Kitchen Food Safety Tips

How safe is your kitchen?

Did you know that most foodborne illness results from poor food handling at home? Your kitchen could be a high risk environment. Bacteria can thrive in food that is improperly stored or handled. Reduce the risks by following these tips from Canada’s food safety experts. Play it “food safe” in your kitchen!

Get off to a CLEAN start!

- Handwashing is one of the best ways to prevent the spread of foodborne illness. Do you wash your hands for at least 20 seconds with soap and warm water before and after handling food? Wash again when you switch from one food to another.
- Are your countertops and utensils clean and sanitized? Sanitizing reduces bacteria and can prevent foodborne illness.

It’s important to thoroughly clean everything that comes in contact with your hands or your food! Don’t forget about kitchen cloths . . . faucet handles . . . sink drains . . . garbage disposals . . . can opener blades . . . refrigerator handles . . . small appliances . . . utensils, and so on.

BLEACH SANITIZER

- Combine 2 mL (1/2 tsp) of liquid chlorine for every 1 litre of H2O to make a disinfection solution of 100 mg/l or 100ppm.
- After cleaning, spray sanitizer on the surface/utensil and let stand briefly.
- Rinse with lots of clean water, and air dry (or use clean towels).

Eight quick tips for the kitchen (at home, work, school, etc.)

1. Keep separate cutting boards for raw meat, poultry and seafood and a different one for ready-to-eat and cooked foods. Clean and sanitize cutting boards after each use. Plastic cutting boards can be easily cleaned in the dishwasher.
2. Wash the lids of canned foods just before opening them to prevent dirt from getting into the food. Clean the can opener’s blade after every use.
3. Take small appliances apart (food processors, meat grinders and blenders) right after you use them, and clean and sanitize them thoroughly.
4. Air dry dishes and utensils if you can, or dry them with clean kitchen towels. Wash and sanitize towels, sponges and cloths often to prevent bacteria from growing.
5. Clean the pantry regularly, keeping food off the floor. Store food in sealed containers.
6. Thoroughly wash and sanitize containers and utensils that were in contact with raw food before you reuse them.
7. If you have an infection or cut on your hand, cover it with a bandage and then wear disposable gloves when preparing food. But remember: gloves pick up bacteria, too. Change gloves frequently and wash gloved hands as often as bare hands.
8. Use a food thermometer to measure the internal temperature of your food.

Cold Facts

Fridge and Freezer Checklist

Refrigeration slows down most bacterial growth while freezing can stop the growth of most bacteria. (But remember: chilling won’t kill bacteria. Only proper cooking will do that!)

- Don’t let bacteria get a foothold! After you shop, immediately put away food that needs to be refrigerated or frozen.
- Check the temperature of your fridge and freezer. Are they cold enough?
  - Set refrigerators at or below 4°C (40°F). Use a refrigerator thermometer to check the temperature.
  - Keep freezers at or below -18°C (0°F). Use a freezer thermometer to check the temperature.
- Don’t overload your fridge and freezer. Cool air must circulate freely to keep food properly chilled.
- Clean the refrigerator and freezer regularly.
- Bacteria can be carried in raw meat juices. Place raw meat, poultry and seafood in containers on the bottom shelf of the refrigerator. Use containers that are large enough to prevent raw juices from dripping onto or touching other food.

Foodsafe Tip: Freezing will NOT kill all bacteria that might have been in the food before it was frozen. Only cooking your food to a safe internal temperature will kill harmful bacteria.

Food Thermometer Safety Tips

Why should I use a food thermometer?

The answer is simple: for your safety. By cooking your food to a safe internal temperature, you can destroy harmful bacteria. Most of us have years of experience in the kitchen, but some of the old methods and myths are not reliable.
Using a food thermometer lets you check the inside temperature of the food to find out if it is cooked to a high enough temperature to be safe to eat. Help prevent foodborne illness by always using a food thermometer.

Myth-Buster #1:

**Can I tell if meat is cooked by cutting it open and looking at it?**
No you can’t. The only way to be sure that food is cooked to a safe internal temperature is to use a food thermometer to check.

Research has shown that the inside colour of a hamburger is not a reliable indicator of how well the burger is cooked. Sometimes previously frozen ground beef turns brown before it reaches a temperature high enough to kill harmful E. coli bacteria.

**Foodsafe tip:** Check the internal temperature of your hamburger patty and all food made with ground beef. If it is 71°C (160°F), it’s safe to eat. Remember . . . your burger’s done at 71!

Myth-Buster #2:

**Do I have to overcook all my food to make it safe to eat?**
Absolutely not! Using food thermometers can make you a better and safer cook! Cooking your food to a safe internal temperature will kill harmful bacteria. Using a food thermometer helps you cook to just the right temperature and prevents overcooking.

**Foodsafe tip:** Cooking a chicken? A turkey? For maximum safety, food safety experts recommend cooking the stuffing in a separate dish. Why? It takes longer for the stuffing and the meat to reach a safe internal temperature, so why not unstuff and save time? Stuffing and meat must each reach separate safe internal temperatures. See table.

Myth-Buster #3:

**Do I have to check the internal temperature of every ground beef patty?**
Yes – but it’s easy. Buy an instant-read digital food thermometer. When you think the food is almost done, take it away from the heat and take the temperature following the manufacturer’s directions. If the burgers aren’t done, cook them longer and check the temperature again.

**Foodsafe Tip:** Wash the thermometer’s stem and any other utensils you have used with soap and hot water after every use. Why? Because any bacteria in raw or undercooked meat juices can contaminate other food.
The safe cook’s guide to food thermometers

Food safety experts recommend using a food thermometer that gives an actual temperature reading, not just a range. Oven-safe thermometers stay in the food while it cooks. The instant-read type is used when you think the food is done.

Read the manufacturer’s instructions carefully! For most thermometers, simply insert it into the thickest part of the food, away from fat, bone or gristle. Food is ready to eat when it has reached the proper internal temperature. See table.

Digital instant-read thermometers read quickly. The thermometer works well in both thin and thick food – just insert it near the end of cooking time.

Digital instant-read thermometer-fork combinations can also be read quickly. The fork sensor needs to be fully inserted into the thickest part of the food.

Dial oven-safe thermometers are for thicker foods, like roasts and casseroles, not for thin food. They can stay in the food while it’s cooking in the oven or barbecue.

Disposable temperature indicators are for one-time use with specific foods. Temperature-sensitive material changes colour when the proper temperature is reached.

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Calibration

Calibration Procedure:

1. Add crushed ice to a 6” container.
2. Top with cold water.
3. Re-top with more ice.
4. Stir solution, (ice slurry) with the probe of the thermometer for a full minute (or until the temperature stops changing).
5. Temperature should read 32°F / 0°C.
6. Any adjustment should be made with the stem of the thermometer still in the slurry.
7. If the reading is not at 32°F / 0°C, adjust the thermometer by holding the dial head of the thermometer firmly with pliers, etc. while using a wrench to adjust the nut underneath the dial head.
8. For most accurate calibration, do a boiling point calibration and divide the difference. Use the divide total as your adjustment temperature.
Food Safety Facts for Fresh Fruits and Vegetables

Buying poor quality products and using improper storage, handling and preparation techniques for fresh produce can result in foodborne illness. To reduce the risk of illness, follow these food safety tips.

Buying Fresh Fruits and Vegetables

- Purchase fresh fruits and vegetables that are not bruised or damaged. If buying fresh-cut ready-to-eat fruits and vegetables, be sure they are properly refrigerated (i.e., less than 4°C) or surrounded by ice.
- Fresh fruits and vegetables can become contaminated with harmful bacteria when they come into contact with unprocessed food items such as meats and their juices. Be sure to separate fresh fruits and vegetables from unprocessed or raw food items in order to avoid cross-contamination.
- Some people might be allergic to certain fresh fruits and vegetables, in particular people with pollen allergies. For more information on food allergies and fresh produce, please consult: http://www.inspection.gc.ca/english/fssa/concen/tipcon/orale.shtml.
- Consumers should note that certain fresh fruits and vegetables may contain levels of naturally occurring toxic chemicals. These chemicals may have an adverse effect on human health, for example: toxic wild mushrooms, cyanogenic glucosides in cassava, hypoglycin and propionic acid in immature ackee.

Washing and Preparation

- Discard any rotten fruits and vegetables.
- Before and after handling fresh fruits and vegetables, always wash your hands thoroughly for at least 20 seconds with hot water and soap.
- Before eating, preparing or cutting fresh fruits and vegetables:
  - thoroughly wash them under potable running water, unless otherwise specified - do not use soap or detergents;
  - scrub fresh fruits and vegetables that have firm surfaces, such as oranges, potatoes and carrots with a clean produce brush. The flesh of improperly washed fresh fruits and vegetables can become contaminated during cutting;
  - cut away any damaged or bruised areas on fresh fruits and vegetables since harmful bacteria can thrive in these areas. Clean your knife after cutting these damaged or bruised areas to prevent contaminating the rest of the fruit.
- Thoroughly wash all food equipment such as counter tops, cutting boards and utensils that come into contact with fresh produce with hot water and
soap. Rinse them and sanitize them with a mild bleach solution (5ml/1tsp. bleach per 750ml/3 cups water) and air-dry.

- Avoid using sponges and other cleaning materials which are difficult to keep clean and dry. Otherwise you could be spreading bacteria around.

- Once cut, immediately place peeled or cut fruits and vegetables on/into a separate clean plate/container to prevent them from becoming cross-contaminated.

**Storing Freshly Cut Fruits and Vegetables**

- Refrigerate (i.e., less than 5°C) fresh fruits and vegetables within two hours of peeling or cutting. Leftover cut fruits and vegetables should be discarded if left at room temperature for more than two hours.
- Prevent fruits and vegetables that have been peeled or cut from coming into direct contact with raw meat, poultry or fish.

