

Food Safety



for Older Adults



How's your food safety savvy?

Why older adults must *FightBAC!*[™]

Age brings experience and wisdom. Age also increases the risk of foodborne illness.

Everyone's health is different, including our ability to fight off disease, but as we age:

- immune systems weaken and our ability to fight illness is not as strong or efficient
- stomach acid decreases (stomach acid plays an important role in reducing the number of bacteria in our intestinal tracts)
- sensory losses (sight, smell and taste) may diminish our ability to detect food spoilage
- the risk of chronic illness increases—diabetes, some cancer treatments, and kidney disease may increase a person's risk of acquiring foodborne illness



The Canadian Partnership for Consumer Food Safety Education is a unique coalition of industry, consumer, government, health and environmental organizations working together to improve consumer understanding of foodborne illness and the measures that can be taken to decrease the risk of illness.

Canada's food supply is one of the safest in the world and Canadians should be proud. However, food safety doesn't just happen, many people play a vital role in keeping our food safe—farmers, fishermen, processors, grocers and you, the consumer.

According to Health Canada, an estimated two million Canadians are affected each year by foodborne illness—commonly known as food poisoning. Many cases go unreported because the symptoms resemble other digestive illnesses. Unsafe food handling practices in the home are a leading cause of foodborne illness.

Research and technological advances over the past 25 years have led to many changes in farming, food processing and eating habits. Unfortunately, in many cases, the way consumers prepare and handle food has changed very little. Food handling practices, which have been in the family for years, may be leaving you exposed to foodborne illness.

It's time to *FightBAC!*[™]—eliminate the bacteria responsible for foodborne illness. *FightBAC!*[™] is a national awareness campaign designed to educate everyone about food safety. Assess your current food safety habits and compare them to the *FightBAC!*[™] messages—**Clean, Separate, Cook and Chill**. Then tell your friends, children and grandchildren and encourage them to join you in the national effort to *FightBAC!*[™].

Foodborne illness can be deadly!

In general, foodborne illness is not long lasting, but in some cases it can be severe, even deadly.

- **Older adults**, young children, pregnant women and people with weakened immune systems are more susceptible to severe bouts of foodborne illness.
- Foodborne illness occurs when a person eats food contaminated with microscopic, disease-causing organisms, such as bacteria, viruses and parasites.
- The most common symptoms may include stomach cramps, nausea, vomiting, diarrhea, headache and fever, or any combination of these.
- These symptoms can occur several hours or several days after eating contaminated food.
- Symptoms will vary according to the type and amount of bacteria, viruses and parasites present in the food.
- The good news—foodborne illness can be prevented. Make sure you're up-to-date on how to *FightBAC!*[™].

Clean

Wash hands and surfaces often

Wash fresh produce

Whether they come from your garden, the market, or the store—fruits and vegetables should be washed just before serving. They should never be consumed without being washed.

- Wash produce under clean, potable, running water.
- Use a vegetable scrub brush on produce with a firm skin such as carrots, potatoes, melons and squash.
- Always wash produce, such as squash, melons and oranges, even if you don't eat the outer rind. Bacteria on the outer surface can be transferred to the inner flesh when the item is cut or peeled.
- Discard outer leaves of leafy vegetables and wash produce thoroughly under clean, potable, running water—making sure all dirt has been removed.

Do not use detergent or bleach on fruit and vegetables. Porous produce can absorb these products and neither detergent nor bleach is intended for use on foods. Clean, potable, running water and a vegetable scrub brush are sufficient for cleaning produce.

Bacteria can be present throughout the kitchen—on cutting boards, utensils, sponges and counter tops. Meat, poultry, seafood, eggs, fruits and vegetables may carry bacteria responsible for foodborne illness and as you handle them you can cross-contaminate other foods and working surfaces.

