Everyone should practice safe food handling from the grocery store to the table. This is even more important if your immune system is suppressed by medicine you take or illness. If so, you are at higher risk of getting sick from bacteria in food.

At home

Bacteria (germs) in food can make you sick. You can’t see, smell, taste, or feel these bacteria, but anyone can get sick from them.

Before preparing foods, always check the “Best Before” date. Throw out anything that has passed it. Never taste foods to see if they are safe. When in doubt, throw them out.

You can fight the bacteria in food using four simple steps:
• Clean: wash hands and surfaces often
• Separate: don’t mix raw food with already cooked food
• Chill: put food in the fridge right after preparing or eating
• Cook: cook your food to the right temperature

Clean: wash hands and surfaces often

Bacteria that can make you sick are in many places in the kitchen. You need to wash your hands and clean and sanitize all the places food touches before and after food preparation.

Bleach Sanitizer

Make your own bleach sanitizer. Use this to clean all surfaces used for food preparation:

Combine 1 tsp (5 mL) of bleach and 3 cups (750 mL) of water in a spray bottle. Label it “sanitizer”. Spray this sanitizer on surfaces that need to be cleaned. Let the sanitizer sit for 1–2 minutes, and let it air dry.

Every day, throw out unused sanitizer and make a new batch.

Hands

Wash your hands with warm water and soap for at least 20 seconds
• before and after touching food
• after using the bathroom, changing diapers, or touching pets.
Twenty seconds is about the time it takes you to sing the “ABC” song.

Surfaces

• Wash cutting boards and countertops with hot, soapy water and sanitize with bleach sanitizer before and after preparing food (see Bleach Sanitizer). Don’t forget areas like faucets, sink drains, fridge handles, and small appliances.
• Wash the tops of cans and jars before opening.
• Clean can openers, blenders, and mixer blades before/after each use.
• Wash and sanitize the refrigerator and microwave often to get rid of bacteria.
• Wash out lunch bags and boxes every day with hot, soapy water, and sanitize with bleach sanitizer.

Cloths

• Use a clean kitchen cloth every day. You can also use paper towels. Wash cloths and towels often in the hot cycle of the washing machine or in bleach sanitizer.
• Sponges are harder to keep free of bacteria. It is best not to use them.
• Wash your vegetable brush, kitchen scissors, or scouring pad in the dishwasher or in bleach sanitizer every day.

Food

• Wash fresh fruit and vegetables under running water. Wash them even if you are not going to eat their skin.
• Use a vegetable brush to rub firm fruits and vegetables like potatoes under running water.
Separate: don’t mix raw food with cooked food

Unsafe food handling can cause bacteria to move from one food to another.

- Don’t let uncooked eggs, or raw meat, poultry, fish, or their juices touch food that is already cooked or will be eaten raw.
- In your grocery cart separate raw meat, poultry, fish, and eggs from all the other food. Put meat and fish in a plastic bag before you put it in your cart.
- Use one cutting board for raw meat, chicken, or fish and a different one for other food like fruit and vegetables. Wash cutting boards and use bleach sanitizer between each use.
- Never put cooked food on an unwashed plate that had raw food on it.
- Separate raw meat, fish, poultry, and eggs from other foods in the refrigerator. Keep them in sealed containers at the bottom of the fridge to keep juices from dropping on other foods.

Cook: cook your food to the right temperature

Cooking food to the right temperature kills bacteria. Use a clean food thermometer to make sure you cook your foods to the safe temperatures in the chart below. Serve food right after cooking and always keep hot food above 60°C (140°F).

<table>
<thead>
<tr>
<th>Food</th>
<th>Temperature (use a thermometer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, veal and lamb, pieces and whole cuts (like steaks and roasts)</td>
<td>63°C (145°F) Medium-rare</td>
</tr>
<tr>
<td></td>
<td>71°C (160°F) Medium</td>
</tr>
<tr>
<td></td>
<td>77°C (170°F) Well done</td>
</tr>
<tr>
<td>Ground meat and meat mixtures including burgers, sausages, meatballs, meatloaf, casseroles</td>
<td>71°C (160°F) Beef, veal, lamb, pork</td>
</tr>
<tr>
<td></td>
<td>74°C (165°F) Poultry</td>
</tr>
<tr>
<td>Pork chops, ribs, roasts, ham</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>Poultry (chicken, turkey, duck)</td>
<td>74°C (165°F) Pieces</td>
</tr>
<tr>
<td></td>
<td>85°C (185°F) Whole bird</td>
</tr>
</tbody>
</table>

Cook eggs until the yolk and white are firm, not runny. When making uncooked food that calls for raw eggs, use only pasteurized egg products.

Cook fish to the temperatures in the chart above. Fin fish should be opaque and flake easily with a fork.

Clams, oysters, and mussels are cooked when they open. Throw away ones that don’t open.

Boil gravy, soups, or sauces when cooking them. Reheat leftovers only once, bringing the food to a boil.

When using a slow cooker, keep the lid tightly sealed. Don’t lift the lid to check on the food.

Cook stuffing separately from the chicken or turkey.

Read the food package for instructions on how to prepare and store it.

Reheat leftovers only once and to at least the temperature in the chart above. Throw away any leftovers after they’ve been reheated once.

Microwave cooking

Microwaves sometimes leave cool spots in food where bacteria can live. Cover the food with a microwave-safe material that doesn’t touch the food. Stir the food a few times during cooking. If there is no turntable, turn the dish once or twice during cooking. After cooking, check the temperature of the food with a clean thermometer.

