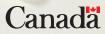
Government of Canada Gouvernement du Canada

Seafood* (Fish, Crustaceans and Shellfish)

One of the ten priority food allergens

*In this pamphlet, the term seafood refers to all edible fish, crustaceans and shellfish from fresh and salt water.



Allergic reactions are severe adverse reactions that occur when the body's immune system overreacts to a particular allergen. These reactions may be caused by food, insect stings, latex, medications and other substances. In Canada, the ten priority food allergens are peanuts, tree nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pine nuts, pistachio nuts and walnuts), sesame seeds, milk, eggs, seafood (fish, crustaceans and shellfish), soy, wheat, sulphites (a food additive) and mustard.

What are the symptoms of an allergic reaction?

When someone comes in contact with an allergen, the symptoms of a reaction may develop quickly and rapidly progress from mild to severe. The most severe form of an allergic reaction is called anaphylaxis. Symptoms can include breathing difficulties, a drop in blood pressure or shock, which may result in loss of consciousness and even death. A person experiencing an allergic reaction may have any of the following symptoms:

- Flushed face, hives or a rash, red and itchy skin
- · Swelling of the eyes, face, lips, throat and tongue
- Trouble breathing, speaking or swallowing
- Anxiety, distress, faintness, paleness, sense of doom, weakness
- Cramps, diarrhea, vomiting
- A drop in blood pressure, rapid heartbeat, loss of consciousness

How are food allergies and severe allergic reactions treated?

Currently there is no cure for food allergies. The only option for managing the risk is to completely avoid the specific allergen. Appropriate emergency treatment for anaphylaxis (a severe food allergy reaction) includes an injection of epinephrine, which is available in an auto-injector device. Epinephrine must be administered as soon as symptoms of a severe allergic reaction appear. The injection must be followed by further treatment and observation in a hospital emergency room. If your allergist has diagnosed you with a food allergy and prescribed Epinephrine, carry it with you all the time and know how to use it. Follow your allergist's advice on how to use an auto-injector device.

Frequently asked questions about seafood allergies

What is the difference between crustaceans and shellfish?

Crustaceans are aquatic animals that have jointed legs, a hard shell and no backbone, such as crab, crayfish, lobster, prawns and shrimp. Shellfish (also known as molluscs) have a hinged two-part shell and include clams, mussels, oysters and scallops, and various types of octopus, snails and squid.

How can I avoid a fish, crustacean or shellfish-related reaction if I'm allergic to these foods?

Avoid all food and products that contain fish, crustacean or shellfish and their derivatives. These include any product whose ingredient list warns it "may contain" or "may contain traces of" fish, crustaceans or shellfish. Fish, crustacean and shellfish will be listed on the label of prepackaged foods using their common names (e.g., tuna, salmon, lobster, crab, clam, oyster, etc.)

Who is affected by seafood allergies?

Crustacean and shellfish allergies predominantly affect adults and are rare among young children. In North America, fish allergies are more predominant in adults, while in countries where fish is a dietary staple, fish allergies are common among both adults and children. Allergies to fish, crustaceans and shellfish are usually lifelong conditions.

Are fish oils (omega -3) safe for seafood allergic consumers?

People who are allergic to fish or other seafood may not need to avoid fish oil. Fish oils on the market tend to be refined enough to remove all of the proteins that can trigger allergic reactions. However, you should consult your allergist before eating anything made with fish oils.

What is the difference between a fish, crustacean or shellfish allergy and histamine poisoning (scombroid poisoning)?

Although allergic reactions and histamine poisoning can cause similar symptoms, they are different issues. Allergies to fish, crustacean and shellfish proteins cause an allergic person's immune system to react abnormally.

Histamine is produced when some species of fish-such as anchovies, mackerel, mahi-mahi and tuna-decompose. Dangerous levels of histamine can develop when these fish are improperly handled. Histamine is toxic to everyone at high doses. If you experience symptoms such as rash, nausea, vomiting, diarrhea, headache, dizziness, burning throat, stomach pain, itchy skin or tingling after consuming these fish, seek emergency medical treatment.

If I am allergic to one type of seafood will I be allergic to another?

People with allergies to one type of seafood, like fish, crustaceans (lobster, crab, etc.) and shellfish (oysters, mollusks, etc.), may not be allergic to other kinds of seafood. Studies suggest that seafood allergies tend to fall within groups. In fact, many people are only allergic to a single type of seafood. For example, some people can eat fish safely but react to crustaceans such as crab and lobster. If you're allergic to one type of seafood such as fish, consult your allergist before trying other types, such as crustaceans and shellfish.

Can I have a seafood-related reaction even if I do not eat or use seafood and seafood derivatives?

People with a severe fish, crustacean and shellfish allergy can experience allergic reactions even without eating these foods. Exposure to proteins carried in cooking vapours (such as sizzling fish or steam from a lobster pot), and on dishes used to prepare and present these foods (such as sizzling skillets) have been reported to trigger an allergic reaction.

What do I do if I am not sure whether a product contains seafood or seafood derivatives?

If you have a seafood allergy, do not eat or use the product. Get ingredient information from the manufacturer.

Does product size affect the likelihood of an allergic reaction?

Product size does not affect the likelihood of a reaction; however, the same brand of product may be safe to consume for one product size but not another. This is because product formulation may vary between different product sizes of the same product.

Watch out for allergen cross contamination!

Cross contamination is the transfer of an ingredient (food allergen) to a product that does not normally have that ingredient in it. Through cross contamination, a food that should not contain the allergen could become dangerous to eat for those who are allergic.

