FOOD SAFETY
AT HOME

FOOD SAFETY AT HOME

About this guide

This guide explains safe food handling practices that you can do at home to reduce your risk of food-borne illness. Many food-borne illnesses can be prevented by following these four steps: clean, separate, cook, and chill.

BE FOOD SAFE.

FOOD-BORNE ILLNESS

People get sick from food prepared at home more often than you might think. It is estimated there are about four million cases of food-borne illness every year in Canada. **That is one in eight Canadians.**

Food-borne illness is caused by food or drink that contains bacteria, viruses or parasites such as *campylobacter, E. coli, norovirus, listeria, salmonella, cryptosporidium, and trichinella.*

Common symptoms include: diarrhea, stomach cramps, nausea, vomiting, fever, and headache.

These symptoms can appear several hours, several days or more than a month after eating contaminated food.

Who is at risk?

Most people recover completely from food-borne illness. However, adults aged 60 and older, pregnant women, children under the age of five years, and people with weakened immune systems are at higher risk for more serious health problems. Some of these conditions include kidney failure, chronic arthritis, miscarriage, and even death.

Take extra care to prevent illness

Fortunately, most cases of food-borne illness can be prevented.

Four steps
TO FOOD SAFETY

clean separate cook chill

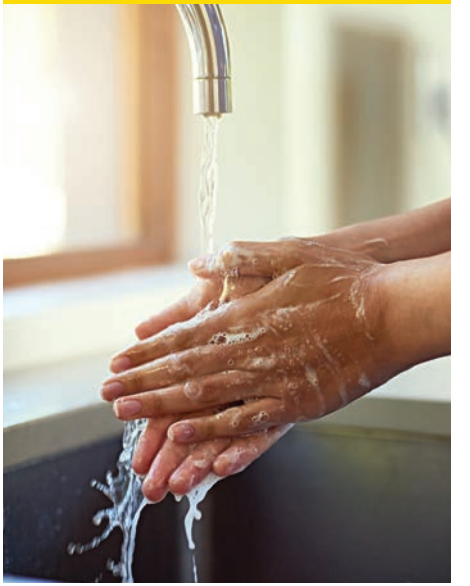
WASH HANDS AND SURFACES OFTEN.

Bacteria and other germs can spread throughout the kitchen and get on hands, cutting boards, knives, and countertops. Clean often to prevent illness.

clean

Wash hands and kitchen equipment often

- Wash your hands with soap and warm water for 20 seconds before and after handling food.
- Wash cutting boards, dishes, utensils, and countertops with hot, soapy water after any contact with raw meat, poultry, seafood, eggs, and unwashed fresh produce.
- Don't use the same towel for drying hands that is used for drying dishes/utensils. Have different towels for each use. Or use a paper towel once, and discard
- Wash kitchen cloths frequently in the hot cycle of a washing machine.



Wash fresh vegetables and fruits

- Wash fresh vegetables and fruits under cool running water. This includes vegetables and fruits with a skin/rind that is not eaten.
- Use a clean vegetable brush to wash produce with a firm skin, including carrots, potatoes, melons, and squash
- Cut away any bruised or damaged areas on vegetables and fruits as harmful bacteria can thrive in these areas.

Myth

Washing eggs, meat, and poultry removes bacteria.

This is not true.

Washing eggs before storing removes the protective coating on the shell, allowing bacteria in.

Bacteria in raw meat and poultry juices can spread to other foods, utensils, and surfaces. This is called cross-contamination.

HANDWASHING IS ONE OF THE BEST WAYS TO PREVENT FOOD-BORNE ILLNESS.

separate

DON'T CROSS-CONTAMINATE.

Cross-contamination occurs when bacteria are spread from one food to another. To avoid this, keep raw meat, poultry, and seafood (and their juices) separate from cooked or ready-to-eat foods.

Grocery cart and fridge

- Separate raw meat, poultry, and seafood from other food in your grocery cart, grocery bags, and fridge.
- Place raw meat, seafood, and poultry on the bottom shelf of your fridge and in leak proof containers so juices from these foods cannot drip onto other foods.
- When thawing frozen meat in the fridge, keep it in a leak proof container to ensure it doesn't drip onto ready to eat foods during the thawing process.

