Your guide to safe food handling
The Facts...

Food poisoning, a type of foodborne illness, results from eating foods that contain enough harmful microorganisms or their toxins to cause illness. Although often mistaken as a viral illness, like the 24-hour flu, Health Canada estimates that there are about 4 million or 1 in 8 Canadians effected by foodborne illness in each year.

For those at high risk – infants and young children, pregnant women, older adults and people with weakened immune systems – foodborne illness can result in very serious health problems, such as kidney failure.

All foods, including fruits and vegetables, have the potential to cause illness since microorganisms can exist on all surfaces.

1 in 10 Canadians may use unsafe practices that put them at risk for foodborne illness.

You’re in control...

There are 4 EASY steps you can take at home to eliminate harmful bacteria and greatly reduce the risk of foodborne illness for your family.

1. CLEAN - wash hands and surfaces often
2. CHILL - refrigerate or freeze foods promptly
3. SEPARATE - keep raw meat/poultry/seafood and their juices separate from one another and other foods
4. COOK - cook foods to proper temperatures

Studies estimate that about eighty-five percent of all cases of foodborne illness could be prevented if food is handled properly.
**Clean:** Wash hands and surfaces often. Proper hand washing may eliminate nearly half of all cases of foodborne illness.

- **Wash your hands** before you begin cooking and after you touch pets, change a diaper, cough or sneeze, use the phone, sort dirty laundry, use the restroom, take out the garbage or handle dirty dishes.

- Wash your hands for 20 seconds – that’s two choruses of “Happy Birthday”. Keep a nail scrub brush handy to get under your fingernails. Use a clean cloth or paper towels to dry.

- **Always wash hands, utensils, cutting boards and surfaces when switching tasks, such as handling raw meat/poultry/seafood and preparing vegetables.**

- Mix 1 tsp (5 mL) bleach with 3 cups (750 mL) water to sanitize drains, cutting boards, taps, sinks, counter tops, sponges, pot scrubbers and fridge door handles. Store your bleach solution in a labelled spray bottle.

- Wash sponges with hot soapy water after every use. Change sponges, dishcloths, aprons and towels often – machine wash in hot water. Replace sponges every few weeks.

- **Wash all fruits and vegetables, including those that you peel or cut, like melons, oranges or cucumbers.**

- Washing eggs is **not recommended** as this will remove their natural protective coating.

- **Rinsing raw meat/poultry/seafood before cooking is NOT RECOMMENDED** as this can spread bacteria to kitchen surfaces and other foods.

- Thoroughly wash hands using warm, soapy water.

- Frequently sanitize your kitchen using a chlorine bleach solution.
chill: Refrigerate/freeze foods promptly.
Cold temperatures can prevent most harmful bacteria from growing.

- **Use the 2 Hour Rule in your home and while shopping** – refrigerate or freeze all perishables within 2 hours of purchase or preparation. If the weather is hot (greater than 80°F/26°C), reduce that time to 1 hour and use a cooler for perishables.
- Set your fridge temperature to be less than 40°F (4°C) and just slightly above the point where your lettuce will freeze. Check the temperature with a refrigerator thermometer. Avoid packing your fridge – cold air must be able to circulate.
- Store eggs in the main body of the fridge, not the door. This keeps eggs at a cooler, more consistent temperature. When buying and storing eggs, check the “best before” date on carton for assurance of Grade A quality.
- **Marinate foods in the fridge.** If using a 30 minute quick-marinade product, follow package instructions.
- **Never defrost foods at room temperature.**
- Meat/poultry/seafood defrosted in the microwave should be cooked immediately.
- **Raw meat/poultry/seafood that has been frozen and thawed needs to be cooked before refreezing.** (If ice crystals are still present, it can be refrozen)
- Remove cooked poultry from bones of whole birds before storing in fridge or freezer.
- **Divide leftovers into small portions to get foods cold faster.** Refrigerate leftovers promptly and cover when cooled. Don’t keep leftovers longer than 2 to 3 days.

Refrigerator defrosting is the safest way to thaw.