Source: healthycanadians.gc.ca
### Tips for Food Safety

**Chill: put food in the fridge right after preparing or eating**

Keep cold foods cold. The cold temperature in your fridge doesn’t kill bacteria, but does keep it from growing. Use a thermometer to set your fridge temperature at 4°C (40°F) or lower. Set your freezer temperature at -18°C (0°F).

- Put raw food, leftovers, and prepared foods in the fridge or freezer within 2 hours. If it has been sitting out longer than 2 hours, throw it away.
- Don’t defrost food at room temperature. Thaw food in the fridge, in cold water or in the microwave. If you thaw food in cold water or in the microwave, cook it right away. Replace the cold water used to thaw food every 30 minutes.
- Put leftovers into small, shallow containers so they cool faster in the fridge. Place leftovers near the top of the fridge so they don’t warm the food above.
- Do not overload your fridge. Cold air must be able to move around to keep food safe.
- Keep raw meats on the bottom shelf in sealed containers to prevent juices from dripping.
- Marinate meats in the fridge.

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### Food storage chart

<table>
<thead>
<tr>
<th>Food</th>
<th>Fridge 4°C (40°F) or lower</th>
<th>Freezer -18°C (0°F) or lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh raw steaks, roasts, chops</td>
<td>2–3 days</td>
<td>8–12 months</td>
</tr>
<tr>
<td>Fresh raw ground meats and sausage</td>
<td>1–2 days</td>
<td>Ground meat: 2–3 months Sausage: 1–2 months</td>
</tr>
<tr>
<td>Poultry: Fresh raw whole, or pieces</td>
<td>2–3 days</td>
<td>Pieces: 6 months Whole: 12 months</td>
</tr>
<tr>
<td>Fresh raw fish</td>
<td>2–3 days</td>
<td>Fatty fish: 2 months Lean fish: 6 months</td>
</tr>
<tr>
<td>Fresh raw shellfish</td>
<td>12–24 hours</td>
<td>2–4 months</td>
</tr>
<tr>
<td>Cooked shellfish</td>
<td>1–2 days</td>
<td>2–4 months</td>
</tr>
<tr>
<td>Deli meats</td>
<td>3–4 days</td>
<td>2–3 months</td>
</tr>
<tr>
<td>Packaged lunch meats and wieners</td>
<td>Unopened pack: 2 \ weeks Opened pack: 3–5 days</td>
<td>1–2 months</td>
</tr>
<tr>
<td>Fresh eggs</td>
<td>In shell: see “Best Before” date. Out of shell: 2–4 days</td>
<td>In shell: don’t freeze Out of shell: 4 months</td>
</tr>
<tr>
<td>Leftovers*: Cooked meat and mixed dishes</td>
<td>3–4 days</td>
<td>2–3 months</td>
</tr>
<tr>
<td>Gravy and broth</td>
<td>3–4 days</td>
<td>4–6 months</td>
</tr>
<tr>
<td>Cooked poultry and fish</td>
<td>3–4 days</td>
<td>4–6 months</td>
</tr>
</tbody>
</table>

*Source: healthycanadians.gc.ca

*If your doctor or healthcare provider has said you are immunosuppressed, don’t keep leftovers for more than 1 day. Reheat them to boiling, stirring well.*
Fight bacteria at the grocery store

Use the tips below to fight the bacteria in food and avoid getting sick from the food you eat.

In the meat and alternatives section
- Keep your meat, chicken, fish, and eggs separate from the rest of the food in your grocery cart and grocery bags.

In the dairy section
- All milk, yogurt, and cheese packages should have the word “pasteurized” on the label.
- Don’t buy food that has a “Best Before” date that has passed or is close to expiring.

Other places in the store
- Don’t buy cans or jars that have dents, cracks, or bulging lids.
- Pick up refrigerated or frozen foods last. Take them home right away and put them away first.

When you’re finished grocery shopping, go home right away to store food properly.

Travelling with food

When you travel with food, bring lunch with you, or bring food for someone in the hospital, always keep cold food cold.
- Keep food in the freezer or refrigerator until just before you leave home.
- Frozen containers of milk or juice help chill other food and will thaw in time to drink at lunch. An ice pack will also keep other foods cold.
- Pack cold or frozen food in a cooler with ice or ice packs. A full cooler will stay cold longer than one that is partly filled.
- If you are travelling a long distance, don’t pack hot food.

Cautions for older adults, pregnant women, young children, and people with weakened immune systems

The foods below can cause food-borne illness. These foods should be fully cooked before eating. See the section Cook your food to the right temperature, on page 2.

- Smoked meat or seafood
- Raw meat, poultry, fish (sushi), shellfish (like oysters, clams, mussels)
- Non-dried deli meats like hot dogs, bologna, roast beef, and turkey breast: cook to steaming hot or 74°C (165°F)
  - Dried and salted deli meats like salami and pepperoni don’t need to be cooked before eating.

Use any packaged deli meats, or deli meats sliced at the grocer, within 2 days after opening.

Avoid the foods below:
- Raw or unpasteurized milk, like cow and goat milk, and any foods made from unpasteurized milk
- Soft and semi-soft cheeses such as Brie, Camembert, feta, and blue-veined cheeses
- Raw or partly cooked eggs or egg products like cookie or cake batter, salad dressings, sauces, or homemade eggnog
- Raw sprouts like alfalfa, mung bean, or radish
- Unpasteurized fruit juice or cider
- Honey (pasteurized or unpasteurized) for children younger than 1 year

For more information

For tips or answers on food safety, visit:
- healthycanadians.gc.ca. Click Food and Nutrition, and then Food Safety.
- Alberta Health Services: albertahealthservices.ca/eph.asp. Click Information for Your Home & Family, and then Food Safety.