**Proper Storage Techniques for Fresh Produce**

- After returning from purchasing your fresh fruits and vegetables, promptly refrigerate those that need refrigeration. The following are the different requirements for keeping fresh fruits and vegetables at their optimum freshness and sensory quality.

  - **Only in the Refrigerator, Never at Room Temperature to Avoid Spoilage**: apples, artichokes, asparagus, beans, beets, blueberries, broccoli, brussel sprouts, cabbage, Belgian endive, carrots, cauliflower, celery, cherries, sweet corn, cranberries, cucumbers, eggplant, ginger root, grapes, fresh herbs, leeks, lettuce and other greens, mushrooms, green onions, parsnips, peas, peppers, pineapple, new potatoes, radishes, raspberries, rhubarb, strawberries, squash, citrus fruit, turnips.
  
  - **At Room Temperature until Ripe and then in the Refrigerator**: apricots, avocados, kiwifruit, mangoes, melons, nectarines, papaya, peaches, pears, plums, tomatoes.
  
  - **Only at Room Temperature and Preferably not in the Refrigerator**: bananas, garlic, globe onions, mature potatoes, pumpkins, rutabagas, sweet potatoes.

**Safeguarding Canada’s Food Supply**

The Canadian Food Inspection Agency (CFIA) is the Government of Canada's science-based regulator for animal health, plant protection and, in partnership with Health Canada, food safety.

Source: Canadian Food Inspection Agency [www.inspection.gc.ca](http://www.inspection.gc.ca)
Natural Toxins in Fresh Fruit and Vegetables

Fresh fruit and vegetables are an important part of a healthy diet, however several fruits and vegetables consumed in Canada contain small amounts of natural toxins. These natural toxins help protect the plants and create resistance to diseases and certain types of insects. The public should be aware of the presence of natural toxins in these fruits and vegetables. The following safety tips can help reduce or avoid exposure to toxins, which could potentially have harmful effects on human health.

Fruit and Vegetables that Produce Cyanide

Stone Fruits

The kernels within the pits of some stone fruits contain a natural toxin called cyanogenic glycoside. These fruits include apricots, cherries, peaches, pears, plums and prunes. The flesh of the fruit itself is not toxic. Normally, the presence of cyanogenic glycoside alone is not dangerous. However, when kernels are chewed cyanogenic glycoside can transform into hydrogen cyanide - which is poisonous to humans. The lethal dose of cyanide ranges from 0.5 to 3.0 mg per kilogram of body weight. This is why it is not recommended to eat the kernels inside the pits of stone fruits.

Although it is not recommended, some people use ground or whole bitter apricot kernels to flavour foods, as a health food, or for medicinal purposes. More information on bitter apricot kernels is available on the Health Canada website at:

Cassava Root and Bamboo Shoots

Cyanogenic glycoside toxin is also found in the cassava root and fresh bamboo shoots, making it necessary for them to be cooked before canning or eating. Cassava is classified into two main types - sweet and bitter. Sweet cassava is
defined as having a concentration of cyanide less than 50 mg per kilogram of fresh weight, while bitter cassava has a concentration greater than 50 mg per kilogram. The sweet cassava only requires cooking in order to reduce the cyanide content to non-toxic levels. However, the bitter cassava contains more toxins and should be prepared and cooked properly prior to consumption. Grating the root and prolonged soaking of the gratings in water will leach out the cyanide, reducing the levels of toxin. In addition to soaking, cooking will further detoxify the roots before consumption.

Cyanogenic glycoside found in fresh bamboo decomposes quickly when placed in boiling water, rendering the bamboo shoots safe for consumption. It has been found that boiling bamboo shoots for 20 minutes at 98 C removes nearly 70 percent of the cyanide, while higher temperatures and longer intervals remove up to 96 percent. The highest concentrations are detoxified by cooking for two hours.
Natural Toxins Found in Ackee Fruit

Ackee, akee or achee - *Blinghia sapida* - is a food staple in many Western Africa, Jamaican and Carribean diets. There are two main varieties, hard and soft ackees, that are available for consumption. Both canned and fresh forms of this fruit are consumed. However, unripe fruit contains natural toxins called hypoglycin that can cause serious health effects. The only part of this fruit that is edible, is the properly harvested and prepared ripe golden flesh around the shiny black seeds. The fruit is poisonous unless ripe and after being opened naturally on the tree.

Potatoes that Can Cause Burning Sensations

Several different glycoalkaloids are produced naturally by potatoes, the most common being solanine and chaconine. Low levels of glycoalkaloids produce desirable flavour in potatoes. However, exposure to elevated levels of glycoalkaloids when eating potatoes can cause a bitter taste or a burning sensation in the mouth - indicating a state of toxicity. Glycoalkaloids are not destroyed by cooking; even by frying in hot oil. The majority of this natural toxin found in potatoes is in the peel, or just below the peel. Greening of the potatoes may be indicative of the presence of the toxin. Red skinned or russet potatoes may camouflage the greening.

Consumers should avoid eating potatoes that show signs of greening, physical damage, rotting or sprouting. Potatoes should be stored in a cool, dark, dry place at home, such as a basement, and away from the sun or artificial light. Wash potatoes before cooking and peel or cut away green areas prior to cooking. Potatoes with pronounced greening or damage should be discarded. If potatoes taste bitter or cause a burning sensation after cooking, do not consume them.
Poisoning from Fiddleheads

There have been documented reports of poisoning from consuming raw or undercooked fiddleheads. Symptoms usually begin 30 minutes to 12 hours subsequent to consumption and may include diarrhea, nausea, vomiting, abdominal cramps and headaches. Illness generally lasts less than 24 hours. It is assumed that these poisonings have occurred due to a natural toxin that exists in the fern of the plant. Unfortunately, this toxin has yet to be identified.

Fresh fiddleheads must be carefully washed in several changes of cold water. They should then be thoroughly cooked, either through steaming for 10 to 12 minutes - until tender - or in boiling water for at least 15 minutes. Water used for boiling or steaming fiddleheads should be discarded because it may contain the toxin. Fiddleheads should also be boiled or steamed prior to sauteing, frying or baking.

Off-Flavour in Fresh Carrots

Off-flavours such as a bitter taste, aftertaste and/or petroleum-like flavour have been associated with the consumption of fresh carrots. In contrast to sweet flavour, these off-flavours are usually as a result of stored carrots being exposed to ethylene. Ethylene is a normal fruit ripening hormone that may react with natural chemical compounds found in carrots creating off-flavour sensory attributes. Thus, carrots should not be stored with ethylene-producing commodities such as apples, avocados, bananas, pears, peaches, plums, cantaloupes, honeydew melons and tomatoes. Carrots properly handled and stored in perforated plastic bags at a low temperature retain the most acceptable taste.

Source: Canadian Food Inspection Agency  [www.inspection.gc.ca](http://www.inspection.gc.ca)
Food Safety Facts for Turkey

Foodborne illness, also known as "food poisoning" may happen because of using improper techniques when buying, preparing and cooking a turkey. Follow these food safety tips to help reduce the risk of foodborne illness.

It’s always important to keep foods out of the danger zone which is between 4°C (40°F) and 60°C (140°F). To do this, just keep hot foods hot, at least 60°C (140°F) and keep cold foods cold at 4°C (40°F) or lower.

Buying a turkey

- Check the "best before" date on fresh turkeys because it indicates the freshness of the turkey.
- Frozen, well wrapped turkeys can be kept in the freezer for up to one year
- If buying a frozen turkey, allow four to six days for thawing in the refrigerator (depending on the size).
- If buying fresh turkey, purchase it no more than two days before cooking. It should be cold when bought then immediately refrigerated at home at a temperature of 4°C (40°F) or lower.
- At the grocery store, the turkey should be the last item selected before proceeding to the checkout.
- Do not let the turkey come into contact with other items in the grocery cart. Put the turkey in a separate plastic bag to avoid cross-contaminating other foods.

Thawing the turkey

- **Never** thaw turkey on the kitchen counter.
- Place the turkey in the refrigerator in a large container or on a platter big enough to prevent leaking juices from contaminating other foods in the refrigerator. Place on the bottom shelf of the refrigerator.
- Start thawing the frozen turkey in the refrigerator several days before roasting. Allow 24 hours of defrosting time for each 2.5 kg (5 pounds) of turkey (i.e., 5 hours/lb. or 10 hours/kg).
- Turkey can be defrosted under cold running water, but it should be wrapped in leak proof plastic to help prevent cross-contamination.
- If thawing turkey in the microwave, cook the turkey immediately after thawing is complete.

Preparing the turkey

- Thoroughly clean your hands, the counter and all utensils before and after preparing the turkey.
• Immediately after preparing the turkey, wash and sanitize the sink, counter tops, utensils and anything else that came in contact with the turkey with a mild bleach solution (5 ml/1 tsp. bleach per 750 ml/3 cups water). Rinse with clean water.
• Do not let any juices from the turkey come in contact with other food or food preparation equipment.
• For maximum safety, cook the stuffing outside the bird.

**Cooking the turkey**

• **Never** slow-cook turkey. Set the oven no lower than 177° C (350°F) and use a food thermometer to check that the turkey reaches a minimum internal temperature of 85°C (185°F).
• The stuffing should reach a minimum internal temperature of 74°C (165°F).
• For whole turkey: near the end of the cooking time, remove meat from heat and insert an instant-read thermometer into the thickest part of the breast or thigh meat, so the thermometer does not touch any bone. Follow the manufacturer’s directions on the proper use of your specific food thermometer. If the proper temperature has been achieved, the food is safe to eat. If the food has not reached the proper temperature, continue cooking. Always wash the food thermometer and other utensils you used on raw or partially cooked foods before using them to check foods again.
• If you choose to serve a pre-cooked, stuffed turkey which is purchased hot, be sure to keep it in the oven to keep the turkey at least 60°C (140°F) or above and eat it within two hours of purchase. If you will be eating this turkey more than two hours after buying it, the stuffing should be removed and both it and the bird should be refrigerated to 4°C (40°F) or lower as soon as possible after purchase.