Cutting boards

- Use one cutting board for ready-to-eat food and a separate one for raw meat, poultry, and seafood.

SERVING PLATES

Always put cooked food on a clean plate. Never place it on an unwashed plate previously used for raw meat or unwashed produce.

cook

COOK TO PROPER TEMPERATURES.

Food is properly cooked when it is at a high enough temperature to kill harmful bacteria, such as E. coli, salmonella, and listeria. Be sure to cook food to proper internal temperatures.

Use a food thermometer

Always use a food thermometer to check the internal temperature of the thickest part of meat, poultry, fish or seafood because food can cook unevenly (See the *Safe Cooking and Reheating Temperatures of Hazardous Food Chart* on Page 15 of this booklet).

Microwave safely

Cover your food and rotate the dish once or twice during cooking (unless you have a turntable) and stir the contents of the dish. Also, use your microwave's power settings to ensure even cooking. Allow for standing time to finish cooking.

Keep food hot

If cooked food is not eaten immediately, keep it hot at 60°C (140°F) or higher, until it is eaten. If you don't keep hot food hot, chill it quickly. Bacteria can grow quickly in the danger zone between 4°C to 60°C (40°F to 140°F).

Reheat leftovers

- Reheat solid foods to 74°C (165°F) or higher.
- Reheat sauces, soups, and gravy to a rolling boil. Make sure to stir while heating.
- Reheating leftovers in a slow cooker is not recommended.

Myth

You can tell if meat is cooked by checking its colour.

Despite common belief, the colour of meat is not a reliable sign that meat is done or safe to eat.

Meat can turn brown before all the bacteria are killed. The only way to know if food is thoroughly cooked is to use a food thermometer.

FOOD THERMOMETER TIPS

- Insert the thermometer into the thickest part of the meat, all the way to the middle. Make sure the thermometer is not touching any bone or fat.
- Clean the thermometer with warm water and soap each time after you use it (between readings).
- Digital instant-read food thermometers are the easiest to handle.

Oysters:

Cook raw oysters to a minimum internal temperature of 90°C (194°F) for a minimum of 90 seconds.

chill

CHILL PROMPTLY.

The bacteria in food stored at room temperature doubles every 20 minutes. One of the most effective ways to prevent food-borne illness is to keep food properly chilled. Chilling food slows the growth of harmful bacteria.

Set your fridge at 4°C

Is your fridge cold enough? Make sure your fridge is set at 4°C (40°F) or lower. Check the temperature from time to time with a fridge thermometer. If your fridge does not have a built-in thermometer, you can purchase one at a store that sells kitchen gadgets.

Remember the "two-hour rule"

- Refrigerate or freeze perishable food, prepared food, and leftovers within two hours. This "rule" includes food from the grocery store or food left on the counter.
- Discard perishable food that has been left out for longer than two hours.

DEFROST FOOD SAFELY

Three ways to defrost food safely:

1 In the fridge
2 Under cold running water
3 In the microwave

(If you use a microwave to defrost, cook the food immediately afterward)

Avoid defrosting food at room temperature.

Keep **hot** foods **hotter** than **60°C (140°F).**

Keep **cold** foods **colder** than **4°C (40°F).**

Use canned food safely

- Never eat food from jars with loose or bulging lids, or eat from badly dented, bulging or leaking cans.
- Store cans in a cool, dry, clean place.
- Eat within one to two years or before the 'best before' date on the jar/can.
- Do not store foods in open cans.

STORE FOOD SAFELY

- Divide large amounts of leftovers into shallow containers for quicker cooling in the fridge.
- Refrigerate leftovers promptly and use them as soon as possible.

Myth

You can tell if food has spoiled by the way it looks, smells, and tastes.

Using sight, smell, and taste to judge if food is safe is **unreliable.** As we age, our sense of sight, smell, and taste is reduced. These less acute senses reduce our ability to notice the warning signs of spoiled food. At the same time, some foods may be unsafe to eat without tasting or smelling bad.

