

What Causes Seasonal Allergies to Develop?

Essentially, allergies are caused by your immune system overreacting to airborne pollen particles as they enter the eyes, nose, or lungs or when the skin comes into contact with an allergen (e.g., grass, insect bite). The white blood cells that normally work to protect your immune system from foreign "invaders" create antibodies, called IgE's, to train the body to recognize the "invader" and protect you from it the next time it comes around. This is handy when dealing with bacteria and viruses, but not with tree pollen or dog hair. In short, when a foreign matter enters the system, the IgE's communicate the message to some cells called mast cells that the body is under threat and an immune attack is launched by releasing chemicals into the affected area... most notoriously, a chemical called histamine.

Histamine, once released into the body, causes symptoms very similar to that of the common cold: runny eyes and nose, nasal congestion, sneezing and coughing, itchy eyes, nose, and mouth, sore or itchy throat, and in some cases hives.

Additionally, in some individuals who battle environmental allergies, immune system over-activation can also stem from the gastrointestinal tract (i.e. having poor digestion or an unhealthy diet) as a large part of the immune system, known as GALT (gut associated lymph tissue) resides in the lining of your gut. Normally the GALT is elegantly controlled and able to differentiate between elements that are harmful to your body (i.e. viruses, bacteria) and those that are harmless (i.e. food). Individuals with healthy digestive tracts and immune systems won't have a strong immune response to foods. However, in individuals whose digestion and immunity have been compromised the ability to tolerate some foods becomes disrupted.

As a result, the immune system can become over-reactive, and a cascade of immunological events ensues. As part of the defense, antibodies are produced in efforts to neutralize and eliminate the antigen (e.g. food) from the body. These antigen-antibody immune complexes will circulate to any tissue or organ of the body and trigger an inflammatory reaction which leads to tissue damage. When these immune complexes migrate and take up residence in mucous membranes such as the upper and lower respiratory tracts, the result is a hypersensitive or allergic reaction that can further contribute to environmental allergies.

While it seems that some people are predisposed to allergies, it is possible to reduce the frequency and severity of allergy symptoms, reduce your dependency on antihistamines and other medications that only address the symptoms of allergy, increase your quality of life, promote disease remission, and decrease susceptibility to new allergen sensitivities by retraining your body to not be allergic.