**Serving the turkey**

• Serve turkey and stuffing immediately. Keep the rest of the turkey and stuffing hot at a minimum 60°C (140°F) in the oven. Replace empty platters with hot food from the oven.

**Turkey leftovers**

• Refrigerate leftovers promptly in uncovered, shallow containers so they cool quickly. Once food is cooled, cover.
• Remove meat from the bone. Store meat, stuffing and gravy separately in shallow containers to cool them quickly.
• Reheat leftovers to 74°C (165°F).
• Bring gravy to a full, rolling boil and stir during the reheating process.
• Use leftovers within two to three days.

Source: Canadian Food Inspection Agency [www.inspection.gc](http://www.inspection.gc)
Food Safety Tips for Eggs

Eggs are good for you, but like other foods, they must be handled with care! Although *Salmonella* is rarely found in eggs in Canada, it pays to take care. Follow these tips from Canada’s food safety experts.

Play it food safe!

- When cooking eggs for high-risk groups like young children, the elderly, pregnant women and people with weak immune systems, be sure to cook eggs thoroughly. Raw or lightly cooked eggs may contain *Salmonella* or other bacteria that can make you sick.

Shop with care

- Choose only refrigerated Grade A eggs.
- Check the shells! They should be clean and uncracked.
- Check the "best before" date on the package. If there is no "best before" date, make sure to use the eggs within the next three to four weeks.
- When shopping, pick up eggs and other cold food last so they stay cold.

Get off to a clean start

- Before and after you handle eggs, wash your hands with soap and warm water for 20 seconds. Clean and sanitize all cooking equipment, utensils and work surfaces with a mild bleach solution.

**BLEACH SANITIZER**

- Combine ½ tsp of bleach to 1L (4 cups) of water in a spray bottle
- After cleaning, spray sanitizer on the surface/utensil and let stand briefly.
- Rinse with lots of clean water, and air dry (or use clean towels).

Keep your eggs cold!

- Always put eggs and other perishables away first when you get home from the grocery store. Keep eggs in the coldest section of the fridge, usually near the back.
- Store eggs in their original carton! It protects them from odours and damage – and you will be able to check the "best before" date easily. (Remember to use older eggs first!).
• If raw eggs crack by accident, remove them from the shell and put them in a covered container in the refrigerator and use them within four days.
• Hard-boiled eggs can be stored in the fridge for one week in a covered container.

Cold facts about freezing eggs

To freeze whole raw eggs or raw egg whites:
• Beat the eggs until well blended.
• Pour them into a freezer container, and seal tightly.
• Label the container with the date and the number of eggs.

To freeze raw egg yolks:
• Beat in 1/8 tsp salt or 1 ½ tsp sugar or corn syrup for every four egg yolks.
• Pour them into a freezer container, and seal tightly.
• Label the container with the date and the number of eggs.

Foodsafe tip: You can freeze eggs for up to four months. Defrost in the refrigerator, microwave or under cold running water.

Ask the “eggs-perts”!

Q1. Should eggs stay at room temperature for more than two hours?

   No! Neither raw nor cooked eggs should be kept out of the refrigerator for more than two hours. Foods spoil quickly in the danger zone temperature range of 4°C to 60°C (40°F to 140°F).

A1.

Q2. Is it safe to eat raw or lightly cooked eggs?

   Foods made from raw or lightly cooked eggs may be harmful to vulnerable people such as young children, the elderly, pregnant women and people with weak immune systems. When serving eggs to these people, cook them thoroughly.

A2.

Foodsafe tip: Try pasteurized egg products. They are an excellent and safe alternative to make food where the eggs won’t be cooked. Try them when making eggnog, mayonnaise, Hollandaise sauce, cookie dough (if you eat raw cookie dough), salad dressings, ice cream and mousses. Pasteurization destroys disease-causing organisms such as salmonella.

Q3. Are hard-cooked decorated Easter eggs safe to eat?

   Yes – if you follow a few quick rules. First, be sure to hard cook eggs and cool them immediately. Use a colouring dye that is non-toxic, and use eggs with uncracked shells. Store the coloured eggs in a covered container in the refrigerator until you need them.

A3.

Foodsafe tip: Want to display your eggs and eat them later? Display them in a bowl of ice.

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Food Safety Facts on Leftovers

Foodborne illness can occur as a result of using improper food handling techniques when storing and reheating leftovers. Follow these food safety tips to decrease the risk of foodborne illness from handling leftovers:

### Storing leftovers

- Refrigerate leftovers immediately. Cold food should be stored at 4°C (40°F) or colder.
- Very hot items can be cooled at room temperature for approximately 30 minutes prior to being refrigerated. Frequent stirring accelerates the cooling at this stage.
- Refrigerate or freeze leftovers in covered, shallow containers. Food will cool faster in shallow containers.
- Place containers on wire refrigerator shelves to allow air to flow across the bottom of the container. This practice allows food to cool twice as fast as sitting on a solid shelf.
- An effective way to cool and store hot leftovers is in zipper-type plastic bags. Although the bags must be closed securely for liquids, food cools quickly because a large, flat surface area is exposed to the refrigerated air.
- Never remove a large pot of food (such as soup, stew, or pasta sauce) from the stove and place it in the refrigerator. Large masses of food can take hours or days to chill properly. A slow cooling process provides an ideal environment for the growth of harmful bacteria.
- Store leftovers within 2 hours of cooking. Discard leftovers if the food has been sitting at room temperature for more than two hours.
- Debone large pieces of meat or poultry and divide them into smaller portions before storing.
- Do not overcrowd your refrigerator. Leave airspace around containers to allow circulation of cold air. This will help ensure rapid, even cooling.
- Date leftovers to ensure that they are not stored too long – eat leftovers within 4 days. For frozen leftovers, eat within 4 days of being taken out of the freezer.
- Always put leftovers in clean containers and never mix them with fresh food.

### Reheating leftovers

- Solid leftovers must be reheated to at least 74°C (165°F). Do not reheat foods slowly.
- Reheat soups, sauces and gravies to a rolling boil.
- Follow the manufacturer’s instructions when reheating leftovers in a microwave.
- If leftovers are uneaten after they have been reheated, discard them.
- NEVER use your nose, eyes or taste buds to judge the safety of food. You cannot tell if a food may cause foodborne illness by its look, smell or taste.
Instead, follow the "Food Safety Tips" listed here, and remember: "If in doubt, throw it out!"

Source: Canadian Food Inspection Agency  www.inspection.gc.ca
Slow Cooker Food Safety

Is your slow cooker a haven for bacteria? Are you cooking up a foodbourne illness with your evening crockpot meal?

Use your slow cooker safely with the following tips and guidelines!

SAFE STARTING POINTS

• **Cleanliness.** Your hands, utensils, work area, and slow cooker must all be clean!

• **Preheat.** A preheated slow cooker allows foods to heat up quickly and discourages bacterial growth.

• **Keep cold foods cold.** Make sure that bacteria do not get a “head start” by keeping refrigerated foods cold until you are ready to prepare and cook them.

• **Leftovers?** Do not reheat foods in a slow cooker – the gradual heating encourages bacterial growth and is not recommended.

• **Moist foods.** Use the slow cooker to prepare foods that are moist (chilis, soups, stews). The moisture allows for even heating.

INGREDIENT CONTROL

• **Thaw meats.** If meats are not thawed completely, the temperature will not climb high enough to prevent foodbourne illness.

• **Cut Meats Up.** Smaller pieces allows meats to be heated throughout.

USE THE PROPER AMOUNT AND PLACEMENT OF FOOD

• **How full?** Fill cooker no less than half full and no more than two-thirds full. The heat comes from the bottom and sides of the cooker, and food must be in direct contact with the container to heat.

• **How to arrange foods.** Vegetables cook slower than meat and poultry in a slow cooker so if using them, put vegetables in first, at the bottom and around the sides of the utensil. Then add meat and cover the food with liquid.
Take-out Food Safety

More and more Canadians are relying on restaurants, deli counters and caterers to prepare their food for home consumption. Hectic schedules make it convenient for people to order foods in advance of sitting down to eat. Mishandling of perishable foods including restaurant take-out can cause illness. To ensure that your take-out food is safe to eat follow these guidelines:

Refrigerate food within two hours at 4°C (40°F).

**Hot take-out foods:** Foods that have already been cooked should be kept hot if they are being consumed shortly after purchase. The internal temperature of the food should remain at 60°C (140°F) or above until you are ready to eat it. A food thermometer will indicate whether the food has been held at a safe temperature. If you plan to eat these foods at a later time, divide the food into small portions and place it in shallow containers, and refrigerate. Your refrigerator should be set at or below 4°C (40°F). It is recommended that a refrigerator thermometer be used to check the temperature.

**Cold take-out foods:** Cold perishable foods should be eaten within two hours of purchase. In hot weather, when air temperatures are above 32°C (90°F), food should be consumed within one hour of purchase. If you plan to eat cold take-out foods at a later time, be sure to refrigerate them within two hours of purchasing them, or one hour on hot days. Harmful bacteria grow quickly between temperatures of 4°C (40°F) and 60°C (140°F). This temperature range is known as the danger zone. Foods should never be left in the danger zone for more than two hours. Reheat food to 74°C (165°F).

Take-out foods containing meat or poultry and kept in the refrigerator should be reheated to an internal temperature of at least 74°C (165°F). A food thermometer should be used to ensure that food has been reheated to the proper internal temperature. When using an oven to reheat food set the oven no lower than 165°C (330°F). When using a microwave oven, food should be covered and rotated to make sure it is cooked throughout. Before inserting a food thermometer, allow food to stand for one minute. It is not recommended that foods be reheated in either slow cookers or chafing dishes because food is kept in the danger zone for too long. Sauces, soups, and gravies should be reheated until boiling. Eat food immediately once it has been reheated. Discard if not consumed after reheating.