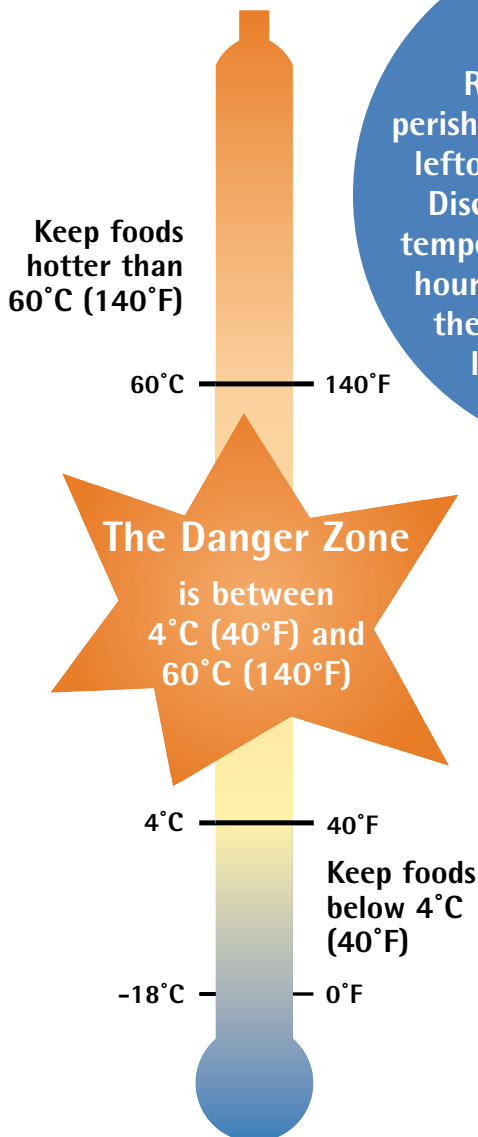
Here's how to *FightBAC!*TM

- Wash your hands for 20 seconds with soap and warm water before and after handling food, using the bathroom and handling pets.
- Wash your cutting boards, dishes, utensils and counter tops with soap and warm water after preparing each food item and before you go on to the next food.
- Once cutting boards (including plastic, non-porous, acrylic and wooden boards) become excessively worn or develop hard-to-clean grooves—replace them.
- Wash cloth tea towels and dish cloths *often* in the hot cycle of a washing machine. Consider using paper towels to clean up kitchen surfaces.
- For added protection, use a commercial kitchen sanitizer as directed or make your own bleach solution. Mix 5 mL (1 tsp) of household bleach to 750 mL (3 cups) of water.
- Occasionally sanitize cutting boards by flooding the board with the bleach solution. Let it stand a few minutes and then rinse thoroughly with clean, potable, running water.

Proper hand washing may eliminate nearly half of all cases of foodborne illness and significantly reduces the spread of the common cold and flu.

Chill

Chill it promptly!



The Two-Hour Rule

Refrigerate or freeze perishables, prepared food and leftovers, within two hours. Discard food left at room temperature longer than two hours. This includes food in the car, picnics and food left on the counter.

At room temperature, bacteria in food can double every 20 minutes. Freezing foods or storing them at cold temperatures won't kill the bacteria, but it will prevent most types from multiplying.

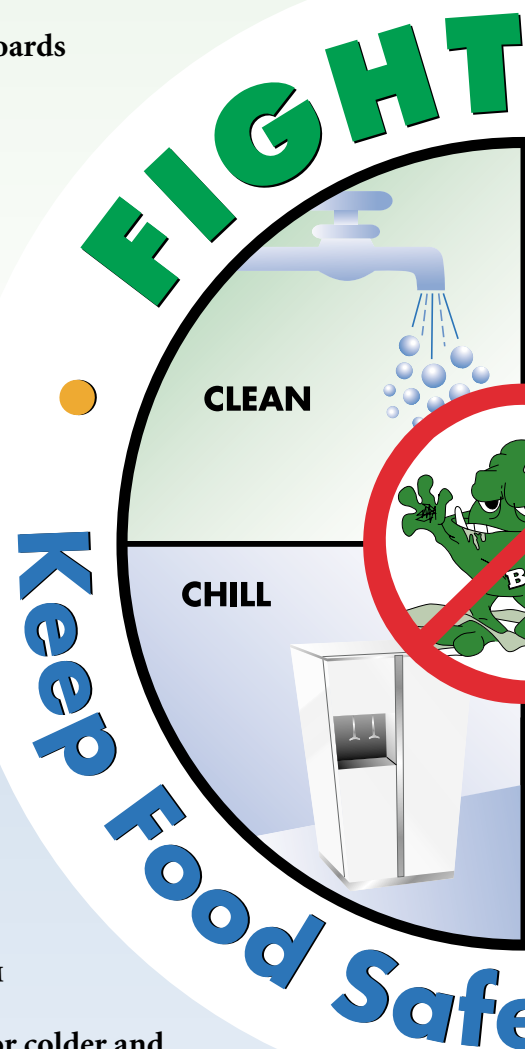
It is essential to refrigerate or freeze perishable foods, prepared foods and leftovers within 2 hours of purchase or consumption. The fewer bacteria—the less likely you will become ill.