FOLLOW 'BEST BEFORE' DATES CORRECTLY

The 'best before' date on food packaging indicates how long the **unopened** food will keep its freshness and nutritional value. Once it is opened, the 'best before' date **no longer applies.**

The storage life of any food depends on how that food is stored. Use the 'best before' date, along with the *Refrigerator Storage Chart* on page 17 of this booklet, to determine how long to keep food in the fridge.

What is the format of best before dates?

Best before dates must be in both English and French, using the words "best before" and "meilleur avant" with a date in the **year-month-day** format. The best before date will look like this example:

Best before 22 NO 08
Meilleur avant

Best before date abbreviations

January	JA	July	JL
February	FE	August	AU
March	MR	September	SE
April	AL	October	OC
May	MA	November	NO
June	JN	December	DE

Expiry dates are found on some foods such as meal replacements, nutritional supplements, infant formulas, and formulated liquid diets. After the expiry date, these products should not be consumed.

HIGH RISK FOODS

According to Health Canada, the foods listed below have been linked to outbreaks of food-borne illness. These foods must be **fully cooked** to eliminate bacteria, viruses, and parasites.

To reduce risk, adults aged 60 and older, pregnant women, children under the age of five years, and people with weakened immune systems should avoid eating these foods in a raw or semi-cooked state:

- Raw meat or undercooked poultry.
- Raw fin fish and shellfish, including oysters, clams, mussels, and scallops.
- Raw or unpasteurized milk from cows or goats, or foods made from unpasteurized milk.
- If you use cheese made from unpasteurized milk, only eat cheeses aged for 60 days or longer.
- Soft cheeses, including feta, brie, camembert, and queso blanco fresco.
- Raw or lightly cooked egg or egg products, including salad dressings, cookie or cake batter, sauces, and homemade eggnog.
  - If you choose to make eggnog with whole eggs, heat the milk mixture to 71°C (160°F).
  - Foods made from commercially pasteurized eggs have a reduced risk.
- Raw sprouts, including alfalfa, clover, radish, and mung beans.
- Unpasteurized fruit juice and cider.

FOOD SAFETY IN THE COMMUNITY

Many churches, community centres, private clubs, and condominium complexes in Windsor and Essex County have kitchens used for potluck suppers, seniors' luncheons, and other community functions.

If you are a volunteer or if you participate in community events, please pass on these four food safety steps: **clean, separate, cook, and chill.** Remind everyone to make food safety a priority.

BE FOOD SAFE.

Sources:
Canadian Partnership for Consumer Food Safety Education. befoodsafe.ca
Safe Food Handling for Adults 60+. Health Canada, 2010.
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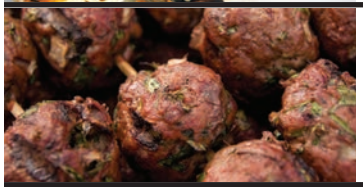
notes

SAFE COOKING AND REHEATING

TEMPERATURES OF HAZARDOUS FOOD

Cook food to the minimum internal temperature and hold for 15 seconds.
Use a clean probe thermometer to verify food temperatures.

		minimum internal cooking	minimum reheating
	whole poultry	82°C (180°F)	74°C (165°F)
	ground poultry poultry products poultry pieces	74°C (165°F)	74°C (165°F)
	food mixtures containing poultry, eggs, meat, fish, or other hazardous food	74°C (165°F)	74°C (165°F)
	pork pork products ground meat other than ground poultry	71°C (160°F)	71°C (160°F)
	fish	70°C (158°F)	70°C (158°F)
	beef lamb rice seafood other hazardous food	70°C (158°F)	70°C (158°F)

FOOD HANDLERS' STORAGE GUIDE

General guidelines for the shelf life of common foods. Read the label and check "best before" dates if applicable. Most foods are safe to eat if stored longer, but flavour and nutritional value will deteriorate. Discard if there is evidence of spoilage.

