



Keep Food Safe — Keep Bacteria From Growing

FOOD SAFETY FOR FAMILY DAYCARE PROVIDERS

In small amounts, most bacteria do not make people sick. When some bacteria are allowed to grow, they can multiply to harmful levels or produce harmful poisons that will cause foodborne illness. You can keep food safe when you keep food out of the temperature Danger Zone.

I. CONTROL TIME AND TEMPERATURE

Time and temperature play important roles in the growth of bacteria. Most bacteria grow best between 40° F and 140° F — the temperature Danger Zone. When you control the temperature of foods, and limit the amount of time foods spend in the Danger Zone you can help prevent bacteria from growing to harmful levels.

To keep foods out of the Danger Zone, simply:

1. Keep cold foods cold
2. Keep hot foods hot

The 2-hour rule

Bacteria grow by dividing in two. Under the right conditions, they can divide every 15 minutes. For example, let's imagine there are 200 *Salmonella* bacteria in an egg. In most cases this number will not make someone sick. When you don't cook the egg thoroughly or allow it to stay at room temperature (70° F) for more than 2 hours, the number of bacteria can multiply to over 25,000! After 3 hours the number could be over 1 million! On your clean hands you have hundreds of bacteria. If they are allowed to grow on the food you touch, you could make the children in your care ill.

The 2 hour rule states that potentially hazardous foods (PHFs) should not stay in the Danger Zone for more than 2 hours. This means

keep cold food cold and hot food hot at all times from shopping to serving or reheating.

Here's how it works.

Keep Foods Cold

Neither refrigerator nor freezer temperatures kill bacteria, they just slow down the rate of growth. Bacteria remain alive in your freezer (0-32° F). In the refrigerator (40° F or below) bacteria not only survive but they can grow. Some organisms like *Listeria* can grow in the refrigerator.

Keep foods cold (40° F or below) at all steps in handling:

WHEN YOU SHOP FOR FOOD

- Buy cold or frozen items last.
- Go home directly after shopping.
- If the weather is warm or you have a long trip, pack cold foods in an insulated container.
- If the weather is cold and your car is heated, don't place foods near the heater.

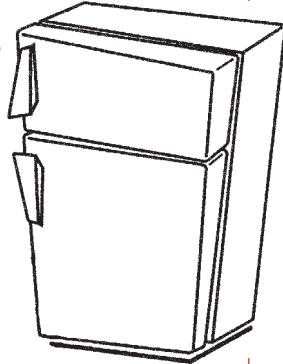
WHEN YOU STORE FOODS

Make sure your refrigerator works properly.

- ✓ Air needs to get inside and circulate to keep food cold. Check to see that vents under and behind the refrigerator are not blocked with dust and dirt.
- ✓ Keep your refrigerator clean.

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- ✓ Place a refrigerator thermometer in the middle of the refrigerator and freezer. Set your refrigerator so that the temperature is no higher than 40° F. Check the temperature of your refrigerator each day.
- ✓ Don't overstuff it. Cold air needs to circulate inside the refrigerator to keep foods cold.



After you shop:

- ✓ Put PHFs into the refrigerator or freezer first.
- ✓ Put raw items in the back of the refrigerator where it is coldest. Use the refrigerator door for condiments and other foods such as jams and juices.
- ✓ Keep eggs in their original carton in the refrigerator — not on the door.

WHEN YOU PREPARE FOODS

Keep foods cold and out of the temperature Danger Zone.

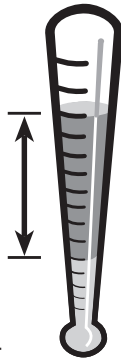
THAW FOODS PROPERLY.

• *In the refrigerator:* This is the best way to defrost foods. In the refrigerator (at 40° F or below) bacteria will grow very slowly. Plan enough time for the size of the food to thaw. For example, one pound of ground beef or a thin chicken breast may take less than a day to thaw, while a 10 pound turkey may take 4 or 5 days.