Here's how to *FightBAC!*TM

- Set your refrigerator at 4°C (40°F) or colder and your freezer at -18°C (0°F). Check the temperature occasionally with an appliance thermometer.
- Don't pack the refrigerator with food—cold air must circulate to keep food safe.
- Marinate foods in the refrigerator.
- Store eggs in their original carton. Although your refrigerator may have an egg tray on the door, these areas are not cold enough.
- Refrigerate leftovers within 2 hours. Today's refrigerators are designed to chill warm food items without causing damage to the appliance. To aid the cooling process, separate large quantities into shallow containers and cover once cooled.

When shopping

- Read and follow label instructions such as "Keep refrigerated", "Best before", "Refrigerate after opening" and "Keep frozen".
- Pick up all refrigerated and frozen foods last. Refrigerate or freeze food within two hours of purchase. Use a cooler in your car on hot days or when the trip home will take more than an hour.



Keep Hot Foods Hot & Cold Foods Cold!

- Use a cooler with ice to transport food in the car.
- Use ice packs or frozen drinking boxes to keep lunches cool.
- Use insulated bags or hot packs in coolers to transport hot food. It may be necessary to reheat items to a safe internal temperature when you reach your destination.

Cross-contamination is the process of spreading bacteria from one product to another. Bacteria can be spread to food by coming into direct contact with contaminated food, kitchen utensils or counter surfaces.

This is especially important when handling raw meat, poultry and seafood. Keep these foods and their juices separate from other foods.

Here's how to *FightBAC!*TM

- Separate raw meat, poultry and seafood from other foods in your grocery cart and in your refrigerator.
- Use two cutting boards, one for raw meat, poultry and seafood, and a second one for washed, fresh produce and other ready-to-eat foods. The use of separate cutting boards is common practice in commercial kitchens and should be in the home as well.
- Always wash hands, cutting boards, dishes, knives and utensils with soap and warm water after they come in contact with raw meat, poultry, seafood, eggs and unwashed fresh produce.
- Always place cooked food on a clean plate. Do not use an unwashed plate as bacteria from the raw food will contaminate your cooked food.

Board Games plastic vs wood

There is no evidence to support one type of cutting board—hard wood or plastic—over the other, but the following advice will help keep them free of bacteria:

- use two cutting boards—one for raw meat, poultry and seafood and one for washed fresh produce and ready-to-eat foods
- wash with soap and warm water after each use
- use a bleach solution to kill microbes; then rinse well and air dry or dry with a clean cloth
- replace boards or sand wooden boards when they become grooved and worn

Food safety experts agree foods are properly cooked when they are heated for a *long enough time* and at a *high enough temperature* to kill harmful bacteria responsible for foodborne illness.

Here's how to *FightBAC!*TM

- Use a clean food thermometer, which measures the internal temperature of cooked foods, to make sure meat, poultry, casseroles and other foods are properly cooked all the way through.
- Eggs should be cooked thoroughly to proper temperature.
- Fish should be opaque and flake easily with a fork.
- When cooking in a microwave oven, make sure there are no cold spots in food where bacteria can survive. To do this, cover food, stir and rotate the dish by hand once or twice during cooking—unless you have a turntable in the microwave. Allow for standing time. All of these steps are necessary for thorough cooking or reheating of food. Use a food thermometer to make sure foods have reached a safe internal temperature.