CUPBOARD (ROOM TEMPERATURE)

Unless otherwise specified, times apply to unopened packages.

CEREAL GRAINS
(once opened, store in airtight containers, out of light and heat)

Bread crumbs (dry) ..... 3 mo
Cereals (ready-to-eat) ..... 8 mo
Cornmeal ..... 6-8 mo
Crackers ..... 6 mo
Pasta ..... several yr.
Rice ..... several yr.
Rolled oats ..... 6-10 mo
White flour ..... 1 yr.
Whole wheat flour ..... 3 mo

CANNED FOODS
(once opened, store covered in airtight container in refrigerator)

Evaporated milk ..... 9-12 mo
Other canned foods ..... 1 yr.

DRY FOODS
(once opened, store in airtight containers, out of light and heat)

Baking powder, baking soda ..... 1 yr.
Beans, peas, lentils ..... 1 yr.
Chocolate (baking) ..... 7 mo
Cocoa ..... 10-12 mo
Coffee (ground) ..... 1 mo
Coffee (instant) ..... 1 yr.
Coffee whitener ..... 6 mo
Fruit (dried) ..... 1 yr.
Gelatin ..... 1 yr.
Jelly powder ..... 2 yr.
Mixes (cake, pancake, and biscuit) ..... 1 yr.
Mixes (pie filling and pudding) ..... 18 mo
Mixes (main dish accompaniments) ..... 9-12 mo
Potatoes (flakes) ..... 1 yr.
Skim milk powder
- unopened ..... 1 yr.
- opened ..... 1 mo
Sugar (all types) ..... several yr.
Tea bags ..... 1 yr.

MISCELLANEOUS FOODS

Honey ..... 18 mo
Jam, jellies
(once opened, covered in fridge) ..... 1 yr.
Mayonnaise, salad dressings

- unopened ..... 6 mo
- opened (covered in fridge)..... 1-2 mo

Molasses ..... 2 yr.

Nuts ..... 1 mo

Peanut butter
- unopened ..... 6 mo
- opened ..... 2 mo

Pectin - liquid..... 1 yr.
- opened (covered in fridge)..... 1 mo
- powdered ..... 2 yr.

Sandwich spread
(once opened, covered in fridge)..... 8 mo

Syrups - corn, maple, table..... 1 yr.

Vegetable oils
(once opened, covered in fridge)..... 1 yr.

Vinegar ..... several yr.

Yeast (dry)..... 1 yr.

VEGETABLES

Potatoes, rutabaga, squash..... 1 wk

Tomatoes ..... 1 wk

Cool room (7-10°C, 45-50°F)

Onions (dry, yellow skin)..... 6 wk

Potatoes (mature)..... 6 mo

Rutabaga (waxed)..... several mo

Squash (winter) ..... several mo

REFRIGERATOR (4°C, 40°F)

Unless otherwise specified, cover all foods.

DAIRY PRODUCTS & EGGS (check "best before" dates)

Butter
- unopened ..... 8 wk
- opened ..... 3 wk

Cheese
- cottage (opened) ..... 3 days
- firm..... several mo
- processed (unopened) ..... several mo
- processed (opened) ..... 3-4 wk

Eggs ..... 3 wk

Margarine
- unopened ..... 8 mo
- opened ..... 1 mo

Milk, cream, yogurt (opened)..... 3 days

FISH AND SHELLFISH

Clams, crab, lobster, and mussels
(live) ..... 12-24 hr

Fish (cleaned)
- raw ..... 3-4 days
- cooked ..... 1-2 days

Oysters (live) ..... 24 hr

Scallops, shrimp (raw) ..... 1-2 days
Shellfish (cooked)..... 1-2 days

FRESH FRUIT (RIPE)

Apples..... 2 mo
- purchased February to July ..... 2 wk
Apricots (store uncovered) ..... 1 wk
Blueberries (store uncovered) ..... 1 wk
Cherries..... 3 days
Cranberries (store uncovered) ..... 1 wk
Grapes..... 5 days
Peaches (store uncovered) ..... 1 wk
Pears (store uncovered)..... 1 wk
Plums..... 5 days
Raspberries (store uncovered)..... 2 days
Rhubarb ..... 1 wk
Strawberries (store uncovered) ..... 2 days