Mark food containers with date and time. Judging the safety of take-out food that has been stored in your refrigerator by its smell, taste, or appearance puts you at risk of foodborne illness. Write the date and time of purchase on your take-out container. Recording the date is a reminder that any food left uneaten after two
days should be discarded. Recording the time is a reminder of the two-hour rule. All perishable foods left at room temperature for more than two hours must be discarded. When in doubt, throw it out!
Safe Food Storage

Fresh? Frozen? Or shelf-stable? Food items in the supermarket are stored a certain way to maintain product quality and to keep foods safe. Once a food product has been chosen from the shelf or cooler, the consumer is responsible for making sure it is properly transported and stored at home. Failure to safely store food may cause bacteria in food to multiply and could result in a foodborne illness if the food is consumed.

At the supermarket

- Choose canned and dry goods first. Buy refrigerated/frozen and hot deli items last.
- Don’t choose cans that bulge, leak or are dented at the seam or rim.
- Double bag (in plastic) meat and poultry to prevent cross-contamination from any dripping juices.
- Check eggs to make sure that they are not cracked or dirty.

On your way home

- Foods containing bacteria that can cause foodborne illness can’t be in the “Danger Zone” (less than 60°C or 140°F or above 4°C or 40°F) longer than two hours. Bacteria multiply rapidly and can reach dangerous levels at this stage.
- Once you have purchased your food, go directly home. If this is not possible, place perishable foods in a cooler until you get home.

Storing shelf stable foods

- Store unopened dry foods, canned goods and high acid items (like ketchup, mustard and vinegar) in a clean, dry place where the temperature is neither too hot (above 100°F) nor too cold. After opening, refrigerate any foods that need to be kept cool.
- Do not use food from cans or jars that are damaged.

Storing refrigerated food

Though food is refrigerated to prolong freshness and inhibit bacterial growth, there is a limit to how long food can be kept in the refrigerator. Once food begins to look or smell bad, it should be discarded. Follow these tips to help keep refrigerated food safe:

- Maintain a temperature of 4°C or 40°F or less to inhibit bacterial growth.
- Store eggs in their carton on a shelf, not in the door.
• Keep meat and poultry products in the original packaging. Less handling reduces the incidence of cross-contamination.
• Keep your refrigerator clean to avoid cross-contamination from spilled or spoiled foods.
• Don’t let meat or juices of raw meat and poultry contaminate other foods in the refrigerator.

**Storing frozen foods**

• Keeping food at -18°C (0°F) stops bacterial growth, but it will not kill bacteria already present.
• Food can safely be defrosted in the refrigerator, under cold running water or in the microwave. If you defrost food in the microwave, cook it immediately.
• Foods frozen near the beginning of their durable life will taste better than foods frozen near the end of their durable life.
• Food that is freezer burnt (dry in spots) is safe to eat (but may not taste very good).

**Durable life information on food products**

• Durable life is the amount of time that an unopened product will retain all of its wholesomeness, taste, nutritional value, and any other qualities claimed by the manufacturer, when stored under appropriate conditions.
• Manufacturers and retailers are responsible for determining the durable life of foods they manufacture and sell.
• Durable life information is not a guarantee of product safety.

Source: Canadian Food Inspection Agency [www.inspection.gc.ca](http://www.inspection.gc.ca)
Food Safety Tips for Barbecuing

Many Canadians love to barbecue all year round, but especially when the weather starts to get warm. As with any type of cooking, it's important to follow safe food handling guidelines to prevent harmful bacteria from spreading and causing foodborne illness.

**At the store**

When you’re at the grocery store, buy cold food at the end of your shopping. Make sure to keep raw meat separate from other products. You can put packages of raw meat in separate plastic bags to keep meat juices from leaking onto other foods. This helps avoid possible cross-contamination and prevents the spread of foodborne illness. Always refrigerate perishable foods within one to two hours, especially in warm weather.

**Storing raw meat**

**In the refrigerator**

At home, store raw meat in the refrigerator immediately after you return from the grocery store. Freeze raw poultry or ground beef that won’t be used within one to two days. Freeze other meats within four to five days.

Marinate meat in the refrigerator, not on the counter. Remember to set some marinade aside in the fridge if you want to use it later to baste meat or use it as a dipping sauce. Do not use leftover marinade from the raw food on the cooked food.

**In the cooler**

If you are storing your meat in a cooler before barbecuing, make sure that the cooler is kept cold with ice packs. Keep the cooler out of direct sunlight and avoid opening it too often, because it lets cold air out and warm air in. You may also want to use two coolers, one for drinks (as it may get opened more often) and another one for food.
Whether you are storing the meat in the refrigerator or a cooler, always remember to keep food out of the temperature danger zone of 4°C to 60°C (40°F to 140°F). Bacteria can grow in this temperature range. After only two hours in this range, your food can become dangerous.

**Cross-contamination**

To avoid potential cross-contamination and the spread of foodborne illness, follow the following steps:

- Make sure to keep raw meat away from other foods, including vegetables such as lettuce and tomatoes. You can do this by packing meats separately or by making sure they are wrapped separately, so that juices don't leak out onto other foods.
- Wash your hands carefully with soap and warm water for at least 15-20 seconds before and after handling raw meat.
- Clean all your cooking equipment, utensils and work surfaces, and then sanitize them with a mild bleach solution, in the following manner:
  - Combine 5 mL (1 tsp) of bleach with 750 mL (3 cups) of water in a labelled spray bottle.
  - Spray the bleach solution on the surface/utensil and let stand briefly.
  - Rinse with lots of clean water and air dry (or use clean towels).

**Thawing**

Thawing should be done in the refrigerator. Sealed packages can be thawed in cold water. Microwave defrosting is acceptable if the food item is placed immediately on the grill. Meat should be completely thawed before grilling so that it cooks more evenly.

**Cook thoroughly and use a digital food thermometer**

Bacteria such as *E. coli*, *Salmonella* and *Listeria* can only be killed by heat. Raw meat must be cooked properly to a safe internal temperature (see chart below) to avoid foodborne illness. Colour alone is not a reliable indicator that meat is safe to eat. Meat can turn brown before all the bacteria are killed, so use a digital food thermometer to be sure.

To check the temperature of meat that you are cooking on the barbecue, take it off the grill and place it in a clean plate. Insert the digital food thermometer through the thickest part of the meat. For hamburgers, you should insert the digital food thermometer through the side of the patty, all the way to the middle. Make sure to check each piece of meat or patty because heat can be uneven.

Do not use the same plate or utensils for raw and cooked meat because cross-contamination can occur. Raw juices can spread bacteria to your safely-cooked food and cause foodborne illness.
Remember to always clean your digital food thermometer in warm, soapy water between temperature readings to avoid cross-contamination.

**Internal Cooking Temperatures**

You can't tell by looking. Use a digital food thermometer to be sure!

<table>
<thead>
<tr>
<th>Food</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, veal and lamb (pieces and whole cuts)</td>
<td>63°C (145°F)</td>
</tr>
<tr>
<td>Medium-rare</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>Medium</td>
<td>77°C (170°F)</td>
</tr>
<tr>
<td>Well done</td>
<td></td>
</tr>
<tr>
<td>Pork (pieces and whole cuts)</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>Poultry (e.g. chicken, turkey, duck)</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Pieces</td>
<td>85°C (185°F)</td>
</tr>
<tr>
<td>Whole</td>
<td></td>
</tr>
<tr>
<td>Ground meat and meat mixtures</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>(e.g. burgers, sausages, meatballs, meatloaf, casserole)</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Beef, veal, lamb and pork</td>
<td></td>
</tr>
<tr>
<td>Poultry</td>
<td></td>
</tr>
<tr>
<td>Egg dishes</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>(e.g. hot dogs, stuffing, leftovers)</td>
<td>74°C (165°F)</td>
</tr>
</tbody>
</table>

**Keep hot food hot**

Remember to keep hot food hot until served. Keep cooked meats hot by setting them to the side of the grill, not directly over coals where they can overcook.

**Serving food**

Use a clean plate when taking food off the grill. Remember not to put cooked food on the same plate that held raw meat. This prevents it from being re-contaminated by raw juices.
Leftovers

Cool food by using shallow containers, so that it cools quickly. Discard any food left out for more than two hours. On hot summer days, don’t keep food at room temperature for more than one hour. Remember to keep food out of the temperature danger zone of 4°C to 60°C (40°F to 140°F). When in doubt, throw it out!

What the Government of Canada does to Keep our Food Supply Safe

The Government of Canada is committed to food safety.

Health Canada establishes regulations and standards relating to the safety and nutritional quality of foods sold in Canada. Through inspection and enforcement activities, the Canadian Food Inspection Agency verifies that food sold in Canada meets Health Canada's requirements.

For more information on food safety, please visit Health Canada’s website, the Canadian Food Inspection Agency’s website and the Canadian Partnership for Consumer Food Safety Education’s Be Food Safe Canada program.
Food Safety Facts on Microwave Ovens

Foodborne illness can occur as a result of using improper food handling techniques and cooking practices when using a microwave oven. Thorough cooking is the best way to kill bacteria present in food. Because cooking in a microwave oven might not result in even cooking, follow these instructions.

The Microwave

- Do not operate the microwave oven if the door does not close firmly, or the oven is damaged in any other way.
- Do not use metal pans made for convectional ovens or aluminium foil as they cause uneven cooking and could even damage the oven.
- Clean the oven frequently with water and mild detergent.

Defrosting

- Remove food from plastic wrap, freezer cartons, and/or styrofoam trays before defrosting and cooking. They are not heat stable and could leach hazardous compounds from the container or plastic wrap to the food.
- Do not defrost foods in a microwave oven for more than two hours. Set a timer as a reminder.
- Defrost frozen foods completely before cooking them in a microwave. Frozen and thawed portions in the same food will lead to uneven heating.