### Storage Chart
(from "packaged on" date or purchase date from butcher)

<table>
<thead>
<tr>
<th></th>
<th>Fridge</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground meats/poultry, fresh seafood</td>
<td>1 day</td>
<td>2-3 months</td>
</tr>
<tr>
<td>Variety meats (e.g., liver, kidney, heart)</td>
<td>1-2 days</td>
<td>3-4 months</td>
</tr>
<tr>
<td>Stew meat, ribs, stir-fry strips, kabobs</td>
<td>2 days</td>
<td>3-6 months</td>
</tr>
<tr>
<td>Whole chicken/turkey or pieces</td>
<td>2-3 days</td>
<td>pieces 6 months whole 12 months</td>
</tr>
<tr>
<td>Steaks, roasts, chops</td>
<td>2-4 days</td>
<td>8-12 months</td>
</tr>
<tr>
<td>Cooked meats/poultry, cold cuts (open pkg)</td>
<td>3-4 days</td>
<td>2-3 months</td>
</tr>
<tr>
<td>Vacuum packed roasts/steaks (unopened)</td>
<td>See best before date</td>
<td>10-12 months</td>
</tr>
<tr>
<td>Fresh shell eggs</td>
<td>See best before date</td>
<td>For egg freezing instructions visit <a href="http://www.eggs.ca">www.eggs.ca</a></td>
</tr>
</tbody>
</table>

†NOTE: If package has a “best before date”, use by that date. Once opened, use or freeze as recommended in chart above.

You can’t tell if food is safe by smelling or looking at it. IF IN DOUBT, THROW IT OUT.

For a more detailed storage chart visit www.befoodsafe.ca
**separate:** Don’t cross-contaminate. Keep raw meat/poultry/seafood and their juices separate from one another and other foods during storage and preparation.

- When shopping, keep packages of meat/poultry/seafood in bags separate from other groceries.
- **Prevent meat/poultry/seafood juices from dripping onto other foods in the fridge** – place on a plate and store on the bottom shelf.
- Place washed produce in clean containers, not back into their original unwashed packaging.
- Store eggs in their original carton to prevent them from absorbing odours and flavours from other foods.
- Wash scissors or blades used to cut open food packages.
- **Ideally use two cutting boards:** one for raw meat/poultry/seafood; the other for cooked foods and washed fruits/vegetables.
- Ideally, place packages of meat and poultry in separate plastic bags that are found at the grocery store meat counter.
- Clean and sanitize cutting boards using hot soapy water followed by a mild bleach solution (1 tsp/5 mL bleach: 3 cups/750 mL water); rinse. Plastic cutting boards can be cleaned and sanitized in the dishwasher.
- **When checking cooked foods for seasoning, don’t "double dip"** – once you’ve done your tasting, don’t put the tasting spoon back into the pot.
- When basting, brush sauce on cooked surfaces only. Be careful not to add sauce with a brush previously used on raw meat/poultry/seafood.
- **Do not reuse a marinade that has been in contact with raw meat. Discard or bring to a rolling boil for 1 minute before using as a basting or dipping sauce.**
- Remove stuffing from poultry immediately after roasting or cook stuffing separately.
**cook**: Cook meat/poultry/seafood and eggs to proper temperatures.

- Use a food thermometer or temperature indicator. This is the ONLY way to tell if your food has reached a high enough internal temperature to destroy harmful bacteria.

- To know when burgers are done, check patty temperatures with a proper thermometer. Research shows that the colour of cooked ground beef can vary — beef burger patties may be brown in the centre before being cooked to a safe temperature.

- Beef steaks and roasts can be enjoyed cooked from medium-rare to well-done. Steaks should be turned twice or more while cooking to ensure even heating. Test for doneness using a digital instant read thermometer.

- Don’t bring meat/poultry/seafood to room temperature before cooking.

- Finish cooking partially cooked meat/poultry/seafood immediately — do not hold to finish cooking at a later time.

- Serve cooked eggs or egg-rich foods (like rice pudding) immediately after cooking or refrigerate promptly and serve within 2 to 3 days.

- Stuff poultry just before cooking, stuffing loosely — no more than two-thirds full.

- Use the Temperature Rules chart for safe doneness temperatures regardless of thermometer manufacturer’s guidelines.