FRESH VEGETABLES

Asparagus ..... 5 days
Beans (green, wax) ..... 5 days
Beets..... 3-4 wk
Broccoli ..... 3 days
Brussels sprouts ..... 1 wk
Cabbage..... 2 wk
Carrots..... several wk
Cauliflower..... 10 days
Celery..... 2 wk
Corn ..... use same day
Cucumbers ..... 1 wk
Lettuce..... 1 wk
Mushrooms..... 5 days
Onions (green) ..... 1 wk
Parsnips ..... several wk
Peas ..... use same day
Peppers (green, red, etc.) ..... 1 wk
Potatoes (new)..... 1 wk
Spinach ..... 2 days
Sprouts..... 2 days
Squash (summer)..... 1 wk

MEAT & POULTRY

Uncooked

Chops, steaks ..... 2-3 days
Cured or smoked meat ..... 6-7 days
Ground meat..... 1-2 days
Poultry ..... 2-3 days
Roasts ..... 3-4 days
Variety meats, giblets ..... 1-2 days

Cooked

All meats and poultry..... 3-4 days
Casseroles, meat pies, and meat sauces ..... 2-3 days
Soups ..... 2-3 days

MISCELLANEOUS FOODS

Coffee (ground)..... 2 mo
Nuts ..... 4 mo
Shortening..... 12 mo
Whole wheat flour ..... 3 mo

FREEZER (-18°C, 0°F)

Use freezer wrapping or airtight containers. Freeze fresh food at its peak condition.

DAIRY PRODUCTS & FATS

Butter
- salted ..... 1 yr.
- unsalted ..... 3 mo

Cheese - firm, processed ..... 3 mo

Cream - table, whipping
(separates when thawed) ..... 1 mo

Ice cream ..... 1 mo

Margarine ..... 6 mo

Milk ..... 6 wk

FISH AND SHELLFISH

Fish (fat species:
lake trout, mackerel, salmon) ..... 2 mo

Fish (lean species:
cod, haddock, pike, smelt) ..... 6 mo

Shellfish ..... 2-4 mo

FRUITS & VEGETABLES

All fruits & vegetables ..... 1 yr.

MEAT, POULTRY, & EGGS

Uncooked

Beef (roasts, steaks) ..... 10-12 mo

Chicken, turkey
- cut up ..... 6 mo
- whole ..... 1 yr.

Cured or smoked meat ..... 1-2 mo

Duck, goose ..... 3 mo

Eggs (whites, yolks) ..... 4 mo

Ground meat ..... 2-3 mo

Lamb (chops, roasts) ..... 8-12 mo

Pork (chops, roasts) ..... 8-12 mo

Sausages, wieners ..... 2-3 mo

Variety meats, giblets ..... 3-4 mo

Veal (chops, roasts) ..... 8-12 mo

Cooked

All meat ..... 2-3 mo

All poultry ..... 1-3 mo

Casseroles, meat pies ..... 3 mo

MISCELLANEOUS FOODS

Bean, lentil, pea casseroles ..... 3-6 mo

Breads
(baked or unbaked, yeast) ..... 1 mo

Cakes, cookies (baked) ..... 4 mo

Herbs ..... 1 yr.

Pastries, quick bread (baked) ..... 1 mo

Pastry crust (unbaked) ..... 2 mo

Pie (fruit, unbaked) ..... 6 mo

Sandwiches ..... 6 wk

Soups (stocks, cream) ..... 4 mo

This is intended as general information and the Windsor-Essex County Health Unit assumes no responsibility towards persons using this guide. Adapted from the Government of Ontario - Ministry of Agriculture and Food.

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FOOD SAFETY TIPS for Home Canning

INTRODUCTION

Home canning is an excellent way to preserve food product freshness. If you are considering home canning, there are things you can do to ensure that your food products are safe.

