservice and answered at least eight of the test questions correctly.***

EMPLOYEE SIGNATURE:

SUPERVISOR SIGNATURE:

Inservice Credit:

<input type="checkbox"/> Self Study	1 hour
<input type="checkbox"/> Group Study	1 hour

File completed test in employee's personnel file.

1. When cooking food in a microwave oven, you should:

- A. Wrap it tightly in aluminum foil.
- B. Leave the food uncovered.
- C. Stir the food every thirty seconds.
- D. Let the food sit for a few minutes after the oven turns off.

2. True or False

The best way to put out most kitchen fires is with a bucket of water.

3. The most deadly form of food-borne illness is often caused by improperly processed _____ foods.

4. True or False

All foods should be washed before cooking, including raw meats.

5. To cool foods safely, a refrigerator should be set at no more than _____ degrees.

6. To be safe, all foods should be refrigerated within _____ hours.

7. True or False

Allergic reactions to food can be fatal if the person's throat swells shut.

8. To remove excess salt, you should _____ canned vegetables before cooking them.

9. True or False

People with weak immune systems should avoid eating red meats.

10. _____ is the leading cause of home fires and fire injuries.