Cooking

- Arrange items uniformly on microwave safe cookware. Cover with a microwave safe lid or with microwave safe plastic wrap that does not touch the food to promote even heating. This will trap steam in the cooking vessel which will more effectively kill bacteria and ensure even heating and thorough cooking. However, leave a small section uncovered so that steam can escape.
- Cut food into small pieces for uniform cooking.
- Debone larger pieces of meat that are to be cooked in a microwave. The bone causes uneven heating around it. Place thicker portions of meat and poultry around the outside of a dish. Turn pieces at least once during cooking.
- Cook larger pieces of meat at 50% power. This allows the heat to penetrate further into the meat without overcooking the outer portions.
- Never cook whole turkeys in the microwave. The size and density of the bird do not allow for even cooking. Never cook stuffed turkeys in the microwave.
• Never partially cook meat in the microwave or in the convection oven. If microwave cooking is done to speed up the total cooking process then it must be followed immediately by another cooking method (grill, oven, stove top).
• Make sure food is cooked completely and evenly. Because of the rapid heating process, parts of food may cook faster than other parts. Rotate trays and stir food several times during cooking.
• Observe all standing times for microwaved food after cooking. This will allow for even heat distribution.
• Use a thermometer to determine if meat is adequately cooked. Check the temperature in several places, especially in the thickest area of the meat. Make sure the thermometer does not touch bone, metal, glass or packaging materials.
• Cook red meats to a minimum temperature of 74°C (165°F) and poultry to at least 85°C (180°F). Juices should run clear for meats and poultry.
• Adjust cooking times for lower powered microwaves ovens. Microwave ovens with lower power will take longer to cook food to the required temperatures.

Reheating

• Do not reuse trays and containers that came with microwave convenience foods. They may be designed for one-time use only.
• The temperature in the center of reheated microwave items should reach 74°C (165°F).

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Picnicking, Hiking & Camping Food Safety Tips

*How safe is your picnic?*

Picnics in the park

Hiking in the woods

Campsite barbecues

Everyone loves eating outdoors . . . but it can be a food safety challenge because you don’t have a proper kitchen!

*Control the temperature!*

When we’re outdoors, we can’t control the weather – but we **CAN** control the temperature of our food and prevent foodborne illness! The rules are simple. Hot food must be kept hot at or above 60°C (140°F) and cold foods must be kept cold at or below 4°C (40°F). There’s no middle ground.

Keep food out of the temperature danger zone of 4°C to 60°C (40°F to 140°F). Bacteria can grow in this temperature range. After only two hours, your food can become dangerous. When in doubt - throw it out! Play it “food safe” this summer - and all year long!

Use a food thermometer to measure the internal temperature of your food. See table.

**Foodsafe tip:** When transporting food to picnic sites, it can be difficult to keep food hot, so keep it cold instead then heat it up when you get to your destination!

**Five easy “cooler safety” tips**

1. **Take** perishable food in a cooler that keeps food cold at or below 4°C (40°F). Food safety experts recommend using freezer ice packs because they drip less. Loose ice or cubes can melt, then drip and possibly transfer contaminants from one food to another. If you use loose ice, store everything in sealed containers to prevent cross-contamination!

2. **Foodsafe tip:** Frozen juice boxes make excellent ice packs for small lunch packs. Kids will love drinking the juice slush when the juice boxes thaw!

3. **Refrigerate** or freeze food, if possible, the day before you pack it. This way it’s already cold when you put it in the cooler.
4. **Place** your cooler in the coolest part of your vehicle when you’re travelling. On hot days, use the car’s air conditioning, if you can, to keep food cool.

5. **Keep** the cooler out of the sun and keep the lid closed as often as you can. You may want to use two coolers – one for drinks (since it may be opened more often) and another for food.

6. **Foodsafe tip:** Cover the cooler with a blanket to help keep it cool.

7. **Separate** raw food from cooked food. Place raw meat and poultry in sealed containers and pack them at the bottom of the cooler to keep their juices from dripping onto other food. Or better yet, pack raw meat in a separate cooler.

**Keep CLEAN!**

1. Clean utensils, plates and trays after each use. Don’t forget to wash and sanitize inside the cooler before and after each use.

2. Follow the same handwashing rules outdoors as you do at home. Bring some soap and wash your hands with clean, safe water for at least 20 seconds.

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Handwashing Checklist

Always wash after you:

- touch raw meat, poultry or seafood
- touch raw fruits and vegetables
- use the washroom
- change a diaper
- touch an animal
- touch any dirty surface
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**Foodsafe tip:** Save yourself some time and some effort by washing fruits and vegetables before you leave home.

**SEPARATE for safety!**

- To prevent raw meat, poultry or seafood from contaminating other food while you’re preparing them, pack two sets of utensils and two cutting boards. Use one set for raw food and the other for ready-to-eat or cooked food. Bring a bag to store the used items to prevent them from cross-contaminating the clean items.
**COOK thoroughly!**

- By cooking your food to a safe internal temperature, you can destroy any harmful bacteria that might be present. Use a food thermometer to check the inside temperature of the food to find out if it’s cooked to a high enough temperature to be safe to eat. Proper cooking helps prevent foodborne illness. Using a food thermometer also helps you prevent overcooking.
- Precook and chill meat at home when possible, and reheat on site to 74°C (165°F). This will help save time, prevent flaring and undercooking.

**Take care with drinking water!**

Even when lakes and rivers look clean, the water may be dangerous to drink. Drink bottled water or tap water from a clean, safe source. (Remember to clean your water bottles and containers after each use!)

**Foodsafe tip:** Use only safe drinking water for washing food, washing dishes and brushing teeth.

Many campers and hikers use water purification tablets and water filters. Follow package directions. If you don’t have tablets or filters, purify your water by boiling for one minute.

**How to purify water by boiling:**

- Let suspended particles settle or strain the water through coffee filters.
- Bring the water to a rolling boil and continue to boil for at least one minute.

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Food Safety Facts for the Holidays

Food plays an important role in most holiday celebrations. Follow these safe food handling tips to decrease the risk of foodborne illness during the holiday season.

It’s always important to keep foods out of the danger zone which is between 4°C (40°F) and 60°C (140°F). To do this, just keep hot foods hot at least 60°C (140°F) and keep cold foods cold at 4°C (40°F) or lower.

Preparing and Serving Holiday Buffets

- Remember the "2-hour rule" when entertaining with a large meal or buffet. Don’t let perishable foods linger for longer than two hours in the danger zone.
- Prepare foods quickly, cook them thoroughly and serve them promptly. Keep hot foods hot with warming trays, chafing dishes or crock pots. Keep cold foods cold by placing serving dishes on crushed ice.
- Keep replacement dishes of food hot in the oven or cold in the refrigerator prior to serving.
- Do not add new food to a serving dish that has been sitting at room temperature for more than two hours.
- Use serving spoons and tongs for finger foods to stop the spread of foodborne illness. Don’t “double dip” into bowls because this spreads harmful organisms from your mouth and hands to the food. If someone else has "double dipped" you could get sick, or if you "double dip" you could cause someone else to get sick. Instead use a spoon to put some dip on your own plate.

Traveling With Food

- Wrap hot food in foil and heavy towels, or carry in insulated containers with hot packs to maintain a temperature of at least 60°C (140°F).
- Store cold foods in a cooler with ice or freezer packs so the food remains at 4°C (40°F) or lower. Full coolers keep their temperature better than partially full ones.

Vegetables and Herbs - Stored in Oil

(e.g. basil or other herbs in oil; garlic, mushrooms, sundried tomatoes, peppers in oil and also pesto or antipasto)

- Home-prepared products in oil can be made safely by adding dehydrated ingredients only to oil. These products can be kept at room temperature. Dehydrated ingredients include ingredients that are very dry and can be kept
at room temperature without spoiling, e.g. dried herbs and spices, dry-packed sundried tomatoes, etc.

- If home-prepared products in oil are made using fresh ingredients, e.g. fresh basil, peppers, mushrooms or garlic, they should be kept refrigerated at all times and must be discarded after one week. These products may be frozen for longer storage. Thaw frozen products in the refrigerator. After the products have thawed, they should be kept refrigerated at all times and must be discarded after one week.
- Consumers who purchase products made with fresh ingredients from fairs or farmer's markets or receive them as gifts should check that they were refrigerated after they were prepared, when they were prepared and discard them if more than one week old.
- Commercially-prepared products in oil that contain an acid (such as vinegar) or salt in their list of ingredients are generally considered to be safe. Store them in the refrigerator after opening and between each use. Contact the manufacturer if you have questions about a particular product.

**Eggnog and Other Recipes With Eggs**

- Be sure to handle these tasty treats safely. Commercial, ready-made eggnog is prepared using pasteurized eggs and does not require heating. Homemade eggnog may contain harmful bacteria if not prepared properly. Serve cooked eggnog using the directions below or use pasteurized egg products, found in most grocery stores.
- If you choose to make eggnog with whole eggs, heat the egg-milk mixture to at least 71°C (160°F). Refrigerate at once, dividing large amounts into shallow containers so that it cools quickly.
- Precautions should also be taken with sauces, mousses, and any other recipes calling for raw or lightly-cooked eggs. Use pasteurized egg products, or bring egg-mixtures to a temperature of at least 71°C (160°F).
- All of these products must be stored in the refrigerator.

**Cider**

- Popular holiday beverages, such as unpasteurized apple cider, mulled cider and other drinks made from unpasteurized apple cider may contain harmful bacteria.
- Use ciders labelled as pasteurized, or bring unpasteurized cider to a boil before serving. This is especially important when serving cider to children, the elderly, and people with weakened immune systems.