Know the risks

Canned foods that are not prepared properly at home can lead to botulism, a deadly form of food poisoning caused by the bacterium C. botulinum. Botulism spores are hard to kill and are extremely heat-resistant. Foods contaminated with the C. botulinum toxin may not look, smell, or taste spoiled. Do not eat from cans or bottles that are dented, leaking or have bulging ends, as this could mean that the contents are unsafe.

Safe home canning practices

Home canning requires special equipment including heavy-duty glass jars, metal lids, metal rings, metal bands, boiling water canners, and pressure canners. Always read the manufacturer's instructions for your canning equipment and follow recipes from reputable sources carefully. Changing ingredients and cooking times can result in unsafe food.

Before you start canning, determine the acid level of the food.

High-acid foods	Low-acid foods
Fruit	Most fresh vegetables except tomatoes
Jams, jellies, marmalades	Meat and poultry
Fruit butters	Seafood – fish and shellfish
Pickles and sauerkraut	Soup and milk
Tomatoes with added lemon juice or vinegar	Spaghetti sauce with meat, vegetables and tomatoes

High-acid foods require a boiling water canner

High-acid foods include those with a pH of less than 4.6.

Low-acid foods require a pressure canner

Low-acid foods include those with a pH of more than 4.6. Tomatoes are borderline high-acid food and require an acid, such as lemon juice or vinegar, to be added for safe canning. Mixtures of low and high-acid foods, such as spaghetti sauce with meat, vegetables, and tomatoes, are considered low-acid foods and require a pressure canner to destroy botulism causing bacteria.

FOOD pH CHART

	9.0	
Neutral pH	**8.0**	egg whites, olives
Acidic pH	**7.0**	water, milk
	6.0	meat, melons, cheese
	5.0	vegetables, bread
	4.0	tomatoes, fruits/jams
	3.0	orange juice, pears, plums
	2.0	vinegar, lemon/lime

FOOD SAFETY IN YOUR HOME CANNING PRACTICES

CLEAN

- Wash hands with soap and warm water for 20 seconds before and after handling food.
- Wash vegetables and fruits, including those with rinds thoroughly with clean, cool running water before preparing them.
- Clean and sanitize all work surfaces, utensils, and equipment. Keep them clean during all stages of the canning process to avoid cross-contamination.
- Sterilize your jars. This means washing them in hot soapy water and then boiling the jars according to recipe instructions.
- Inspect jars to make sure they are free of cracks and chips.

SEPARATE

- Use one cutting board for washed, fresh produce and a separate one for raw meat, poultry, and seafood.
- Only use new self-sealing lids and make sure the sealing compound is not damaged before use. Screw bands may be re-used.
- Discard any rusted or dented bands.

COOK

- Use only current, tested home canning recipes. Never substitute the jar size or the amounts of ingredients that are recommended in the recipe.
- Use the appropriate heat-processing method according to the acidity of the food.
- During processing, check that adequate cooking or heating temperatures are maintained.

CHILL

- Label and date all home canned foods before storing.
- Store in a cool, dry place. For best quality, use within one year from the date they were made.
- Once the container has been opened, refrigerate leftovers.

FOOD-BORNE ILLNESS

- According to Health Canada, symptoms of botulism usually appear within 12 to 36 hours after eating contaminated food. These symptoms may include:
  - Nausea
  - Headache
  - Vomiting
  - Double vision
  - Fatigue
  - Dryness in the throat and nose
  - Dizziness

  These symptoms will usually last two hours to 14 days but some can last longer.

SERIOUS HEALTH RISKS CAN INCLUDE:

- Respiratory failure
- Paralysis
- Death

Call 9-1-1 to seek immediate medical attention if you experience these symptoms. Persons at higher risk for serious health effects include pregnant women, children under the age of five, adults over the age of 60, and people with weakened immune systems.

For more information, contact the Environmental Health Department 519-258-2146 ext. 4475 or email inspection@wechu.org

WINDSOR-ESSEX COUNTY
HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

Environmental Health
Department
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wechu.org

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