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### Temperature Rules for Safe Doneness

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Safe Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground meat and meat mixtures (burgers, sausages, meatballs, meatloaf, beef minute steak and casseroles)</td>
<td>160°F (71°C)</td>
</tr>
<tr>
<td>Ground chicken/turkey</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Beef, lamb and veal roasts and steaks</td>
<td>145°F (63°C) Med-rare, 160°F (71°C) Medium, 170°F (77°C) Well</td>
</tr>
<tr>
<td>Pork chops/roasts/fresh cured ham</td>
<td>160°F (71°C) Medium</td>
</tr>
<tr>
<td>Fresh (raw) ham</td>
<td>160°F (71°C)</td>
</tr>
<tr>
<td>Pre-cooked ham</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Whole turkey (stuffed)</td>
<td>180°F (82°C)</td>
</tr>
<tr>
<td>Chicken (stuffed or not)</td>
<td>180°F (82°C)</td>
</tr>
<tr>
<td>Stuffing (alone or in the bird cavity)</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Chicken/turkey pieces</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Duck and goose</td>
<td>180°F (82°C)</td>
</tr>
<tr>
<td>Egg dishes, casseroles</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Raw breaded chicken products</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Do not microwave.</td>
<td></td>
</tr>
<tr>
<td>Leftover, reheated</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Fish</td>
<td>158°F (70°C)</td>
</tr>
<tr>
<td>Shellfish (shrimp, crab, scallops, clams, oysters and mussels)</td>
<td>165°F (74°C)</td>
</tr>
<tr>
<td>Discard any clams, oysters or mussels that do not open when cooked.</td>
<td></td>
</tr>
</tbody>
</table>
Keep your family safe –
Cook to **safe** internal temperatures. Be especially careful if you’re cooking for those at high risk of serious illness from foodborne bacteria - infants/young children, pregnant women, older adults or those with chronic illness. Using a food thermometer or temperature indicator is the ONLY reliable way to test for safe internal temperatures.

An investment in safety –
Buy a digital instant-read or programmable thermometer. Look for these thermometers at houseware suppliers.

**Thermometer Know-How**

**Rules of Thumb:**

1. Take temperatures of thin foods like burgers within 1 minute of removal from heat, larger cuts like roasts, after 5 to 10 minutes.

2. Insert thermometer stem/indicator into the thickest part of the food, away from bone, fat or gristle.

3. Leave thermometer in food for at least 30 seconds before reading temperature.

4. When food has an irregular shape, like some beef roasts, check the temperature in several places.

5. **Wash the thermometer stem thoroughly in hot, soapy water after each use!**

6. Review manufacturer’s guidelines specific to the use of your thermometer or temperature indicator.
Programmable Digital Thermometer (A):
- Oven safe.
- Lets you monitor cooking without opening the oven AND it signals when your food is cooked to the doneness you select.
- Leave the thermometer stem inserted into the food while it cooks.
- Use for casseroles, roasts, whole poultry and meatloaves.

Digital Instant Read (B):
- Not oven safe.
- Use to test temperature near end of cooking – insert thermometer stem into the centre or thickest part of food to check.
- Ideal for thin or small pieces of meats such as steaks, burgers, chops, poultry pieces and meatballs.

Oven Safe Dial Thermometer (C):
- Oven safe.
- Lets you monitor cooking by checking.
- Leave the thermometer stem inserted into the food while it cooks.
- Not appropriate for use with thin cuts or pieces of meat such as steaks, burgers, chops, poultry pieces and meatballs.

How to Insert

- Thin foods like burgers, steaks, chops & chicken pieces: near end of cooking, remove from heat and insert instant-read thermometer stem sideways into the centre of patties or centre of thickest part of food. Insert to a depth of at least 1-1/2 inches (4 cm).

- Whole chicken: near end of cooking, remove from heat and insert instant-read thermometer stem starting at the thickest end of the breast, near the wing, so that the stem points in the direction of the drumsticks (parallel to and 1-1/2 inches (4 cm) from breast bone). If stuffed, check stuffing temperature by inserting thermometer stem into centre of stuffing.

- Meatloaves, roasts, casseroles and egg dishes: near end of cooking, remove from heat and insert instant-read thermometer stem into the centre of the thickest part of meat/casserole, to a depth of at least 1-1/2 inches (4 cm) OR for meatloaves/roasts, use oven safe or programmable digital thermometer: prior to cooking, insert thermometer stem into the centre of the thickest part of the meat, avoiding bottom of pan.

- Whole turkey: prior to cooking, insert stem of oven safe or programmable digital thermometer into the thickest part of the inner thigh meat, not touching thigh bone AND/OR near end of cooking, remove from heat and insert instant-read thermometer stem into inner thigh meat (as above). If stuffed, check stuffing temperature by inserting thermometer stem into centre of stuffing.

Always wash the tongs, plate and thermometer stem used in checking partially cooked meats/poultry before using again.
More questions about safe food handling?
Visit www.befoodsafe.ca or call your local public health office.
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