Be sure to prevent cross-contamination, too. Place frozen meat or other PHFs in a pan or tray below ready-to-eat foods.

After thawing, you should use or cook meats within 1 or 2 days.

You can thaw foods in other ways, too — and still keep food safe:



- *In cold running water:* It is best to use this method if the food item can be thawed within 2 hours. Make sure that the food is sealed in a package or plastic bag. Place it in a pot or sink and turn on the faucet. It is important to keep the water running so that it stays cold and the temperature does not warm to room temperature — the Danger Zone!

One pound of ground meat will take about one hour. For a whole turkey, plan on 30 minutes per pound.

Foods thawed this way must be cooked immediately.

- *In the microwave:* Always cover the food to prevent juices from contaminating the parts of the microwave oven. Follow the directions for your microwave oven, rotating the food several times to make sure it thaws evenly.

When you thaw foods this way they must also be cooked immediately.

- *Cooking:* Thin foods like hamburger patties, chicken fingers or nuggets, shaved steak, and frozen vegetables can be thawed as part of cooking.

Always cook thawed foods before you refreeze them.

NEVER THAW FOODS AT ROOM TEMPERATURE.

The outside of the food may reach temperatures above 40° F, while the inside is still icy. Bacteria on the surface may grow to harmful levels and/or produce toxins. The poisons will not be killed as part of normal cooking.

CHILL INGREDIENTS BEFORE MIXING.

Keep ingredients out of the Danger Zone.

- Keep ingredients such as mayonnaise, tuna or other ingredients for salads in the refrigerator before mixing.
- Marinate meats in covered containers in the refrigerator.

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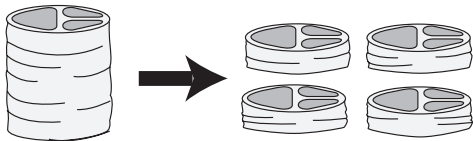
Cool leftover foods quickly

Improper cooling is one of the major causes of foodborne illness. Unfortunately, there are still plenty of people who think that hot food should not be put in the “ice box.” They still imagine that this will melt the ice and the food will spoil. Today, most refrigerators can cool the air temperature quickly.

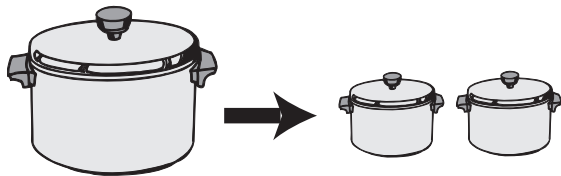
If you are having a problem keeping foods cold in the refrigerator, it is time to get it fixed or replaced.

If you have made a roast or a large pot of stew or soup, chill it quickly:

- Divide large portions into smaller pieces that you can easily use, cover and refrigerate. Freeze portions you cannot use in a few days.



- Divide large amounts of leftovers into small, shallow containers.

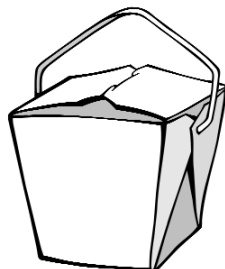


- Chill large pots of soup, stew or sauce in icy water. Then refrigerate.

Keep Foods Hot

WHEN YOU SHOP FOR FOOD AT TAKE OUT RESTAURANTS

- Keep hot items hot.
- Go home directly and serve the food immediately.



WHEN YOU PREPARE FOODS



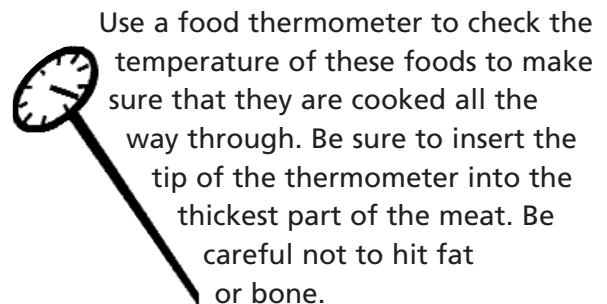
Cook foods to proper temperatures.