Reheating leftovers

- Reheat solid foods quickly to an internal temperature of at least 74°C (165°F).
- Reheat and stir soups, stews, sauces and gravies to a rolling boil.
- Follow the microwave manufacturer's instructions when reheating leftovers, since microwaves vary.
- Discard unused portions of reheated leftovers.
- 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 smell, look or taste. **"If in doubt, throw it out!"**

Separate

Don't cross-contaminate

At the grocery store

- In the grocery cart, be careful juice from raw meat, seafood or poultry does not drip onto other foods. Place them in a plastic bag before placing in your cart.
- Don't allow raw meat, seafood or poultry to be bagged with other groceries.
- If you find juice dripping from raw meat, poultry or seafood on display in the grocery store, tell a manager. Food safety is everyone's responsibility.

In your refrigerator

- Place raw meat, seafood and poultry in a container on the bottom shelf of your refrigerator so it cannot drip onto other foods.

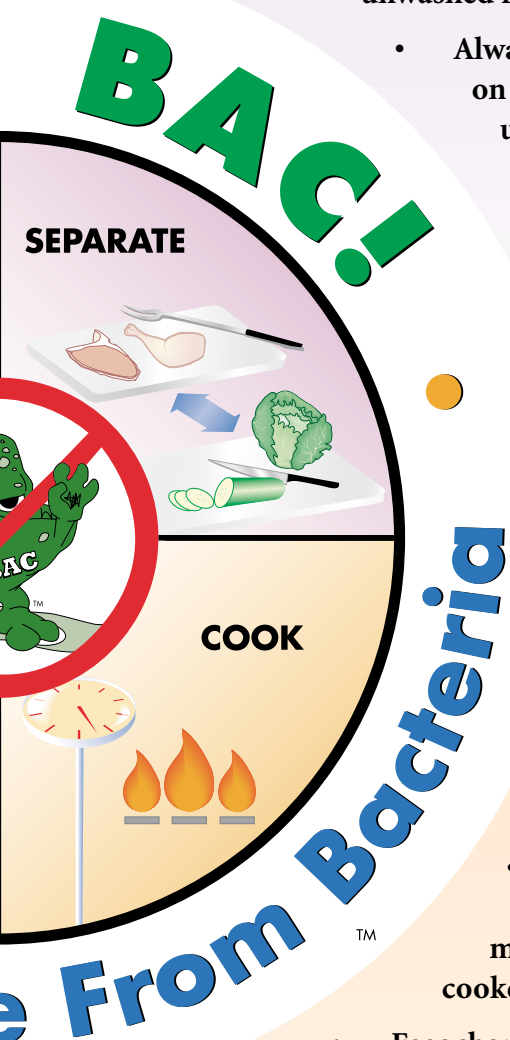
Cook

Cook to proper temperatures

"I never use a thermometer."

Does this sound familiar?

While there are many ways to test when meat, poultry and seafood are done (juices run clear, meat falls off bone, meat patties are brown), or when casseroles are properly reheated (casserole is hot and bubbling) these methods can be misleading. To ensure food has been cooked to a safe temperature, use a food thermometer. A variety of food thermometers are available, but the easiest to handle is a digital model. They are easy to read, provide quick readings and can be used at various stages of cooking. Always wash thermometers between readings! Keep your food thermometer handy and use it ... *It's worth the effort!*



Cooking Temperatures

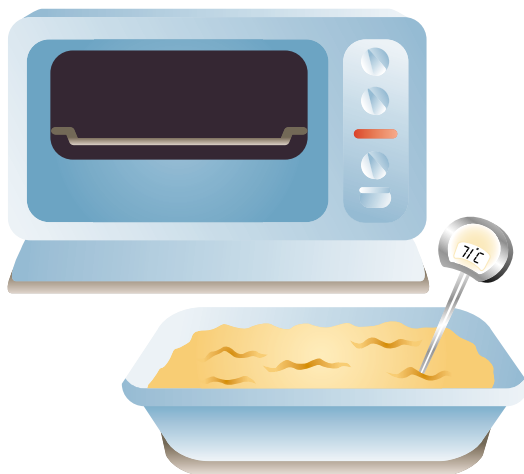


Safe thawing

Food should not be thawed at room temperature.

Three acceptable ways to safely thaw foods are: in a refrigerator, in a microwave or immersed in cold water.

