## GreenApple HEALTH CARE

# Allergies - Green Apple Health Care 

greenapplehealthcare.ca/allergies/

If you have an allergy, you're not alone. Statistics Canada reports that $27.3 \%$ of the Canadian population aged 12 and older (approximately 8.4 million people) suffer an allergy.

The report goes on to say that allergy sufferers "most commonly reported being allergic to pollens or grasses (40.7\%), followed by certain animals (28.5\%), dust mites (27.3\%) and certain medications (28.0\%)" and that "Among allergy sufferers, roughly 3.6 million people (42.8\%) reported being allergic to multiple allergens."

## What is an Allergy?

The body's immune system is designed to recognize, attack, and remove foreign (nonself) invaders such as bacteria, virus, and fungi that are inherently dangerous to the body and could do it harm.

Allergies are responses to substances that the immune system perceives to be a threat. The threat might be an environmental element such as pet dander, pollen, dust mites, mold, insect venom, latex, etc or might be particular food such as milk, eggs, peanuts, shellfish, or other substance to which the body has a hypersensitivity. The immune system sees these nonself substances as hyperthreats and goes into overdrive to attack and remove them.

The portion of the immune system that responds to allergies is the "E" portion, the portion that creates Immunoglobulin E (IgE).

## Allergic Reactions

An allergic reaction occurs fairly quickly, often within minutes or hours. For instance, if someone who is allergic to insect bites is bitten by a bee or a spider, the reaction could begin almost as soon as they are bitten or shortly after. The person gets itching, hives, swelling or they might start to wheeze or become hoarse. It happens fairly soon after having been bitten.

As another example, if someone is allergic to a certain food such as shellfish, they will have a reaction soon after they eat shellfish. The person could get hives or itching, swelling of the lips and tongue or other parts of the body, abdominal pain, nausea or vomiting. The reaction
can occur within minutes or within hours after ingesting the shellfish. There is little delay.
Food allergies should not be confused with food sensitivities. They are both immune system responses, but they are very different things. Food allergies trigger an immediate response from the IgE portion of the immune system. The response is immediately apparent (itching, hives, trouble breathing, swelling, etc). Food sensitivities trigger the IgG portion of the immune system and cause a delayed onset response, one that is not immediately apparent. Food sensitivities cause a buildup of antibody-antigen complexes in various places in the body. The effects of this buildup occur gradually over a period of time.

## What Does the IgE Portion of the Immune System Do in an Allergic Reaction?

The IgE's response to an allergen is immediate and can be quite dramatic.
One of the first things the IgE portion does is shut down the means of entry to the body. For instance, if the threat is from something that is inhaled such as pollen or dust mites, the $\lg \mathrm{E}$ may shut down the respiratory system so that no more of the threat can breathed in. If an allergen such as latex has entered the body through the skin (a "contact allergy"), the IgE may produce welts or hives to protect the tissue at the point of entry and prevent any more of the allergen from getting in there. If an allergen such as milk enters the body through the digestive tract, vomiting and digestive shutdown might occur. The immune system acts to shut off the means of ingress to the body and to expel the threat.

The lgE portion of the immune system releases an enormous number of antibodies to annihilate the nonself threat and an enormous amount of histamine to help remove the threat.

## What is Histamine?

Histamine is a chemical, specifically an amine, that is released by the immune system to help defend the body against a threat. The immune system wants to get rid of an allergen and it uses histamine to help do that.

For instance, if an airborne allergen such as pollen enters the body, histamine can cause the nasal membranes to create more mucus to prevent any more of the airborne allergen from entering the body, and a runny nose or a stuffy nose or sneezing can result.

If there is an allergic reaction to, for instance, an insect bite, histamine is released into the capillaries (small blood vessels). This causes the capillaries to dilate and the capillary walls to become more permeable to allow white blood cells and immunoglobulins to leak from the bloodstream to the site of the infection or injury. This causes the swelling and can also often cause itching.

## Why Do Some People Get Allergies and Others Don't?

An allergy is an immune system reaction that some people have to a foreign substance in the body. Most of these allergens such as pollen, dust mites, latex, eggs, animal dander are not inherently toxic, and not everyone's immune system will respond to them.

So, why do some people have allergies and some don't? Why do some people become hypersensitive to harmless substances?

There may be genetic factors that predispose some people to allergies, but there is also research that suggests that allergies develop in response to environmental toxins.

The rise in exposure to toxins such as air and traffic pollution, endocrine disrupting chemicals, tobacco smoke, heavy metals, pesticides and other toxic substances corresponds with the rise in asthma and allergic diseases over the last few decades.

The buildup of toxins in the body can trigger both adult-onset allergies and childhood allergies. Over a period of time, the toxins build and build inside the cells and eventually it gets to a point where the body becomes hypersensitive and an allergy develops. The allergy that develops may not necessarily be triggered by toxins that are building up. Someone may have a buildup of lead and bisphenol A (BPA) that creates an allergy to a totally different substance like eggs.

## Untreated Allergies

Allergic reactions can range from mild to moderate to life-threatening.
Mild reactions could include things like some itching, watery eyes, sneezing, or a scratchy throat. Mild to moderate reactions might include hives, abdominal pain, or swelling of the lips, face, and eyes.

Anaphylaxis is a severe reaction and symptoms can include sudden hypotension (blood pressure that is too low), weak and rapid pulse, constriction of airways causing trouble breathing, and unconsciousness. Anaphylaxis can be a life-threatening condition.

Mild to moderate allergic reactions are often treated with antihistamine tablets or sprays, decongestants, corticosteroid creams, eye drops, many of which are available without a prescription. Anaphylaxis always requires immediate medical intervention, usually on an emergency basis.

It's not a good idea to leave even mild or moderate allergies untreated as they can lead to chronic or recurring health problems such as inflammation, infection, skin disorders, asthma, arthritis. Untreated allergies may also lead to autoimmune diseases, reduced liver or kidney function, chronic fatigue, and they can weaken your immune system.

## Relief from Allergies

Pharmaceutical remedies, whether prescription or over-the-counter, are often useful in providing relief from the symptoms of allergy.

A broader treatment perspective would include remedies to significantly reduce the hypersensitivity, to dial down the immune system's response to allergens. One such treatment is the intravenous administration of high doses of Vitamin C. Among the many other benefits of Vitamin C, recent research concludes that "treatment with intravenous highdose vitamin C reduces allergy-related symptoms".

Other natural treatments could include the systematic detoxification of toxic buildup in the cells, dietary reforms, and/or specific supplements.

Nobody needs to suffer from allergies. Naturopathic medicine can lessen allergy symptoms and sometimes the hypersensitivity can be completely removed.

If you are interested in exploring natural remedies for allergies, call 780-485-9468 for a consultation appointment or book online.