**Leftovers and Storage**

- While it is tempting to leave turkey and other foods at room temperature for snacking after a meal, you should refrigerate leftovers promptly in
uncovered, shallow containers so they cool quickly. Once food is cooled, cover. Avoid overstocking the refrigerator to allow cool air to circulate freely.

- Remove turkey meat from the bone and store separately from stuffing and gravy.
- Reheat leftovers to at least 74°C (165°F). Bring gravy to a full, rolling boil and stir during the process.
- Use leftover turkey meat, bones, stuffing, gravy and other cooked dishes within two to three days.

Source: Canadian Food Inspection Agency [www.inspection.gc.ca](http://www.inspection.gc.ca)
Food Safety Tips For Halloween

Halloween is a fun time for children. The Canadian Food Inspection Agency (CFIA) would like to remind parents and caregivers of important safety tips so that Halloween remains a pleasant experience for everyone.

Before Trick-or-Treating

Children should be reminded not to eat anything while they’re out trick-or-treating before an adult has a chance to inspect the goodies. To help prevent children from munching, give them a snack or light dinner before they go. Don’t send them out on an empty stomach.

The excitement of Halloween can make children forget some of the safety rules they have learned. Parents or caregivers should remind them not to accept—and, especially, not to eat—anything that isn’t commercially wrapped.

The Goodies

A few tips to keep in mind before children start indulging in the goodies:

Discard homemade candy or baked goods.
Remove choking hazards such as gum, peanuts, hard candies or small toys when young children are involved.
Wash thoroughly fresh fruit, inspect for holes, including small punctures, and cut, before allowing children to eat it. Remember, when in doubt, throw it out!
Check commercially wrapped treats for any signs of tampering, such as an unusual appearance or discolouration, tiny pinholes, or tears in wrappers. Anything that looks suspicious should be thrown out.

Halloween Parties

Juice and cider served to children at Halloween parties should be pasteurized or otherwise treated to destroy harmful bacteria. For more information, please visit the CFIA website at: http://www.inspection.gc.ca/english/fssa/concen/specif/juicee.shtml.

Children With Allergies and Sensitivities

Some Halloween treats may contain ingredients that can cause severe adverse reactions in individuals who have allergies or sensitivities. These treats often include ingredients like peanuts, tree nuts, milk and egg—some of the most common food allergens.
Parents or caregivers should exercise caution by reading labels carefully for all treats. However, they should bear in mind that Halloween candies do not always have ingredients listed on their labels. Avoid candies that do not have an ingredient list!

For more information on allergies, please visit the CFIA website at the following address: http://www.inspection.gc.ca/english/fssa/labeti/allerg/allerge.shtml.

**Konjac Mini-cup Jelly Products**

Keep an eye out for konjac mini-cup jelly products which have been known to pose a **choking hazard** in the past as they may become lodged in the throat due to their consistency. While the original mini-cup jellies with konjac (also conjac, konuyaku or glucomannan) should have been removed from the market, it is possible that some may have been brought into the country by travellers from countries where the original product may still be for sale. Other similar products now available in Canada have been reformulated into a softer consistency.

**Melamine**

The CFIA would like to remind consumers to check the Report on Testing Results for Melamine at the following address http://www.inspection.gc.ca/english/fssa/concen/2008melinfoe.shtml for up-to-date information on certain imported foods, including candy that could contain melamine. Melamine is a chemical compound used in a number of commercial and industrial applications. Canada does not allow the use of melamine as a food ingredient.

Importers, distributors and retailers of products contaminated with melamine have been advised to stop distributing and selling them, however, consumers may have already purchased some of these products. These include candy which may be unknowingly handed out to children on Halloween.

If you are a parent or caregiver, inspect your child’s Halloween treats to determine if there are any candies that may be affected. If there are, remove and dispose of these products.

If you are handing out candy, check to see if you have any of the affected products. If you do, do not distribute or eat them, dispose of them instead.
Food Safety Facts on Flooding

Handling and preparing food is always important in preventing foodborne illness, but the occurrence of a flood may cause damage that could increase the risk of foodborne illness. Follow these safe food handling tips during and after a flood:

General Food Safety Tips on Flooding

- After a flood, the best thing to do is throw away any food (including packaged food) that has been contaminated by the flood water. Even if the food appears to be dry it still may not be safe.
- Throw away all meats, fish, poultry, fresh fruits and vegetables that have come in contact with flood water. As well, food in glass or plastic jars and bottles may be unsafe as the flood water may seep into the lids of these containers and may contaminate the food.
- Inspect food carefully after a flood. Contamination can occur if bacteria in flood water come in contact with food.
- Only food in sealed, airtight metal cans is entirely safe, however, the cans must be carefully cleaned and disinfected before use.
- Cans can be cleaned by washing them in a strong detergent solution and then immersing them in a mild bleach and water solution (5 ml/1 tsp. bleach per 750 ml/3 cups water), for 2 minutes to prevent potential contamination when the can is opened.
- Cans that are bulging or damaged are considered unsafe and unusable and should be thrown away immediately.
- Home canned foods in glass containers that have come in contact with flood water are not safe. Throw away the food and the flat part of the lid. The empty jars can be sterilized for future use.

Sanitize

- It is best to sanitize all equipment that has come into contact with flood water in very hot water, 77°C (170°F).
- Sanitize wood or plastic cutting boards and your counter top with a mild bleach solution (5 ml/1 tsp. bleach per 750 ml/3 cups water).
- Slicing or grinding machines must also be cleaned and disinfected before you use them to ensure that no bacteria remain on the surface of the equipment.

Drying equipment

- The most important final step is to allow surfaces and equipment to air dry when putting away clean equipment.
- Do not lay one wet cutting board on top of another. Bacteria may multiply in trapped water.
- Allow all utensils and dishes to air dry before they are put away.
• If you suspect that your equipment and utensils have become contaminated during storage, clean and sanitize them just prior to use, even though you may have already cleaned, or sanitized them.

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Food Safety Facts for Consumers on a Power Failure

Handling and preparing food is always important in preventing foodborne illness, but a power failure can result in food becoming spoiled due to a lack of refrigeration. In general, do not eat any food you think may be unsafe. Check food in your refrigerators and freezers for signs of spoilage, and ask retailers and restaurateurs to explain how food has been kept safe during power failures. Follow the safe food handling tips below during a power failure to reduce the risk of foodborne illness. **When in doubt, throw it out.**

**Frozen Food**
- Freezing stops the growth of bacteria. An upright or chest freezer should keep food frozen for about 24 hours during a power failure, if the freezer is kept closed.
- If you know that a power failure will last for a long period of time, transport the food to a friend’s or family member’s freezer if possible.
- Discard any thawed food that has remained at room temperature for 2 or more hours.
- Discard any food that has an obvious strange colour or odour.
- If raw food has leaked during thawing, clean and disinfect the areas the food has touched. Do not reuse wash cloths until they have been cleaned and disinfected.
- Food that still contains ice crystals or feels refrigerator-cold can be re-frozen.
- When in doubt, throw it out.

**Refrigerated Food**
- During a power failure the refrigerator will keep food cool for 4 to 6 hours, depending on the kitchen temperature and the original temperature of the refrigerator.
- Place securely wrapped packages of raw meat, poultry or fish in the coldest section of your refrigerator.
- Put ice in the refrigerator to help keep it cool.
- An ice box or cooler filled with ice will help keep perishable foods temporarily chilled.
- Discard any food that has remained at room temperature for 2 or more hours.
- When in doubt, throw it out.

**Dry Goods**
- Make sure that all foods, including dry goods, are stored in a way that protects them from pets, insects and rodents.
- Dry items such as cookies, potato chips, etc. do not need to be kept cool.

Source: Canadian Food Inspection Agency [www.inspection.gc.ca](http://www.inspection.gc.ca)
Food Safety Facts on Mercury and Fish Consumption

Information Update - Testing for Mercury in Canned Tuna
Mercury in Fish - Consumption Advice: Making Informed Choices about Fish
Update - Health Canada advises specific groups to limit their consumption of canned albacore tuna

Fish are an excellent source of high-quality protein and are low in saturated fat which makes them a healthy food choice. However, certain types of fish should be eaten in moderation because mercury levels in those fish sometimes exceed Canada’s mercury guideline. Visit the Health Canada website for more information on fish consumption.

What is Mercury?

Mercury is a naturally-occurring element which is found in soil and rocks and also exists in lakes, streams, and oceans. In addition to natural sources, mercury is released into the environment by human activities such as pulp and paper processing, mining operations, and burning garbage and fossil fuels.

We absorb small amounts of mercury from a number of sources, both natural and artificial, in our immediate environment. These include amalgam dental fillings, air and water pollution, and trace amounts in food. Of the different kinds of food we eat, fish is usually the largest source of mercury.

It is well known that high amounts of mercury can damage the nervous system of people and animals. In trace amounts, however, the effects are not clearly known. Long-term studies are being conducted to determine the effects of low levels of mercury, especially on young children.

Mercury in Fish

Mercury exists in two different forms, the organic and the inorganic. In the aquatic environment, the most prevalent form of mercury is methyl mercury, the organic form, which binds tightly to the proteins in fish tissue. Most fish have trace amounts of methyl mercury. The level of mercury found in a fish is related to the level of mercury in its aquatic environment and its place in the food chain. Mercury tends to accumulate in the food chain, so large predatory fish species tend to have higher levels than non-predatory fish or species at lower levels in the food chain.

The CFIA’s Role

The CFIA regularly tests commercial fish and shellfish to determine if it meets the Canadian mercury guidelines and to establish baseline levels for particular species in particular aquatic environments. Fish and fish products for sale in Canada must meet the mercury guidelines set by Health Canada.
**Freshwater Fish**

Levels of mercury in freshwater fish vary according to the lake or river system from which they are harvested, and as with marine fish, predatory species tend to have higher levels than non-predators. All commercial, freshwater fishing areas are surveyed and where high levels are found, they are closed to commercial fishing or restrictions are placed on catching and marketing certain species.

