



IT'S YOUR HEALTH

This article was produced in collaboration with the Public Health Agency of Canada.

Food Safety for People with Weakened Immune Systems

The Issue

It can be more difficult for immunocompromised patients (people with weakened immune systems) to fight off infections. This means they are more likely to become ill and suffer from serious health effects if they eat contaminated food.

If your immune system is weakened, you should take extra care when handling, storing, preparing, and shopping for food. In addition, consumption of certain high-risk foods should be avoided.



Increased Risks for People with Weakened Immune Systems

Your ability to fight disease is decreased when your immune system is weakened. As a result, people with weakened immune systems are at greater risk than the general population of becoming ill after eating contaminated food. In addition, the health effects caused by foodborne illness may be more serious for people with weakened immune systems.

Some examples of conditions that can affect your immune system are:

- alcoholism
- cancer (especially for people receiving chemotherapy)
- diabetes
- HIV/AIDS
- organ transplantation



Treatments for cancer, such as chemotherapy and radiation, can leave the immune system severely weakened. Your levels of immunity will also be lower than usual if you are taking high doses of drugs, such as steroids or immune suppressants.

Foodborne Illnesses that Pose Higher Risks to People with Weakened Immune Systems

The following types of foodborne illnesses are particularly dangerous for older adults:

Listeria infection is caused by bacteria that may be found in a wide variety of refrigerated, ready-to-eat foods, such as dairy products, cold cuts, and hot dogs.

E. coli O157:H7 infection is caused by bacteria that may be found in foods such as raw and undercooked ground beef, unpasteurized fruit juice/cider, sprouts, and unpasteurized dairy products.

Vibrio infection is caused by bacteria that may be found in raw and undercooked shellfish, such as oysters, clams, and mussels.

Salmonella infection is caused by bacteria that may be found in a wide variety of foods but especially in raw and undercooked chicken, raw eggs, and raw milk.

Minimizing Your Risk

Some food can be a higher risk for people who have a weakened immune system because of the way they are produced and the conditions

and length of time they are stored. If you are faced with such a condition, you can minimize your chances of contracting foodborne illness by avoiding some types of food. The following chart can help you make alternative choices when selecting food.



Select the Safer Alternative (Always refer to the [Internal Cooking Temperatures Chart](#).)

Type of Food

Hot dogs

Food to Avoid

Hot dogs straight from the package without further heating.

Safer Alternative

Hot dogs thoroughly cooked to a safe internal temperature. The middle of the hot dog should be steaming hot or 74°C (165°F)

Tip: To help prevent foodborne illness, avoid spreading fluid from packages onto other food, cutting boards, utensils, dishes and food preparation surfaces. Wash your hands after handling hot dogs.

Type of Food

Deli meats

Food to Avoid

Non-dried deli meats, such as bologna, roast beef and turkey breast.

Safer Alternative

Dried and salted deli meats such as salami and pepperoni.
Non-dried deli meats heated throughout to steaming hot.

Type of Food

Egg and egg products

Food to Avoid

Raw or lightly cooked egg or egg products, including salad dressings, cookie dough or cake batter sauces, and drinks such as homemade eggnog.

Safer Alternative

Egg dishes thoroughly cooked to a safe internal temperature. Eggs should be cooked until the yolk is firm.

Homemade eggnog must be heated to 71°C (160°F).

Tip: Pasteurized egg products can be used when making uncooked food that calls for raw eggs.

Type of Food

Meat and poultry

Food to Avoid

Raw or undercooked meat or poultry, such as steak tartare.

Safer Alternative

Meat and poultry cooked to a safe internal temperature. (refer to the [Internal Cooking Temperatures Chart](#))

Tip: To help prevent foodborne illness, remember to use a digital food thermometer to check the internal temperature.

Type of Food

Seafood

Food to Avoid

Raw seafood, such as sushi.

Raw oysters, clams, and mussels.

Refrigerated, smoked seafood.

Safer Alternative

Seafood cooked to a safe internal temperature of 74°C (165°F).

Cook until the shell has opened.

Smoked seafood in cans that do not require refrigeration until after opening.

Tip: Refrigerated smoked seafood can be eaten safely when fully cooked to a safe internal temperature, such as in a casserole.

Type of Food

Dairy products

Food to Avoid

Raw or unpasteurized dairy products, including soft and semi-soft cheese, such as Brie, Camembert and blue-veined cheese.

Safer Alternative

Pasteurized dairy products, hard cheeses such as Colby, Cheddar, Swiss, and Parmesan.

Type of Food

Sprouts

Food to Avoid

Raw sprouts such as alfalfa, clover, radish, and mung beans.

Safer Alternative

Thoroughly cooked sprouts.



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Type of Food

Pâtés and meat spreads

Food to Avoid

Refrigerated pâtés and meat spreads.

