



Healthy and Happy Monthly Newsletter

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Seasonal Allergies and Food Sensitivities Are Not Fun, so Let's Keep Them On the Run

Among the most common and aggravating health conditions effecting people today are allergies. Interestingly, the likelihood of developing an allergy is not restricted to any particular time in our individual biological progression. In addition, the concept of "once an allergy, always an allergy" does not always hold true, as many of us who had allergies as children no longer do as adults. Others of us who never had allergies in our adolescence are now allergy sufferers today. What is it about our bodies that make allergies so difficult to manage? Would you be interested to know that there are several different types of allergies, and that the signs and symptoms can be simple to identify if you know what to look for. If so, read on as we explore hereditary and environmental risk factors for developing allergies, as well as the treatment and prevention of allergies so that you may be able to enjoy a better quality of life.

An allergy is a hypersensitivity disorder, whereby a person's immune system reacts adversely to a normally harmless substance in the environment. In the case of an allergy, the normally harmless substance is known as an allergen. The risk factors for most allergies can be placed in two distinct categories, environmental and host. Environmental allergies include dietary changes, environmental air pollution, naturally occurring airborne allergens like pollen and mold, and alterations in exposure to infectious disease during adolescence and early childhood development. Host risk factors include heredity, gender, race, and age, with heredity being the most significant.

Seasonal allergies can be triggered by pollen from trees, weeds, and grasses. These pollens are carried by the air and can travel long distances before they settle. Seasonal allergic rhinitis, or hay fever, is an inflammation of the nasal passages which causes swelling, sneezing and itching, runny nose and congestion. It is often caused by tree pollen in the early springtime, grasses in late springtime and early summer, and in the late summer and fall it is caused by weeds.

Like pollen, mold spores are carried around by the air and can be found in soil, plants, rotting wood and settling leaves. As temperatures rise, outdoor mold spores begin to increase in number and peak between July and October. The relationship between mold and pollen levels is complex, and together both can cause a cascade effect on the body's immune system.

The latest statistics indicate that seasonal allergies from pollen and mold affect more than 35 million Americans. So, why is it that those who suffer from seasonal allergies react so acutely to pollen and mold spores while others are unaffected? It is because seasonal allergies are directly related to gut health and the immune system.

Seasonal allergies are notoriously difficult to manage. Year after year allergy sufferers try prescription and over the counter remedies, often with only temporary relief. If you have seasonal allergies, the best defense is to reduce or limit your exposure to the allergens that cause a reaction. With all of the different airborne allergens out there, we all know that this is not entirely possible. So, instead of simply managing the symptoms, let's look at how they can be prevented if they are addressed correctly.

Seasonal allergies from pollen and mold are triggered by an overly sensitive immune system. When you inhale pollen and mold spores your body recognizes them as foreign invaders and develops allergy causing antibodies to fight them. Even after the allergy symptoms have passed, the body produces antibodies that remember these invaders and any exposure at a later time will cause the immune system to react again.

More commonly known as food allergies, dietary changes are often recognized as the main contributing factor to the development of inflammatory conditions, and they the precursor to autoimmune disorders. On the surface, it may seem unlikely to link seasonal allergies with digestion, but they are actually intimately connected. One of the most epidemic sources of allergies is the inflammation of the gastrointestinal tract and the degenerative health conditions that develop over time as a result. Just to clarify, using the term *food allergy* indicates an immune system reaction and an antibody response. It is more appropriate to use the term food sensitivity, intolerance, or reaction.

Approximately 2/3 of the American population has inflammatory symptoms associated with food reactions. While no specific indicator for the onset of allergic reactions is known, there are several factors that can influence seasonal allergies and food sensitivities. For example, early fetal exposure to allergenic foods through the maternal diet during pregnancy, or exposure as an infant can influence such hypersensitivity reactions from birth onward.

Regular maternal consumption of dairy products, gluten exposure, and highly caloric sugar rich foods while the fetus is in the womb can lead to inflammatory allergy conditions in the birthed infant ranging from acid reflux, to ear infections, and chronic sinus congestion. Symptoms can become accentuated if the mother continues to eat foods containing wheat, dairy, and refined sugar while breast feeding. When this occurs, mothers are often advised by the child's pediatrician to switch the baby to formula; however, with allergies to milk and gluten, infants may become sensitized to other foods, such as soy, rice and more.

Fortunately, many food sensitivities in children are mild and resolve over time. In some cases, if not addressed early on, food intolerances can develop into debilitating health conditions over time, like diabetes, obesity, and autoimmune disorders. Often, parents are unaware of the signs and symptoms of allergies, sensitivities, and intolerances, so the root cause of their child's misery is overlooked and not identified until further complications occur.