With regards to recreational fishing, it is normally the responsibility of provincial governments to monitor mercury levels and to set and publicize safe consumption standards and guidelines. For more information regarding the safety of recreationally-caught freshwater fish for consumption, contact provincial authorities.

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Sprouts Health Risk

In recent years, sprouts have enjoyed increasing popularity in Canada due to their nutritional value. However, sprouts, including, alfalfa, mung bean sprouts and radish sprouts have also been associated with several foodborne illnesses worldwide, including Canada. These illnesses were caused by *Salmonella* and *Escherichia coli* O157:H7. Public health officials are working with industry representatives to implement safer growing methods while warning consumers about the risk of eating sprouts.

Who is Most at Risk?

Anyone who eats raw sprouts or lightly cooked mung bean sprouts, is at risk for exposure to *Salmonella* or *E. coli* O157:H7 bacteria. However young children, the elderly and people with weak immune systems are most susceptible to complications from illness caused by *Salmonella* and *E. coli* O157:H7.

What are the Symptoms of *Salmonella* and *E. coli* O157:H7 Infection?

*Salmonella* can cause salmonellosis, an illness characterized by fever, stomach cramps and diarrhea. The illness can last as long as seven days and severe cases may require hospitalization. *E. coli* O157:H7 produces toxin in the body that causes illness characterized by stomach cramps, vomiting, fever and bloody diarrhea and can occur within two to 10 days of eating contaminated food. Infection can lead to hemolytic uremic syndrome (HUS) which can cause acute kidney failure. People who experience symptoms of salmonellosis or *E. coli* infection should contact their doctor immediately.

How do Sprouts Become Contaminated?

Public health scientists believe that the seeds used for sprouting are the most likely source of contamination. *Salmonella* or *E. coli* bacteria can lodge in tiny seed cracks and are difficult to eliminate. These bacteria can multiply during sprouting in warm, humid conditions. Poor hygienic practices in the storage of seeds and in the production of sprouts have also been the cause of past sprout-related outbreaks.

Most sprouts such as alfalfa sprouts can only be eaten raw, which means they are not exposed to temperatures high enough to kill bacteria that may be present. Some sprouts, such as mung bean sprouts, can also be eaten cooked. Recently, in 2005, an outbreak of salmonellosis in Ontario was linked to the consumption of raw and lightly-cooked mung bean sprouts, such as found in some stir-fries.

What is Being Done?

In 1999, in consultation with federal and provincial government and industry representatives, the Canadian Food Inspection Agency (CFIA) developed a *Code of
Practice for the Hygienic Production of Sprouted Seeds. This Code of Practice sets out specific recommendations for the hygienic production of sprouts and general Good Agricultural Practices (GAPs) for the growing of seeds destined for sprout production.


In February 2007, the CFIA in consultation with Health Canada amended the Code of Practice for the Hygienic Production of Sprouted Seeds to include more information on antimicrobial treatments of seeds and to reflect Health Canada’s recent guidance.

Currently, the CFIA and Health Canada are developing education material that outlines some of the safe production practices that should be followed when producing sprouted seeds.

Since 1999, the CFIA has been inspecting sprout manufacturing establishments for Good Manufacturing Practices (GMPs) and has a sampling program in place to monitor the microbiological quality of the sprouts.

What Can Consumers do?

Consumers who belong to high risk groups, such as young children, seniors or people with weak immune systems, should avoid eating all sprouts of any kind especially alfalfa sprouts and mung bean sprouts. In addition, you should also avoid eating cooked mung bean sprouts found in stir-fries or soups unless you can determine that they have been thoroughly cooked. When eating out, be sure to check for the presence of sprouts in salads, sandwiches, soups and Asian dishes.

If you are a healthy individual and wish to eat sprouts the following steps can be taken to minimize your risk of illness:

At retail, make sure that the sprouts you are purchasing are refrigerated or surrounded by ice.
Only purchase sprouts that are crisp-looking, while avoiding dark or musty-smelling sprouts.
When purchasing bean sprouts in bulk display, use tongs or gloves to place the sprouts into a plastic bag.
Upon returning home from the retail store, if not consumed immediately, refrigerate the sprouts. The refrigerator should be set to reach 4 °C or less as measured by use of a thermometer.
Before and after handling sprouts, always wash your hands thoroughly (i.e., ~20 seconds with hot water and soap).
Rinse the sprouts with cold running water prior to consumption.
Do not eat sprouts that are past their best before date or have lost their crispness.
Only eat mung bean sprouts that have been thoroughly cooked.

For more information on food safety, visit the Canadian Food Inspection Agency’s Web site at: www.inspection.gc.ca.
Unpasteurized Fruit Juice / Cider

The Canadian Food Inspection Agency (CFIA) is advising parents and caregivers that children should not be served unpasteurized apple juice or other unpasteurized products, such as unpasteurized cider, fruit juices and raw milk.

Unpasteurized products have the potential to be contaminated with harmful bacteria, such as Salmonella and Escherichia coli O157:H7 as well as viruses, and parasites like Cryptosporidium, which can make vulnerable individuals such as children, especially those under the age of six, very ill, and even lead to death. The elderly and people with weakened immune systems are advised to drink pasteurized juice/cider or bring unpasteurized juice/cider to a boil before consuming it. People in these high-risk groups are advised not to consume unpasteurized juice/cider that may be available at restaurants, institutions and at group or family activities such as visits to local orchards.

Canada has enjoyed a long history of providing safe, high quality juice and cider to consumers. The vast majority of these products are pasteurized, such as shelf-stable products packaged in cans, bottles and juice boxes. However, unpasteurized juice and cider have been implicated in food poisoning outbreaks in the United States and Canada.

There have been two separate outbreaks of foodborne illness associated with unpasteurized cider produced in Canada; one in 1980 and another in 1998—each involving about 14 cases of foodborne illness.

What’s Being Done to Reduce the Possibility of Contamination?

The Code of Practice for the Production and Distribution of Unpasteurized Apple and Other Fruit Juice/Cider in Canada was developed by the CFIA, Health Canada, the provinces, industry and consumers. It outlines the steps producers, processors, distributors and retailers can take to reduce the possibility of contamination. The goal is to continue to produce safe, high quality juice/cider for Canadian consumers. The Code of Practice can be found at: http://www.inspection.gc.ca/english/fssa/protra/codee.shtml.

In addition, the CFIA stepped up its inspection and sampling program for unpasteurized juice/cider and continues to monitor known producers and their products and provide them with updated information as it becomes available. In July 2000, Health Canada introduced a new policy advocating the use of a Code of Practice, encouraging the labelling of "unpasteurized" on unpasteurized juice/cider products, and launching a consumer awareness campaign.
How Does Fruit Juice/Cider Become Contaminated?

Bacteria such as *E. coli* O157:H7 live in the intestines of animals. Fruit juice/cider may become contaminated when the raw fruit used to prepare the juice/cider has fallen to the ground and comes into contact with these bacteria from animal droppings (including uncomposted/improperly composted manure). Contamination can also occur when the water used in the orchard or during processing contains harmful bacteria, or from improper food handling practices or soiled equipment. Foodborne illness-causing bacteria can survive in the final product if it is not pasteurized. Freezing will not destroy the harmful bacteria.

What are the Symptoms of an *E. coli* O157:H7 Infection?

Symptoms can include stomach cramps, vomiting, fever and bloody diarrhea and can occur within two to 10 days of consuming contaminated food. People who experience any of these symptoms should immediately seek the advice of a health care professional and contact their local public health unit. A small percentage of people can develop hemolytic uremic syndrome, which may require blood transfusions and kidney dialysis. The disease can lead to permanent loss of kidney function and can be fatal.

How do I Know if the Product I'm Buying has Been Pasteurized?

The vast majority of juice sold in Canada is pasteurized. This includes all shelf-stable product packaged in cans, bottles and juice boxes, which can be found unrefrigerated on grocery store shelves, and all concentrated juice and juice from concentrate. Most of the juice sold in refrigerated display cases is also pasteurized. Juice/cider sold in the produce sections of grocery stores, or at roadside stands, farm markets and country fairs may or may not have been pasteurized. Consumers can check the label and if unsure, can ask their retailer or local producer. Most unpasteurized juice/cider is purchased as freshly pressed unpasteurized juice/cider from local orchards, cider mills, roadside stands and juice bars.

When Buying Unpasteurized Juice/Cider, What Else Can Retailers and Consumers Do?

Before purchasing unpasteurized juice/cider, both retailers and consumers should check with the producer or vendor to determine if the juice/cider was produced according to the Code of Practice.
Vegetables & Herbs Stored in Oil

Various foods are sometimes stored in oil to extend their shelf life and/or flavour the oil. Some examples include garlic, onions, sun-dried tomatoes, hot peppers, and mushrooms. These products are a popular home-prepared food item and in some cases, are also prepared commercially. Incidents of food-related illness in Canada and elsewhere in recent years have increased the concern over the safety of such foods, when stored in oil.

Why do These Products Present a Health Risk?

These products can present a health risk if stored improperly. If they contain Clostridium botulinum bacteria and are bottled and covered with oil, the conditions could be ripe for bacterial growth and toxin production. While refrigeration will slow down the growth of the bacteria, it may not prevent toxin production. Consuming products that contain these toxins can cause botulism, a potentially fatal food-related illness. This can happen without any evidence of spoilage such as "off" odour, taste or abnormal appearance.

What are the Symptoms of Botulism?

Symptoms may include dizziness, blurred or double vision, difficulty in swallowing, breathing and speaking, and progressive paralysis. The onset of symptoms takes approximately 12-36 hours and the duration may be 1-10 days although some symptoms may linger much longer. Botulism can be fatal and can cause permanent neurological damage in those who survive.

