

Preventing food poisoning

When your immune system is weakened



When your immune system is weakened, your body doesn't defend itself as well. Then you're more likely to get food poisoning. This fact sheet gives you useful tips to prevent this.

Who is this fact sheet for?

This fact sheet is mainly for anyone whose immune system is weakened due, for example, to:

- chemotherapy for cancer treatment
- an organ transplant
- HIV infection

People in these situations are less able to fight off infections that may come from food or other sources.

What is food poisoning?

Food poisoning, also called food-borne illness, is an infection of the digestive system. It occurs when you eat food contaminated with bacteria, viruses, parasites, or the toxic substances they secrete.

For someone with a weakened immune system, this can be dangerous and lead to long-term medical complications or even death.

The symptoms are:

- heartburn (nausea)
- vomiting
- stomach pain and cramps
- diarrhea
- fever and chills



What foods should I eat to reduce the risk?

Some foods are riskier than others for people with weakened immune systems.

To prevent food poisoning, it's best to avoid certain types of foods. You can replace them with safer foods. See the Food Table in the Appendix on page 6.



CAUTION

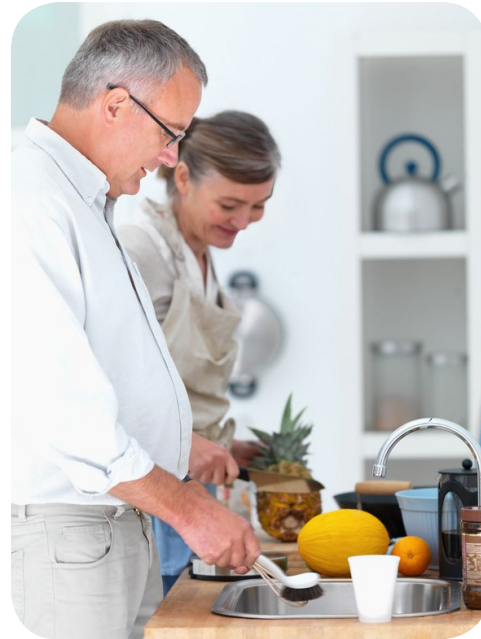
If you are taking **immunosuppressive** medications, check with your healthcare team to see if you should avoid products that contain probiotics.

What precautions should I take when grocery shopping?

- > Buy cold or frozen foods just before checking out.
- > Check the expiry (“best before”) dates on the package.
- > Don’t buy damaged fruits or vegetables.
- > Don’t buy damaged canned goods.
- > In your cart, separate raw meat, poultry, fish, and seafood from ready-to-eat foods. Place everything raw in separate plastic bags.
- > If you have reusable bags, always use the same one for raw meat, poultry, fish, and seafood. Identify it clearly.



- > Always wash fruits and vegetables in cold water.



How should I handle my foods?

- > Before touching food or cooking, wash your hands with soap.

Repeat each time you touch raw food. Also wash your hands after blowing your nose, using the toilet, and touching garbage or animals.

Steps for proper hand washing



1-Wet your hands



2-Lather with soap



3- Clean your nails



4-Rinse



5-Dry your hands



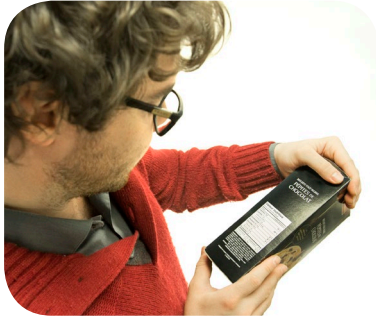
6-Finish with a paper towel

- > Brush fruits and vegetables with rough skins (potatoes, carrots, cantaloupes) before preparing them.
- > Use one cutting board for raw meat and another for vegetables. Choose plastic or glass cutting boards rather than wooden ones.
- > Don’t put cooked meat on a plate that was used to hold raw meat.

How should I store my food?

- > Remove fruits and vegetables from plastic bags before placing them in the refrigerator.
- > Keep cold products below 4°C (39°F) and hot products above 60°C (140°F). Bacteria multiply very quickly between these two temperatures.
- > Don’t leave leftovers at room temperature for more than 2 hours.
- > Cool cooked foods by placing them in shallow, half-covered containers in the refrigerator. When the food is cold, close the containers.
- > Eat leftovers within 3 days.
- > Eat ground meats, organ meats, poultry, and fish within 24 to 48 hours of purchase. For other meats, do not exceed 3 days.

- > Place raw meat, poultry, fish, and seafood on the bottom shelf of the refrigerator in a container.
- > Read the package label to see how long you can keep a product. The expiration date is only valid for a product that has not been opened. See the Useful Resources listed in this fact sheet for advice on safe food storage.
- > Marinate meat in the refrigerator, not on the counter. Don't reuse the marinade unless you have boiled it.



CAUTION

Canning is risky if it's not done the right way. Choose freezing instead. See the Useful Resources listed at the end of this fact sheet to learn about canning and preserving food safely.

How should I defrost my food?

- > Defrost food by putting it in the refrigerator or soaking it in cold water (change the water every 30 minutes to keep it cold). If you thaw food in the microwave, cook it immediately afterward.
- > Never defrost food on the kitchen counter.

How should I cook my food?

Cook your food to a safe temperature.