The following is a list of what to look for if you suspect that your child may have a food intolerance related condition: your child is quick to anger, frequently denies or refuses to comply, has dark rings or bags under the eyes accompanied by mouth breathing and chronic sinus congestion and drainage, bed wetting, habitual involuntary grinding or clenching of teeth usually just before and during sleep as from anger, tension, fear or frustration, stomach aches or abdominal pain, headaches, chronic ear infections, chronic tonsillitis or enlargement of the tonsils, eczema, psoriasis, hives, or other chronic skin conditions, alternating constipation and diarrhea, foul smelling breath, feet, perspiration, or stools, food cravings, trouble concentrating, hyperactivity or erratic behavior, Tourets syndrome, asthma, canker sores or mouth ulcers, and fatigue due to organochloride exposure.

Not often addressed, organochlorides make up a large group of pesticides, herbicides and other synthetic organic compounds that contain chlorine. These organochlorides are found in chlorine bleach, most chemical disinfectants and many plastics. Organochlorides can enter the body through drinking bottled and tap water, eating foods grown with agricultural chemicals like herbicides, pesticides, and insecticides, and through the plastic linings of canned and microwaveable foods.

Also, exposure by breathing the fumes of detergents and chlorine bleach disinfectants and by body contact with chlorine bleached paper products such as toilet paper, tampons, diapers, and paper cups and paper towels can be possible. Organochlorides are often implemented into products for convenience and to create a longer shelf life. The downside is that they weaken the body's immune system, and lower its resistance to bacteria, viruses and other opportunistic infections.

As we age, there is a natural progression of our immune system sometimes for the better, often for the worse. Based upon several factors, like genetics, diet, digestion, stress, liver function, environment, and mineral/nutrient/antioxidant deficiencies, over time the immune system can change and move towards degrees of hypersensitivity and autoimmunity. Autoimmune disorders develop when the immune system mistakenly attacks and destroys healthy tissue in the host body. It is difficult to determine what exactly triggers the immune system to be unable to tell the difference between healthy body tissues and harmful antigens, but one common theme is an imbalance of good and bad intestinal bacteria in the gut.

The gastrointestinal tract consists of the stomach and the intestines, beginning with the mouth and continuing down to the anus. Together, these organs make up the digestive tract, which is approximately 80% of the immune system. The surface area of the digestive tract is estimated to be the size of a football field, a testament to the fact that the immune system must work really hard to prevent pathogenic bacteria and toxins from inhabiting the body and entering the bloodstream.

Unfortunately, the monumental importance of these facts is often overlooked by most individuals, who by their poor dietary intake and lethargic lifestyle, set the stage for a suppression of the immune system, an interruption of the metabolic process, and an overgrowth of pathogenic bacteria. The result is a relentless build up of toxins in the body's tissues and bloodstream. Simply put, gastrointestinal tract health is most often the major determining factor for allergies, intolerances, inflammation, autoimmune disorders, and the development of the majority of the life debilitating disease states that countless Americans are experiencing today.

With the food and drink that most Americans put into our bodies on a daily basis, and the toll that it takes on the gastrointestinal tract and immune system, the following is a comprehensive list of the signs and symptoms of allergies, sensitivities, and intolerances in adults: joint pain, gall bladder pain, ulcerative colitis and Crohn's disease, digestive problems, alternating between constipation and diarrhea, stomach ulcers, duodenal ulcers, gluten sensitivity, mucus in stools, constant hunger and inability to go for long periods of time without eating, chronic infections like urinary tract infections, prostatitis, bronchitis, vaginitis, and sinusitis. Additional symptoms include: hypertension, lower and upper back pain associated with fibromyalgia, hypoglycemia, migraines, skin conditions such as eczema, psoriasis, hives, and acne, autoimmune disorders such as systemic lupus, scleroderma, sjogrens, rheumatoid arthritis, and multiple sclerosis. Other symptoms include: fluid retention and weight gain, especially in women before their period, thrombophlebitis, Meniere's disease, and withdrawal symptoms associated with abstaining from foods that are craved, resulting in fatigue, joint pain, irritability and brain fog.

Based on this discussion, be encouraged to consider the gut and immune system when it comes to any chronic condition, especially those associated with pain. In individuals with chronic disease states, a high percentage has been identified as having a pathogenic bacteria overgrowth in the gastrointestinal tract. For example, approximately 80% of people diagnosed with Irritable Bowel Syndrome (IBS), and 90-100% with fibromyalgia have bad bacteria overgrowth. The cumulative effect of such an intestinal bacteria imbalance results in the malabsorption of nutrients and sluggish detoxification. This dysfunction leads to a systemic absorption of toxins into the body's tissue which promotes an impairment of nerve, brain, muscle and mitochondrial function.

As major contributing factor to inflammatory conditions, a bad bacteria overgrowth in the gut can result in a hypersensitivity to pain and an increase in the release of cytokines. Cytokines are produced by cells within the immune system. They help the immune system cells to communicate, and can be distinguished as pro-inflammatory and anti-inflammatory. Pro-inflammatory cytokines are released to amplify the immune system's inflammatory reactions as a way of dealing with some sort of health threat to the body. Anti-inflammatory cytokines have the opposite effect, functioning to limit the inflammation. Both types work together to balance each other out, and to stimulate new cell production and influence communication between cells.