What Should Consumers do to Protect Themselves?

Home-prepared products stored in oil should be made using only fresh ingredients, and must be kept in the refrigerator and discarded after one week. Consumers who purchase home-prepared food products in oil from fairs, farmer’s markets or roadside stands or receive them as a gift should check when they were prepared and discard them if more than a week old.

What About Commercially-Prepared Products?

Commercially-prepared products stored in oil that contain an acid (such as vinegar) or salt in their list of ingredients are generally considered to be safe. These products are processed using technology not commonly available to consumers. They should, however, be refrigerated after opening and between each use. If in doubt about the ingredients in a particular product, consumers can contact the manufacturer.

Source: Canadian Food Inspection Agency www.inspection.gc.ca
Home Preservation

Home preservation refers to preserving fruits and vegetables by sealing them in glass jars and processing them in a boiling water canner or pressure canner. Heating the jars to high enough temperatures will destroy microorganisms and inactivate enzymes that can cause spoilage. Processing also removes much of the air from the jars. An airtight vacuum seal prevents microorganisms and air from entering the jars resulting in a shelf stable product.

Botulism

Proper canning techniques are essential to ensure the safety of a canned product. It is imperative to use tested recipes from up to date publications. Never alter a recipe. Botulism is a deadly disease caused by consuming toxins produced by Clostridium botulinum bacteria. Removal of air from the jar creates the perfect environment for Clostridium botulinum to develop from spores and produce toxins. These spores can be destroyed by the heat produced in a pressure canner. Alternatively, an acidic environment can be created which prevents the spores from developing and the toxin will not be produced.

The nervous system is affected in botulism poisoning. Symptoms include trouble speaking and swallowing, breathing and progressive paralysis.

Acidity

The level of acidity determines the canning method that should be used. High acid foods such as fruits have a pH value of less than 4.6 and can be canned using a boiling water canner. Low acid foods with a pH greater than 4.6, such as vegetables, must be canned with a pressure canner.

High Acid Foods

High acid foods like jams, jellies, pickles and tomatoes with added acid can be processed in a boiling water canner. Any deep pot with a bottom rack can be used as a canner. Make sure it is deep enough to allow for 5cm of water to cover the jars. The water must be at a full boil. The jars must be processed for at least the amount of time as indicated in a reliable and current recipe from a reputable source. The food and the jar size determine the processing time.

Low Acid Foods

To eliminate the risk of botulism, low acid foods, like vegetables, have to be processed using a pressure canner. A pressure canner that can reach the temperature of 116°C (240°F) will destroy the Clostridium botulinum spores.
Pressure canners are special pots with lids that can be locked shut to give a steam-tight seal. Refer to the manufacturer's instructions when operating a pressure canner. Follow a recipe from a reputable source. Before tasting home canned low acid foods like vegetables, an extra precaution is to boil the jar for 10 minutes immediately before eating.

Source: 06.jul.05, Food Safety Network
Risks Associated with Unpasteurized Milk

Some people believe that drinking unpasteurized milk is healthy and good for you. Is this true?
No. Drinking unpasteurized milk (also called raw milk) can result in mild illnesses, long-lasting serious diseases, or even death. Disease-causing bacteria found in unpasteurized milk includes E. coli O157, salmonella and campylobacter. E. coli O157 is the same bacteria that caused the outbreak in Walkerton, Ontario.

What are the symptoms of infection?
These bacteria can cause severe diarrhea (which may be bloody), stomach cramps or abdominal pain, vomiting, fever, weakness and chills.

Are some people more at risk than others?
Yes. Certain groups such as young children, the elderly, people who are ill, pregnant women and those with weak immune systems are at increased risk of serious illness.

Can the bacteria from drinking unpasteurized milk be passed on to others?
Yes. If someone becomes sick from drinking raw milk, this infection can be passed from person-to-person by hand-to-mouth contact. This fecal-oral spread from person-to-person happens especially when someone has diarrhea and is not washing their hands properly or maintaining good hygiene. Disease can also be spread to those who are caring for a person who is ill with diarrhea.

How does pasteurization make milk safe to drink?
Pasteurization is a heating process. The minimal pasteurization requirement in Ontario is to heat the milk to 72 degrees Celsius for 16 seconds at a dairy processing plant. This process destroys disease-producing bacteria. Milk sold in grocery stores is pasteurized.

What should I do if I drink raw milk and develop symptoms?
Anyone who shows symptoms should see their doctor immediately. About 10 per cent of people with E. coli O157 develop Hemolytic Uremic Syndrome (HUS). HUS is a serious complication that can lead to kidney failure and death.

What should I do if I find unpasteurized milk?
It is illegal to sell, offer to sell, deliver or distribute unpasteurized milk. Unpasteurized milk should be reported to the Ministry of Agriculture and Food’s complaint line at 1-888-466-2372 ext. 64391.
Durable Life Information on Food Products

What is the Durable Life of a Food?

The durable life is the amount of time that an unopened product will retain all of its wholesomeness, taste, nutritional value, and any other qualities claimed by the manufacturer, when stored under appropriate conditions. Manufacturers and retailers are responsible for determining the durable life of foods they manufacture and sell. Durable life information is not a guarantee of product safety.

How is Durable Life Information Different From a Best-Before Date or a Packaged on Date?

Durable life information is declared either on the label of a product or on a poster next to the food and is generally expressed as a number of days. A “best-before” date is a different way of showing the durable life of a product. It indicates the date until which the unopened product will retain its durable life, and must be accompanied by proper storage instructions. A “packaged-on” date is placed on products when they are packaged at the retail store, and must be accompanied by durable life information.

Do All Foods Require Durable Life Information?

No. However, best before dates and instructions for proper storage (e.g. “keep refrigerated”) are required on most foods destined for retail sale that have a durable life of 90 days or less after being packaged. Products packaged at the retail store, such as meat, fish or poultry, must be labelled with a “packaged-on” date and durable life information (label or poster) or with a best before date and proper storage instructions. Fresh fruit and vegetables, donuts and some restaurant and vending machine products are not required to carry either a best before date or durable life information.

What Happens to Food After the Best Before Date or Durable Life has Expired?

When the best before date or durable life of a food has passed, the food may lose some of its nutritional value, such as vitamin C content. It may also lose some of its flavour, or its texture may change. Your senses of sight, smell and taste and your common sense will tell you whether the quality of the food has decreased. And remember, when in doubt, throw it out!

How is Durable Life Information Expressed on a Label?

Durable life information is expressed as a number of days. The best before date appears on the label as an abbreviated form of the month and the date, and is accompanied by the words “best before” and “meilleur avant”. If necessary, the
year will appear before the month and date. For example, a best before date of June 30, 2000 will appear as “00 JN 30.” In some cases (i.e. food packaged at the retail store), the durable life information may instead appear on a poster next to where the food is being sold. In these cases, the packaging date must appear on the product label. It is expressed as “Packaged on”/ “Empaqueté le” with the date.
Food Safety Tips for Reusable Grocery Bags and Bins

Using reusable grocery bags and bins is a good environmental choice for Canadians. In fact, with many grocery stores in Canada promoting the use of reusable grocery bags and bins, more and more Canadians are making the choice to carry reusable grocery bags while shopping. However, it’s still important to practice good food safety to avoid the risks of cross-contamination and foodborne illness.

Certain foods, such as raw meat, poultry and fish, can naturally contain bacteria, viruses or parasites that can cause foodborne illness. Other fresh foods, such as fresh produce, may carry bacteria and can also become contaminated as a result of cross-contamination.

While cross-contamination can happen throughout the growing, harvesting or production process, it is important to reduce the chances of cross-contamination between foods while you are shopping. This is particularly the case for fresh foods that you may not cook before eating.

Cross-Contamination

When you are using reusable grocery bags and bins, the biggest concern for food safety is cross-contamination. Because these kinds of grocery bags and bins are used frequently, they can pick up bacteria from foods they carry.

Bacteria can also be transferred from the environment, from places such as the grocery cart, the ground and the car. These reusable bags and bins are often used to carry other items as well. Bacteria can transfer onto foods when you place them into the bags and bins and can cause foodborne illness for your family.
Here are some food safety tips that you can follow to help lower the risk of cross-contamination:

- When you are using cloth bags, make sure to wash them frequently, especially after carrying fresh produce, meat, poultry or fish. Some reusable grocery bags may not be machine washable. If you are using this type of grocery bag, you should make sure to wash them by hand frequently with hot soapy water. Plastic bins should be washed using hot soapy water on a regular basis as well.
- If you notice that juices from your food have leaked into the bag or bin, make sure you wash them before using them again.
- You should put fresh or frozen raw meat, poultry and fish in separate bins or bags from fresh produce and other ready to eat foods.
- You can also put your meat, poultry or fish in plastic bags, such as the clear bags you can find in the produce and some meat sections. This will help prevent the juices from leaking out and contaminating your reusable bags and bins and also other foods. Fresh produce should also always be placed in plastic bags to protect them from contamination.
- If you are using your grocery bags or bins to store or transport non-food items, they should be thoroughly washed before using them for groceries.
- Always follow proper safe food handling and preparation techniques in your kitchen, whether or not you are using reusable grocery bags. The four key steps are: clean, separate, cook and chill.
- After putting your groceries away, clean the areas where you placed your bags or bins while unbagging your food, especially the kitchen counter and the kitchen table.

**What the Government of Canada Does to Keep our Food Supply Safe**

The Government of Canada is committed to food safety.

Health Canada establishes regulations and standards relating to the safety and nutritional quality of foods sold in Canada. Through inspection and enforcement activities, the Canadian Food Inspection Agency verifies that food sold in Canada meets Health Canada’s requirements.

For more information on food safety, please visit Health Canada’s website, the Canadian Food Inspection Agency’s website and the Canadian Partnership for Consumer Food Safety Education’s Be Food Safe Canada program.