Cooking temperatures for each food have been set to kill certain bacteria that can cause foodborne illness. When you cook foods such as meat, poultry and eggs, use the chart **APPLY THE HEAT**, from *To Your Health*, for safe internal cooking temperatures.

Don't interrupt cooking times. Partial cooking can raise temperatures to Danger Zone levels and not be hot enough or a long enough time to kill bacteria.

For microwave cooking, cover and rotate the food throughout the cooking time. Allow foods to stand and continue cooking for at least 2 minutes.

- Check the temperature of the food. Any PHF cooked in a microwave should be cooked to 165° F.



Use a food thermometer to check the temperature of these foods to make sure that they are cooked all the way through. Be sure to insert the tip of the thermometer into the thickest part of the meat. Be careful not to hit fat or bone.

WHEN YOU SERVE FOOD

Keep hot foods hot. Serve hot foods soon after you have cooked them. Don't allow them to stay at room temperature, they will reach Danger Zone temperatures quickly.

WHEN YOU REHEAT FOOD

Reheat it quickly.

- Check the temperature to be sure it has reached 165° F for 15 seconds.
- Bring gravies, soups and sauces to a boil when reheating.

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II. KEEP BAG AND PICNIC LUNCHES SAFE

When you go on picnics or trips, remember to control the temperature as you travel and as you serve the food. These guidelines will be helpful for children who may bring a lunch, too.

Control the temperature and time

Use the chart below to see if the foods you plan to take need to be kept cold.

Use insulated lunch bags or frozen juice boxes to keep these foods cold so bacteria won't grow.

Place foods that must be kept cold close to the cold pack.

Prevent contamination

Keep everything clean when you pack for your picnic. Wash:

- Your hands before handling food
- Fruits and vegetables you plan to pack
- Utensils and containers thoroughly with soap and warm water, and rinse before you use them.

THESE FOODS	MUST BE KEPT COLD	SAFE AT ROOM TEMPERATURES
Meat, Poultry, Fish, Dry Beans, Eggs and Nuts Group	<ul style="list-style-type: none"> • Any meat, fish, poultry, eggs, cooked beans, or sandwiches; salads or other dishes made with these foods • Processed meats (bologna, hot dogs, etc.) • Tofu, other soy products or other meat substitutes 	<ul style="list-style-type: none"> • Nuts and nut butters • Dry soup mixes
Milk, Yogurt and Cheese Group	<ul style="list-style-type: none"> • Milk and milk drinks • Custards and pudding • All foods containing cheese (like pizza and casseroles) • Yogurt 	<ul style="list-style-type: none"> • Unopened shelf-stable milk and unopened shelf-stable puddings
Vegetable Group	<ul style="list-style-type: none"> • All cooked vegetables • Sprouts 	<ul style="list-style-type: none"> • All raw vegetables • Unopened vegetable juices
Fruit Group	<ul style="list-style-type: none"> • Cut melons 	<ul style="list-style-type: none"> • All fruits • Unopened fruit juices
Bread, Cereal, Rice and Pasta Group	<ul style="list-style-type: none"> • Cooked pasta, rice and other cooked grains or cereals • Any salads, soups or dishes made with cooked grains 	<ul style="list-style-type: none"> • Bread and crackers • Cookies • Dry cereals
Fats, Oils and Sweets	<ul style="list-style-type: none"> • Gravy and sauces • Mayonnaise • Butter 	<ul style="list-style-type: none"> • Candy • Ketchup and mustard • Margarine, oil • Fruit pies

III. THE BOTTOM LINE

As a child care provider, you want to give the children in your care the most nutritious and healthful foods you can. When you are aware of the Danger Zone, you can check the temperatures of foods you prepare and serve. In this way you will be taking an important step to keeping the nutritious foods you serve safe.