- Generally, it will take five hours to thaw half of a kilogram or one pound of meat or poultry in a refrigerator.
- When thawing by microwave, cook the food immediately following the thawing process.
- If you thaw food using cold water, keep the food in its original wrapping and change the water every half hour to ensure the water remains cold. If raw meat comes in contact with sinks and kitchen surfaces, remember to wash them immediately.



An industry standard chart

Recommended internal cooking temperature

Ground Meat

Beef, pork, veal	71°C (160°F)
Chicken, turkey	80°C (176°F)

Fresh Beef

Rare	60°C (140°F)
Medium	71°C (160°F)
Well done	77°C (170°F)
Rolled beef roasts or steaks	71°C (160°F)
Beef minute steak	71°C (160°F)

Fresh Pork

Pork chops	71°C (160°F)
Roasts	71°C (160°F)
Fresh cured ham	71°C (160°F)
Cooked ham (to reheat)	60°C (140°F)

Poultry

Chicken, turkey—whole, stuffed	82°C (180°F)
Chicken—whole, unstuffed	82°C (180°F)
Turkey—whole, unstuffed	77°C (170°F)
Chicken, turkey—pieces	77°C (170°F)

Stuffing

Cooked alone	74°C (165°F)
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Eggs & Egg Dishes

Egg casseroles, sauces, custards	71°C (160°F)
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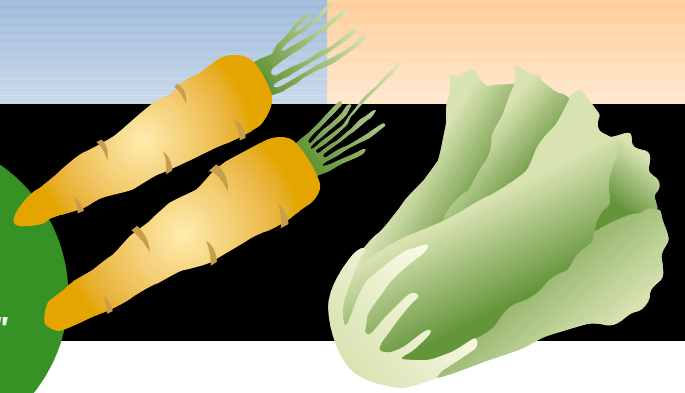
Leftovers—reheated	74°C (165°F)
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Thanks to the following industry groups for their input to the cooking chart:

- Beef Information Centre
- Canadian Egg Marketing Agency
- Canadian Pork Council
- Canadian Turkey Marketing Agency
- Chicken Farmers of Canada

Storage Chart

Keep it safe!
Follow the
"Best before"
date!



For refrigerators and freezers

	Refrigerator 4°C (40°F)	Freezer -18°C (0°F)
Fresh Meat		
Beef—steaks, roasts	2-4 days	10-12 months
Pork—chops, roasts	2-4 days	8-12 months
Lamb—chops, roasts	2-4 days	8-12 months
Veal roasts	3-4 days	8-12 months
Ground meat	1-2 days	2-3 months
Fresh Poultry		
Chicken, turkey—whole	2-3 days	1 year
Chicken, turkey—pieces	2-3 days	6 months
Fresh Fish		
Lean fish (i.e., cod, flounder)	3-4 days	6 months
Fatty fish (i.e., salmon)	3-4 days	2 months
Shellfish (clams, crab, lobster)	12-24 hours	2-4 months
Scallops, shrimp, cooked shellfish	1-2 days	2-4 months
Ham		
Canned ham	6-9 months	Don't Freeze
Ham, fully cooked (half & slices)	3-4 days	2-3 months
Bacon & Sausage		
Bacon	1 week	1 month
Sausage, raw (pork, beef, turkey)	1-2 days	1-2 months
Pre-cooked, smoked links or patties	1 week	1-2 months
Leftovers		
Cooked meat, stews, egg or vegetable dishes	3-4 days	2-3 months
Gravy & meat broth	1-2 days	2-3 months
Cooked poultry and fish	3-4 days	4-6 months
Soups	2-3 days	4 months
Hot Dogs & Lunch Meats		
Hotdogs	2 weeks	1-2 months
opened	1 week	
Lunch meats	2 weeks	1-2 months
opened	3-5 days	1-2 months
Deli Foods		
Deli meats	3-4 days	2-3 months
Store-prepared or homemade salads	3-5 days	Don't freeze
TV Dinners / Frozen Casseroles		
Keep frozen until ready to serve		3-4 months