The table below shows the minimum temperatures at which food must be cooked.

Cooking temperatures

Beef, veal, and lamb (whole cuts and pieces)	Medium rare: 63°C (145°F) Medium: 71°C (160°F) Well done: 77°C (170°F)
Ground meat and meat combinations (hamburger, sausages, meatballs, meatloaf, casseroles)	71°C (160°F)
Poultry (chicken, turkey, duck)	Ground or cut into pieces: 74°C (165°F) Whole: 82°C (180°F)
Pork	71°C (160°F)
Eggs and egg dishes	74°C (165°F)
Others (hot dogs, stuffing, leftovers, seafood, etc.)	74°C (165°F)

Caution: To prepare a slow cooker dish, use fresh meat or meat thawed beforehand.

How should I wash my kitchen equipment?

- > Wash dishes and other kitchen items in the dishwasher. Otherwise, use very hot water and dish detergent.
- > Wash work surfaces with a solution of 750 ml (3 cups) water and 5 ml (1 teaspoon) bleach.
- > Change kitchen towels often. Wash them in very hot water.
- > Wash reusable grocery bags regularly.



Who can I contact for help or to ask questions?

Contact your nutritionist at the CHUM or your care team.



USEFUL RESOURCES

Food safety:

> **canada.ca**

Enter “Food safety for people with a weakened immune system” in the search box on the upper right.

Shelf life of foods: MAPAQ Thermoguide:

> **mapaq.gouv.qc.ca** (French only)

In the search box, enter “thermoguide”.

Canning and preserving foods:

> **canada.ca**

Enter “Home canning” in the search box on the upper right.

> **bernardin.ca**

Other health sheets published by the CHUM are available. Ask for those that might fit your situation.



You can also find them on our web site
chumontreal.qc.ca/fiches-sante

The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.

To find out more about the Centre hospitalier de l'Université de Montréal
chumontreal.qc.ca



Questions

Write down any questions you want to ask your care team so you don't forget anything.





Observations - Comments

Write down observations you feel are important : your symptoms, treatments, follow-up, energy level, spirit, etc.







Upcoming appointments

APPENDIX: WHAT TO SUBSTITUTE FOR THE FOODS YOU SHOULD AVOID



Vegetables and fruits

AVOID	SAFER ALTERNATIVES
<ul style="list-style-type: none"> - Non-pasteurized juices - Sprouts of raw vegetables and seeds (bean sprouts, alfalfa sprouts, etc.) - Raw mushrooms - Pre-packaged salads (rice salad, pasta salad, potato salad, etc.) - Fruits and vegetables cut in the store (1/2 cabbage, 1/2 melon, etc.) 	<ul style="list-style-type: none"> - Pasteurized juices - Non-pasteurized juice that has been boiled and chilled - Cooked sprouts and mushrooms - Salads prepared at home - Fruits that have been washed and peeled 

Milk products

AVOID	SAFER ALTERNATIVES
<ul style="list-style-type: none"> - Raw or non-pasteurized milk products - Soft-ripened or veined cheeses (Brie, Camembert, blue cheese) 	<ul style="list-style-type: none"> - Products made with pasteurized milk - Firm cheeses (cheddar, brick, Swiss, etc.) 

Deli meats, pâtés and terrines

AVOID	SAFER ALTERNATIVES
<ul style="list-style-type: none"> - Refrigerated pâtés and terrines (cretons, liver pâté, etc.) - Non-dried deli meats (mortadella, roast beef, turkey breast, etc.) - Uncooked hot dogs 	<ul style="list-style-type: none"> - Pâtés and terrines sold canned or sealed, or that do not need to be kept refrigerated before opening - Dried and salted deli meats (salami, dry pepperoni, etc.) - Deli meats heated until they are steaming - Hot dogs cooked until the centre is steaming 

Eggs and egg-based products

AVOID

- Raw or soft-cooked eggs
- Recipes containing unpasteurized raw eggs (tiramisu, hollandaise sauce, homemade mayonnaise, homemade Caesar dressing, homemade eggnog, etc.)



SAFER ALTERNATIVES

- Pasteurized liquid eggs (Naturœuf Œuf-à-tout, Omega-pro, etc.)
- Eggs cooked until the yellow is firm
- Homemade eggnog heated to 71°C (160°F)



Meat, poultry, fish, and seafood

AVOID

- Raw, smoked or lightly cooked products (tartare, ceviche, sushi, fresh oysters, smoked salmon, etc.)



SAFER ALTERNATIVES

- Seafood cooked until the shell opens
- Vegetarian sushi or sushi made with cooked fish
- Smoked salmon heated until steaming



Other foods

AVOID

- Non-pasteurized honey
- Food served buffet style or from salad bars in restaurants
- Hot cooked, ready-to-eat products, sold at supermarket counters
- Preservative-free oil blends with garlic or fresh herbs
- Water from artesian wells
- Fermented products (sauerkraut, kefir, miso, tempeh, etc.)
- Bulk foods that cannot be washed or cooked



SAFER ALTERNATIVES

- Pasteurized honey
- Oil blends made with homemade garlic or herbs, refrigerated and used within 7 days
- Water from artesian wells boiled 1 minute



To find out more about the Centre hospitalier de l'Université de Montréal
chumontreal.qc.ca

