



Sulphites

One of the nine most common
food products causing severe
adverse reactions

Sulphite sensitivity reactions

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 and medications. In Canada, the nine priority food allergens are peanuts, tree nuts, sesame seeds, milk, eggs, seafood (fish, crustaceans and shellfish), soy, wheat and sulphites (a food additive). Although sulphites do not cause a true allergic reaction, sulphite-sensitive people may experience similar reactions as those with food allergies. Those who have asthma are most at risk to sulphite sensitivity and other forms of sulphite reactions.

What are the symptoms of an allergic reaction?

When someone comes in contact with an allergen or sulphite, 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 heart beat, loss of consciousness

How are food allergies and severe allergic reactions treated?

Currently there is no cure for food allergies or sulphite sensitivity. The only option is complete avoidance of the specific allergen. Appropriate emergency treatment for anaphylaxis (a severe food allergy reaction) includes an injection of adrenaline, which is available in an auto-injector device. Adrenaline must be administered as soon as symptoms of a severe allergic or sensitivity 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 or a sulphite sensitivity and prescribed adrenaline, 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 sulphite sensitivity

What are sulphites?

Sulphites are substances that naturally occur in food and the human body. They are also regulated food additives that are used as preservatives to maintain food colour and prolong shelf-life, prevent the growth of micro-organisms, and to maintain the potency of certain medications. Sulphites are used to bleach food starches (e.g. potato) and are also used in the production of some food packaging materials (e.g. cellophane).

Are sulphites safe to eat?

Yes, for the majority of consumers. However, some sulphite-sensitive people, many of whom also have asthma, may react to sulphites with allergy-like symptoms. Sulphites can trigger asthma and symptoms of anaphylactic reaction.

I have a sulphite sensitivity. How can I avoid a sulphite-related reaction?

Avoid all food and products that contain sulphites and sulphite derivatives. These include any product whose ingredient list warns it “may contain” or “may contain traces of” sulphites and sulphite derivatives

Can I have a sulphite-related reaction even if I do not eat a food or use a product that contains sulphites or sulphite derivatives?

Yes. There have been reported reactions to inhaled sulphites; however, not from food itself. If sulphites and sulphite derivatives are not present in food, a reaction cannot occur. However, sulphites and sulphite derivatives can often be present under different names, e.g., potassium bisulphite. For other common ingredient label names, refer to the list below. Always read the ingredient list carefully.

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

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

Does product size affect the likelihood of an allergic reaction?

It 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.

Avoiding sulphites and sulphite derivatives

Make sure you read product labels carefully to avoid products that contain sulphites and sulphite derivatives. Certain medications contain sulphites, yet are safe for and may be used by sulphite-sensitive people as directed by an allergist. 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 sulphites

E 220, E 221, E 222, E 223, E 224, E 225, E 226, E 227, E 228
(European names)

Potassium bisulphite/metabisulphite

Sodium bisulphite/dithionite/metabisulphite/sulphite

Sulfur dioxide

Sulphiting agents

Sulphurous acid



Possible sources of sulphites

Alcoholic/non-alcoholic beer, cider, wine
Baked goods, e.g., breads, cookies, pastries, waffles
Bottled lemon and lime juice/concentrate
Canned/frozen fruits and vegetables, e.g., mushrooms, sliced apples, olives, peas, peppers, pickles, pickled onions, tomatoes
Cereal, cornmeal, cornstarch, crackers, muesli
Condiments, e.g., coleslaw, horseradish, ketchup, mustard, pickles, relish, sauerkraut
Deli meat, hot dogs, sausages
Dressings, gravies, guacamole, sauces, soups, soup mixes
Dried fruits/vegetables, e.g., apples, apricots, coconut, mincemeat, papaya, peaches, pears, pineapple, raisins, sun dried tomatoes
Dried herbs, spices, tea
Fish, including crustaceans and shellfish, e.g., shrimp (fresh/frozen)
Fresh grapes, lettuce
Fruit filling, fruit syrup, gelatin, jams, jellies, marmalade, molasses, pectin
Fruit/vegetable juices, e.g., coconut, grape, sparkling grape, white grape
Glazed/glacéed fruits, e.g., apples, grapes, maraschino cherries
Potatoes, e.g., frozen french fries, dehydrated, mashed, peeled, pre-cut
Snack foods, e.g., candy, chocolate/fruit bars, tortilla/potato chips, soft drinks, trail mix
Soy products
Starches, e.g., corn, potato, sugar beet; noodles, rice mixes
Sugar syrups, e.g., glucose, glucose solids, syrup dextrose
Tomato paste/pulp/puree
Vinegar, wine vinegar

Non-food sources of sulphites

Bottle sanitizing solution for home brewing

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 "Food Recalls and Allergy Alerts" notification service available at www.inspection.gc.ca/english/tools/listserv/listsube.shtml?foodrecalls_rappelsaliments. When you sign up you will automatically receive food recall public warnings.



Before eating

Allergists recommend that if you **do not have** your auto-injector device with you, that you **do not eat**. If an ingredient list says a product "may contain" or "does contain" sulphite or sulphite derivatives, do not eat it. If you do not recognize an ingredient or there is no ingredient list available, avoid the 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.

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 is proposing to amend 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 allowing consumers to easily recognize them.

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.

Where can I get more information?

For more information on:

- food allergies;
 - ordering free copies of this pamphlet; and
 - subscribing to the free "Food Recalls and Allergy Alerts" e-mail notification service,
- visit the CFIA Website at www.inspection.gc.ca or call **1 800 442-2342/TTY 1 800 465-7735** (8:00 a.m. to 8:00 p.m. Eastern time, Monday to Friday).

Below are some organizations that can provide additional allergy information:

Allergy/Asthma Information Association www.aaia.ca
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.medical.org (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.