There are several scenarios that will influence the cumulative effect of inflammatory cytokines, most significantly the ratio of pro and anti-inflammatory cytokines. In relation to the immune system, when a gastrointestinal bacteria imbalance occurs, it leads to an interruption in the communication between the cytokine balance and immune cells, creating a snowball effect of inflammatory cytokines. Therefore, rather than assisting the immune system to effectively deal with resolving whatever is causing dysfunction in the body, the systemic presence of inflammation in the body is exasperated and triggers the development of the health issues that we are discussing here. Simply put, a gastrointestinal bacteria imbalance will lead to poor digestion of protein, fats, and carbohydrates, and ultimately increase the body's sensitivity to certain foods, creating allergic symptoms. The cascading effect of this imbalance along with poor digestion and detoxification results in nutrient deficiencies and further metabolic complications.

Are you beginning to see the connection? Gut dysbiosis, or the environment that results when the natural state of good and bad intestinal bacteria is thrown out of balance, causes an immune response, triggering the release of cytokines that cause inflammation. With this information about gastrointestinal bacteria imbalance, let us explore the concept of healing the gut, or treating the root cause, and eliminating all of the symptoms associated with the condition.

Try to avoid processed foods as much as possible. This includes soft drinks and energy drinks, alcohol, potato chips, white bread, bagels, cookies, cupcakes, cake, icing, brownies, processed meats, hotdogs, sausages, bratwurst, anything that is canned, or boxed and intended for an extended shelf life. The list of processed and refined foods is enormous and too great to cover in this newsletter alone. The fact is that processed foods fuel inflammation, so the best plan of action is to keep processed food consumption to a minimum. Instead, try to make up a larger percentage of your diet with fresh, raw, fruits and vegetables. These foods do contain natural sucrose, but they also contain vitamin C, and other antioxidants which counteract the effects of the natural sugars. In addition, these foods are anti-inflammatory, contain vitamins, minerals, and fiber, as well as enzymes that are necessary for the body to break these foods down into the nutrients that we need for survival.

Probiotics, digestive enzymes, essential fatty acids and antioxidants are all essential for the structural integrity and healthy functioning of the gastrointestinal tract. Probiotics are good live bacteria, that when taken regularly will restore the balance of good and bad bacteria, reduce inflammation, allergy symptoms, and help to normalize metabolism and energy production. Ideally, probiotics should be taken on an empty stomach at bedtime, to ensure maximum repopulation in the gut. If taken with food, probiotics can function as digestive enzymes do, helping to break down and digest food, but not repopulating in the gut as thoroughly. Digestive enzymes should be taken about fifteen minutes before each meal to set the stage for the proper digestion of proteins, fats, and carbohydrates.

Probiotics and digestive enzymes work in concert with antioxidants and essential fatty acids to restore the natural balance of the immune system and the metabolic process. Antioxidants are anti-aging, anti-cancer, and anti-inflammatory. They protect against cell damage from free radicals. Free radicals are environmental contaminants such as smoke and car exhaust. Free radicals are also produced by the food that we eat. As mentioned numerous times in previous newsletters, the average American diet consists of approximately 62% processed foods. This type of diet creates a significant amount of free radical damage on the body when consumed regularly, a key contributing factor of metabolic syndrome and associated inflammatory disease states like obesity, diabetes, heart disease, stroke, and more.

Free radicals arise naturally during the metabolic process. Free radicals are unstable compounds that react quickly with the nearest stable molecule, stealing its electron, and leaving it damaged. When the attacked molecule loses its electron, it becomes a free radical itself, causing a chain reaction, which once started can result in the disruption of living cells.

Normally the body can handle these free radicals, but if antioxidants are unavailable or if free radical bombardment becomes excessive, then inflammation and disease can occur. If taken regularly in supplement form along with a diet rich in raw fruits and vegetables, antioxidants such as Vitamin D3, Vitamin C, quercetin, and bioflavonoids not only help to support the immune system and prevent disease, but can result in better sleep, increased energy, pain reduction, lower stress, thinning of the body's fluids including mucus, blood, and the synovial fluid between bones and joints, less muscle tension, and accelerated healing and reduced inflammation.

With the information presented here, the key concept is that the gut is the main influencing factor in determining the degree of inflammation in the body. The likelihood of developing seasonal allergies, intolerances, and disease is ever present the longer and more severe the dysbiosis in the gut becomes. The body's main objective is to maintain homeostasis, or balance, in order to effectively carry out all of its biological processes. In this respect, the old adage "garbage in, garbage out" is unequivocally logical, and diet and lifestyle are ultimately the choice of the individual. But based on the information presented in this newsletter, when it comes to making the decision of what to eat and drink on a daily basis going forward, hopefully you will go with your gut.