Eggs

	Refrigerator 4°C (40°F)	Freezer -18°C (0°F)
Fresh—in shell	3-4 weeks	Don't Freeze
out of shell	2-4 days	4 months
Hardcooked	1 week	Doesn't freeze well
Egg substitutes, opened	10 days	Don't freeze
	3 days	1 year

Dairy Products

Milk	Check best before date	6 weeks
opened		3 days
Cottage cheese	Check best before date	Doesn't freeze well
opened		3 days
Yogurt	Check best before date	1-2 months
opened		3 days
Cheese		
soft	1 week	Doesn't freeze well
semi-soft	2-3 weeks	8 weeks
firm	.5 weeks	3 months
hard	10 months	Up to a year
processed	Several months	3 months
opened	3-4 weeks	Don't freeze
Butter		
	8 weeks	salted—1 year
		unsalted—3 months
opened	3 weeks	Don't freeze

Commercial mayonnaise

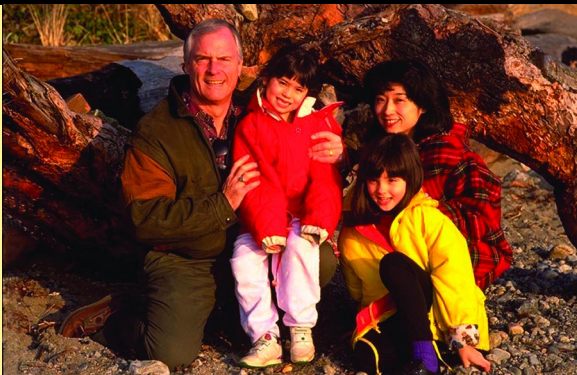
(refrigerate after opening) 2 months Don't freeze

Vegetables

Beans, green or waxed	5 days	8 months
Carrots	2 weeks	10-12 months
Celery	2 weeks	10-12 months
Lettuce, leaf	3-7 days	Don't freeze
Lettuce, iceberg	1-2 weeks	Don't freeze
Spinach	2-4 days	10-12 months
Squash, summer	1 week	10-12 months
Squash, winter	2 weeks	10-12 months
Tomatoes	Not recommended	2 months



Food Storage



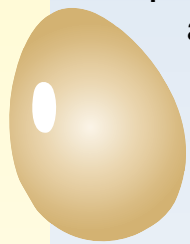
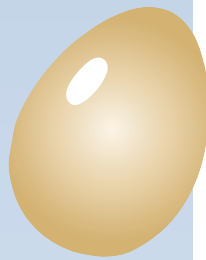
Eggs and food safety

Salmonella in Canadian eggs is not very common.

When preparing recipes that use eggs, follow these food safety tips:

- Always use fresh, Canada Grade A eggs that have been refrigerated. The “Best before” date on the carton will help determine freshness.
- Ensure the eggs are clean and the shells are not cracked.
- Wash your hands, cooking surfaces and all utensils immediately before and after handling raw eggs.
- Prepare only enough food to be consumed in one sitting.
- Serve all egg-rich products immediately after preparing or store in the refrigerator.

Source: Canadian Egg Marketing Agency



For canned food and leftovers

Storing canned food

- Store in cool, clean, dry place.
- Date canned goods at purchase and consume them within 1-2 years or before their “Use by” date if applicable.
- Never use or purchase foods from jars with loose or bulging lids or from bulging, leaking or badly dented cans.

“First in” ...
“First out” ...

A good rule for using and storing canned food.

