



Fish

(including crustaceans and shellfish)

One of the nine most
common food allergens



Severe allergic reactions (e.g. anaphylactic reaction) occur when the body's immune system strongly reacts to a particular allergen protein or irritant. These reactions may be caused by food, insect stings and medications. In Canada, the nine priority food allergens are peanuts, tree nuts, sesame seeds, milk, eggs, fish (including crustaceans and shellfish), soy, wheat and sulphites.

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 dangerous symptoms include breathing difficulties, a drop in blood pressure or shock, which may result in loss of consciousness and even death. Severe allergic reactions can occur quickly and without warning. 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
- Anxiousness, distress, faintness, paleness, sense of doom, weakness
- Cramps, diarrhea, vomiting
- A drop in blood pressure, rapid heart beat, loss of consciousness

How are food allergies and severe food allergy reactions treated?

Currently there is no cure for food allergies. The only option is complete avoidance of the specific allergen. Appropriate emergency treatment for a severe food allergy reaction includes an injection of epinephrine (adrenalin), which is available in an auto-injector, such as an EpiPen[®]. Adrenalin must be administered as soon as symptoms of a severe allergic reaction appear. The injection is 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 EpiPen[®].

Frequently asked questions about fish 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. Fish (including crustaceans and shellfish) are one of the most common food allergens.

I have a seafood allergy. How can I avoid a fish, crustacean or shellfish-related reaction?

Avoid all food and products that contain or warn that they “may contain” fish, crustaceans or shellfish and their derivatives as directed by your allergist.

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

When someone has a seafood allergy his/her immune system has an abnormal reaction to fish, crustacean or shellfish proteins. Histamine poisoning is caused by eating fish that contain high levels of histamine, a chemical that forms when certain types of fish start to decompose. High levels of histamine develop when fish, such as anchovies, mackerel, mahi-mahi and tuna, are not properly frozen or refrigerated. Histamine poisoning causes symptoms similar to seafood allergic reactions and can often be mistaken for a fish, crustacean or shellfish allergic reaction. If you are unsure whether you have a seafood allergy or histamine poisoning, consult an allergist.

If I am allergic to one type of fish, crustacean or shellfish, will I be allergic to another?

It is possible for some people who are allergic to one type of seafood (fish, shellfish or crustacean) to eat other types of seafood without having a reaction. However, studies show that when a person has a specific seafood allergy he/she may also be allergic to other species **within** the same group. For example, if you're allergic to cod, you may also be allergic to pike as both are fish; if you're allergic to shrimp, you may also be allergic to lobster as both are crustaceans; if you're allergic to mussels, you may also be allergic to

clams as both are shellfish. If someone is allergic to one type of seafood – crustaceans **or** fish **or** shellfish – he/she will **not** necessarily be allergic to the other types. Consult your allergist before experimenting.

Can I have a fish, crustacean or shellfish-related reaction even if I do not eat a food or use a product that contains fish or fish derivatives?

Yes. There have been reported reactions to seafood vapours from cooking, preparing (e.g. sizzling skillet), and handling fish, crustaceans and shellfish and/or products that contain them. Avoid these situations. Fish and fish derivatives can often be present under different names, e.g., kamaboko. Always read the ingredient list carefully. Do not forget that cross-contamination, e.g., using the same cooler to store several types of raw fish, can also be a potential source of the allergen.

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

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



Avoiding fish and fish derivatives

Make sure you read product labels carefully to avoid products that contain fish and fish derivatives. Always ask questions about food preparation, ingredients and the possibility of cross-contamination when eating out and buying food from retail food outlets, e.g., in-store bakeries, shopping centre food outlets. 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:

Other names for fish, crustaceans and shellfish

Fish:

Anchovy, 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.

Crustaceans:

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

Shellfish:

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

Possible sources of fish, crustaceans and shellfish

Coffee
Cross-contamination, e.g., containers, frying oils, utensils
Deli meats, e.g., bologna, ham
Dips, spreads, kamaboko (imitation crab/lobster meat)
Ethnic foods, e.g., fried rice, paella, spring rolls
Fish mixtures, e.g., surimi (used to make imitation crab/lobster meat)
Garnishes, e.g., antipasto, caponata (Sicilian relish), caviar, roe (unfertilized fish eggs)
Gelatin, marshmallows
Hot dogs
Pizza toppings
Salad dressings
Sauces, e.g., fish, marinara, steak, Worcestershire
Soups
Spreads, e.g., taramasalata (contains salted carp roe)
Sushi
Tarama (salted carp roe)
Wine

Non-food sources of fish, crustaceans and shellfish

Fish food
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.



What can I do?

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 "Allergy Alerts and Food Recalls" subscription 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 EpiPen[®] with you, that you not eat. If an ingredient list says a product "may contain" or "does contain" fish, crustaceans or shellfish and their derivatives, do not eat. 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 minimize the potential for allergic reactions. 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 *Food and Drug Regulations* require that most pre-packaged foods carry a label and that their ingredients appear in a list in decreasing order of proportion. However, they do not currently require components (e.g. ingredients of ingredients) of certain foods and products, such as flavouring, seasoning, spices and vinegar, to be listed on food labels.

Health Canada has worked with the medical community, consumer associations, and the food industry to enhance labelling requirements for priority allergens, gluten sources and sulphite in pre-packaged foods sold in Canada. These regulations would require that the most common food and food ingredients that cause life-threatening or severe allergic reactions are always identified by their common names that consumers can easily recognize on food labels.

Where can I get more information?

For more information on food allergies and to subscribe to the free "Allergy Alerts and Food Recalls" e-mail subscription service, contact the CFIA at www.inspection.gc.ca or **1 800 442-2342** (8:00 am to 4:00 pm local time – Monday to Friday).

For information on this and other Government of Canada programs and services call
1 800 O-Canada
(1 800 622-6232)
TTY 1 800 465-7735

Below are some of the organizations that can provide additional allergy information:

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

Developed in consultation with the Allergy/Asthma Information Association, Anaphylaxis Canada, Association Québécoise Des Allergies Alimentaires, the Canadian Society of Allergy and Clinical Immunology and Health Canada.