Safer Alternative

Pâtés and meat spreads sold in cans or those that do not require refrigeration until after opening.

Type of Food

Fruit juice and cider

Food to Avoid

Unpasteurized fruit juice and cider.

Safer Alternative

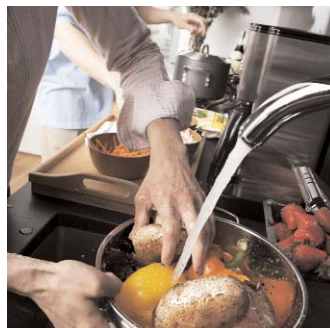
Unpasteurized fruit juice and cider brought to a rolling boil and cooled.
Pasteurized fruit juice and cider.

In addition, there are four basic safety steps you should always follow when handling, storing, preparing, and shopping for food:

Separate: Make sure to always separate your raw foods, such as meat and eggs, from cooked foods, fruits, and vegetables to avoid cross-contamination.

Clean: Wash your hands, kitchen surfaces, utensils, and reusable shopping bags often with warm, soapy water to eliminate bacteria and reduce your risk of foodborne illness.

Chill: Always refrigerate food and leftovers promptly at 4°C or below.



Cook: Always cook food to the safe internal temperatures. Health Canada recommends that you check this by using a digital food thermometer. Cooked foods are safe to eat when internal temperatures are:

- 71° C (160° F) for ground meat (beef, veal, lamb and pork)
- 74° C (165° F) for leftover food, and boned and deboned poultry parts
- 85° C (185° F) for whole poultry

Also, it is strongly suggested that you pay attention to food recalls and learn more about food safety. The Need More Info? section below lists resources with many more tips on safe food practices. For example, there is a link to charts on the proper internal temperatures for cooked meats, poultry and seafood and on the length of time you can store various food items safely in your fridge and freezer.

Background

It is estimated that there are approximately 11 million cases of foodborne illnesses in Canada every year. Foodborne illness, often called food poisoning, occurs when you eat food contaminated with disease-causing organisms, including bacteria, viruses, and parasites.

The most common symptoms of foodborne illness include stomach cramps, nausea, vomiting, diarrhea, headache, and fever. Depending on the type of bacteria virus or parasite, these symptoms can begin a few hours after eating contaminated food, or can be delayed by several days or even weeks. Most people affected by foodborne illnesses recover

completely; some, however, suffer more serious health effects, including such conditions as brain infections and blood poisoning, which, in rare cases, could be fatal.

The risk of serious health effects after eating contaminated food depends on a number of factors:

- your age, general health status, and ability to fight disease; and
- the type and amount of bacteria, viruses, or parasites in the food you eat.

The Government of Canada's Role

Several federal agencies act in partnership to safeguard Canada's food safety. Health Canada sets policies and standards governing the safety and nutritional quality of all food sold in Canada. The Canadian Food Inspection Agency (CFIA) enforces the policies and ensures that necessary warnings are released quickly to the Canadian public. The Public Health Agency of Canada conducts surveillance on outbreaks of foodborne illness and provides advice to protect the health of Canadians.

As a founding member of the Canadian Partnership for Consumer Food Safety Education, Health Canada also participates in public awareness campaigns about safe food practices. An example is the FightBAC!® program, which encourages consumers to think of food safety at every step of the food handling process, from shopping for groceries to reheating left-overs.

Need More Info?

- See Health Canada's web section on **Food-Related Illnesses** at: www.hc-sc.gc.ca/fn-an/securit/ill-intox/index-eng.php
- Visit the Health Canada web section ***In Your Kitchen*** for Safety Tips section for tips on how to safely handle, prepare and cook your food, at: www.hc-sc.gc.ca/fn-an/securit/kitchen-cuisine/index-eng.php
- For ***FightBAC®*** tips and Food Safety Brochures, visit the Canadian Partnership for Consumer Food Safety Education at: www.canfightbac.org/cpcfse/en/. This site has handy **charts on safe cooking temperatures and safe cold storage** at: www.canfightbac.org/en/cookwell/charts/
- Go to the It's Your Health web section on **Food and Nutrition** at: www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/index-eng.php for articles on food safety.
- See the Canadian Food Inspection Agency's web section on **Common Causes of Foodborne Illness**, at: www.inspection.gc.ca/english/fssa/concen/causee.shtml
- Visit the Canadian Food Inspection Agency's web section on **Food Recalls and Allergy Alerts**, at: www.inspection.gc.ca/english/corpaffr/recarapp/recaltoce.shtml
- Go to the **Public Health Agency of Canada's** web section on **Food Safety** at: www.phac-aspc.gc.ca/fs-sa/index-eng.php
- For additional articles on health and safety issues go to the ***It's Your Health*** web section at: www.healthcanada.gc.ca/iyh

You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245*