Cross contamination can happen:

- during food manufacturing through shared production and packaging equipment;
- at retail through shared equipment, e.g., cheese and deli meats sliced on the same slicer; and through bulk display of food products, e.g., bins of baked goods, bulk nuts; and
- during food preparation at home or in restaurants through equipment, utensils and hands.

Make sure you read product labels carefully to avoid products that contain seafood and seafood derivatives. Avoid food and products that do not have an ingredient list and read labels every time you shop. Manufacturers may occasionally change their recipes or use different ingredients for varieties of the same brand. Refer to the following list before shopping:

Most common fishes

Anchovy, basa, bass, bluefish, bream, carp, catfish (channel cat, mudcat), char, chub, cisco, cod, eel, flounder, grouper, haddock, hake, halibut, herring, mackerel, mahi-mahi, marlin, monkfish (angler fish, lotte), orange roughy, perch, pickerel (dore, walleye), pike, plaice, pollock, pompano, porgy, rockfish, salmon, sardine, shark, smelt, snapper, sole, sturgeon, swordfish, tilapia (St. Peter's fish), trout, tuna (albacore, bonito), turbot, white fish, whiting.

Most common crustaceans

Crab, crayfish (crawfish, écrevisse), lobster (langouste, langoustine, coral, tomalley), prawns, shrimp (crevette).

Most common shellfish

Abalone, clam, cockle, conch, limpets, mussels, octopus, oysters, periwinkle, quahaugs, scallops, land and sea snails (escargot), squid (calamari), whelks.

Other examples of seafood

Caviar and roe (unfertilized fish eggs), kamaboko (imitation crab and lobster meat), surimi (used to make imitation crab and lobster meat), sushi and tarama (salted carp roe).



Sources of seafood

Food and products that contain or often contain seafood

- Ethnic foods, for example, fried rice, paella and spring rolls
- Garnishes, for example, antipasto, caponata (Sicilian relish)
- Gelatin, marshmallows
- Pizza toppings
- Salad dressings
- Sauces, for example, marinara, Nuoc Mâm, steak and Worcestershire
- Seafood soups and broths
- Spreads, for example, taramasalata
- Sushi (California rolls)

Other possible sources of seafood

- Deli meats, hot dogs (from gelatin)
- Dips, spreads
- · Fried foods (from contaminated frying oil)

Non-food sources of seafood

- Compost or fertilizers
- Fish food
- Lip balm, lip gloss
- Pet food

Note: These lists are not complete and may change. Food and food products purchased from other countries, through mail-order or the Internet, are not always produced using the same manufacturing and labelling standards as in Canada.



Be informed

See an allergist and educate yourself about food allergies. Contact your local allergy association for further information.

If you or anyone you know has food allergies or would like to receive information about food being recalled, sign up for the Canadian Food Inspection Agency's (CFIA) free e-mail "Food Recalls and Allergy Alerts" notification service available at **www.inspection.gc.ca**. When you sign up you will automatically receive food recall public warnings.

Before eating

Allergists recommend that if you do not have your autoinjector device with you that you do not eat. If the label indicates that a product "contains:" or "may contain:" seafood or seafood derivatives, do not eat it. If you do not recognize an ingredient or there is no ingredient list available, avoid the product.

What is the Government of Canada doing about food allergens?

The Government of Canada is committed to providing safe food to all Canadians. The CFIA and Health Canada work closely with municipal, provincial and territorial partners and industry to meet this goal.

The CFIA enforces Canada's labelling laws and works with associations, distributors, food manufacturers and importers to ensure complete and appropriate labelling of all foods. The CFIA recommends that food companies establish effective allergen controls to prevent the occurrence of undeclared allergens and cross-contamination. The CFIA has developed guidelines and tools to aid them in developing these controls. When the CFIA becomes aware of a potential serious hazard associated with a food, such as undeclared allergens, the food product is recalled from the marketplace and a public warning is issued. The CFIA has also published several advisories to industry and consumers regarding allergens in food.

Health Canada has worked with the medical community, consumer associations, and the food industry to enhance labelling regulations for priority allergens, gluten sources and sulphites in pre-packaged food sold in Canada. Health Canada has amended the Food and Drug Regulations to require that the most common food and food ingredients that cause life-threatening or severe allergic reactions are always identified by their common names on food labels, allowing consumers to easily recognize them. More information on the regulations to enhance the labelling of food allergens, gluten sources and added sulphites can be found on the Health Canada website at:

www.hc-sc.gc.ca/fn-an/label-etiquet/allergen/ index-eng.php

If you come across a food that you think is improperly labelled, contact the CFIA and provide information about the product.

Report a food safety or labelling concern: www.inspection.gc.ca/english/fssa/concen/ reporte.shtml

Where can I get more information?

For more information on:

- food allergies; and
- subscribing to the "Food Recalls and Allergy Alerts" e-mail notification service,

visit the CFIA Website at **www.inspection.gc.ca** or call **I-800-442-2342**/TTY **I-800-465-7735** (8:00 a.m. to 8:00 p.m. Eastern time, Monday to Friday).

For information on this and other Government of Canada programs and services call

- I-800-O-Canada (I-800-622-6232)
- TTY I-800-465-7735

Below are some organizations that can provide additional allergy information:

- Allergy/Asthma Information Association www.aaia.ca/en/index.htm
- Anaphylaxis Canada www.anaphylaxis.ca
- Association Québécoise Des Allergies Alimentaires
 www.aqaa.qc.ca (French only)
- Canadian Society of Allergy and Clinical Immunology www.csaci.ca (English only)
- Health Canada www.hc-sc.gc.ca

Developed in consultation with Allergy/Asthma Information Association, Anaphylaxis Canada, Association québécoise des allergies alimentaires, Canadian Society of Allergy and Clinical Immunology and Health Canada.