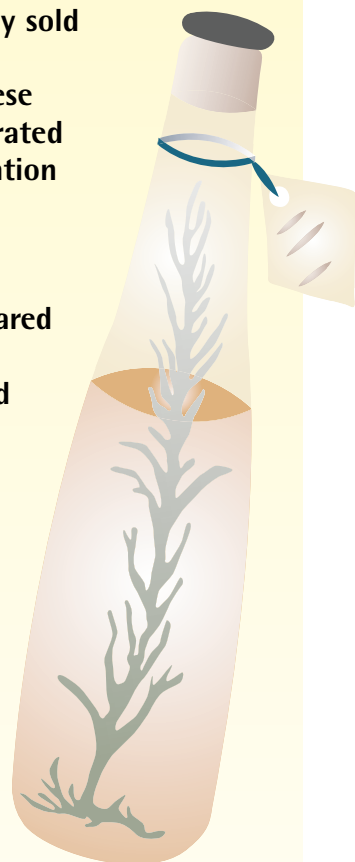
Storing leftovers

- Refrigerate leftovers within 2 hours. Discard if left out for more than 2 hours.
- Never remove a large pot of very hot food (such as soup, stew, or pasta sauce) from the stove and place directly 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.
- Very hot items can be cooled at room temperature for approximately 30 minutes prior to being refrigerated. Frequent stirring or a cold water bath accelerates the cooling at this stage.
- Refrigerate or freeze leftovers in shallow containers and cover once cooled. Food will cool faster in shallow containers.
- Remove bones from large pieces of meat or poultry and divide them into smaller portions before storing.
- Date leftovers to ensure freshness—eat leftovers as soon as possible. Once thawed, leftovers should be eaten within four days.
- Always put leftovers in clean containers and never mix them with fresh food.

Flavoured oils

Homemade flavoured oils are popular and tasty gifts, but they have a limited shelf life of one week and must be kept refrigerated at all times. Oils made with fresh foods such as garlic and herbs pose the greatest risk. These products, often purchased from fairs and farmers’ markets, are frequently sold unrefrigerated. Before purchasing, ensure these oils have been refrigerated and check the preparation date. Do not purchase them if they are more than a week old.

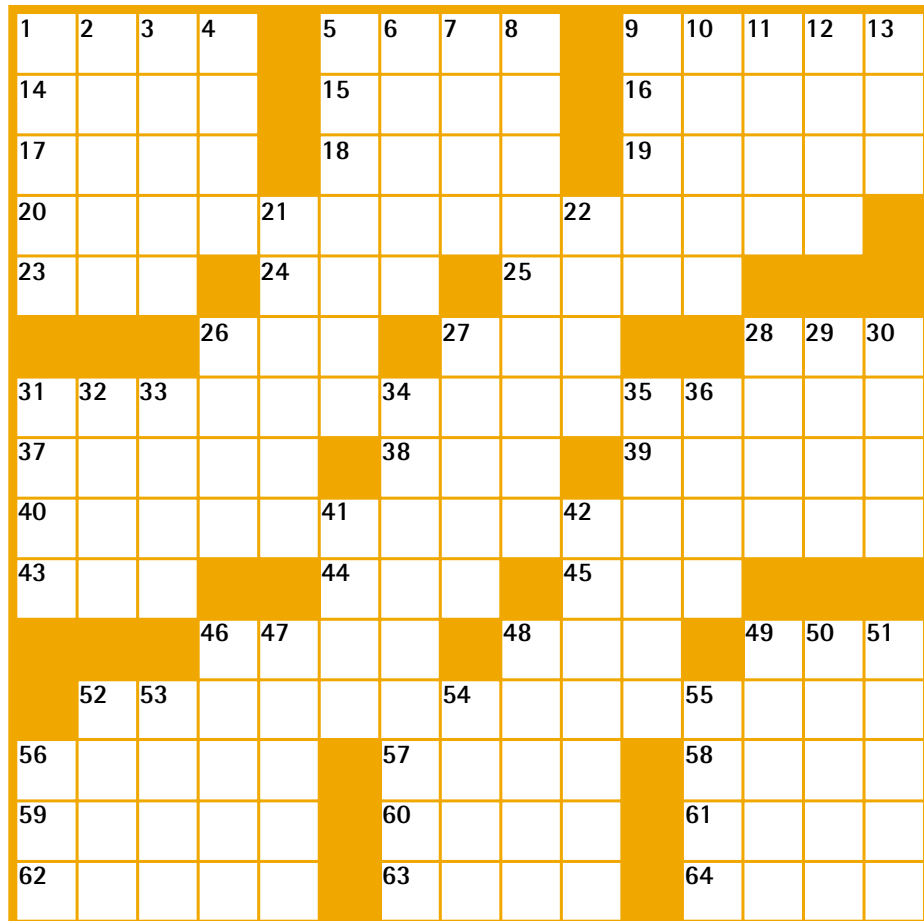
Commercially prepared products stored in oil and containing an acid (such as vinegar) or salt in their list of ingredients are generally considered to be safe. They should be refrigerated after opening and between each use.



Cook, Clean, Chill, Separate



This fun crossword puzzle has four themed clues which are the largest entries on the grid. The four clues are a 'spin' on the **FightBac™** messages—Cook, Clean, Separate and Chill. We challenge all readers and crossword-lovers to give the puzzle a try! See page 7 for the solution.



by Fraser Simpson

ACROSS

- 1 Sigmund's sometime collaborator
- 5 Veggie choice
- 9 Give your part
- 14 Shawm descendant
- 15 Exemplify
- 16 Swamp dweller
- 17 "The Bridges of Madison County" setting
- 18 It might appear in a table
- 19 Expos, e.g.
- 20 COOK
- 23 Arch
- 24 Sinn Fein org.
- 25 Bubble-filled bar
- 26 _____ flash
- 27 Reckless Olympian
- 28 Lacrosse team
- 31 CLEAN
- 37 Soft palate dangler
- 38 Hirt and others
- 39 Outer ear part
- 40 CHILL
- 43 Part of GST
- 44 Wolf Blitzer's network
- 45 Union on the waterfront
- 46 Alternative to DEG or RAD, on a calculator
- 48 Harriet, to Ricky
- 49 Aix-en-Provence, e.g.
- 52 SEPARATE
- 56 Asks
- 57 Surf's murmur
- 58 "Ritorna vincitor" singer
- 59 Aussie/Brit cricket trophy, with "The"
- 60 Even once
- 61 Metric unit
- 62 Novel genre
- 63 Movie about John Reed
- 64 Anguilliform creatures

DOWN

- 1 Do, do, do?
- 2 Seething
- 3 Bullyboy
- 4 Galena yield
- 5 Dealing with the outer eyeball
- 6 Michelangelo sculpture
- 7 2002 Games locale
- 8 Kind of attitude
- 9 Drift
- 10 White House?
- 11 Star _____
- 12 Towel word
- 13 UFO crew
- 21 Descendant
- 22 Carp
- 26 Contempt follower
- 27 Wiped
- 28 Resin used in perfumes
- 29 Base
- 30 Barbershop call
- 31 Eur. country
- 32 Dyed-in-the-wool
- 33 Tries the lamp?
- 34 Clothes washer
- 35 Role for Geena
- 36 Phoenix suburb
- 41 Pigeon's undoing
- 42 Unruly folk
- 46 One on staff?
- 47 Martini go-with
- 48 Dealt
- 49 Hobbits' home, with "The"
- 50 Cycle
- 51 "Watership Down" author
- 52 Pear choice
- 53 K-8
- 54 Pacifist
- 55 Avant-garde composer John
- 56 Ballet move

Acknowledgements

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Who We Are

The Partnership is a group of over 50 public and private sector organizations dedicated to helping consumers handle, store and prepare food safely. With support from our members across the country, the Partnership is focused on teaching Canadians about food safety with a goal of reducing the incidence of foodborne illness. Thanks to all of our members for their support.

Level I Partners

Agriculture & Agri-Food Canada*
 Canadian Council Grocery Distributors*
 Canadian Egg Marketing Agency*
 Canadian Food Inspection Agency*
 Canadian Meat Council*
 Canadian Poultry & Egg Processors Council*
 Canadian Produce Marketing Association*
 Chicken Farmers of Canada*
 Health Canada*
 Ontario Ministry of Agriculture & Food

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 Fraser Health Authority
 Guelph Food Technology Centre
 Kidney Foundation of Canada

Muskoka Parry Sound Health Unit
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 Ontario Family Studies Leadership Council
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 Ontario Independent Meat Processors
 Ontario Public Health Association
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