

## ALPHA-GAL SYNDROME

Alpha-gal Syndrome is an allergy in reaction to the carbohydrate Galactose-alpha-1, 3-galactose. The allergic reaction involves excess Immunoglobulin E Antibodies to the antigen on exposure. This IgE reaction particularly involves the activation of Mast Cells. Histamine and Serotonin release are big drivers of the symptoms. The symptoms can be very mild or life-threatening.

The symptoms of those typically associated with Mast Cell activation include a strong Parasympathetic Imbalance component. Not only the severity but the actual character of symptoms varies tremendously between individuals affected. In some, the symptoms are mainly expressed through the skin and circulatory system as rash, hives, asthma-like symptoms, dizziness, and low blood pressure. Others experience symptoms mainly in the GI tract --- including nausea, vomiting, diarrhea, and stomach cramps. In severe cases there can be anaphylaxis.

In summary, the symptoms are associated with Mast Cell activation and excess Parasympathetic (Vagal) activation.

The condition is acquired via tick bite (most commonly the Lone Star Tick found largely in the Southeastern United States). The saliva of certain ticks is very high in the Alpha-gal carbohydrate, and the extreme exposure in response to being bitten sensitized the individual to Alpha-gal. Once sensitized, the allergic reaction will occur to ingestion of any foods that are high in Alpha-gal. These include meat from beef, pork, venison, goat, and lamb --- and can include reaction to products derived from those meats. A few individuals even react to milk products, gelatin, and collagen. Animal derivatives such as collagen, elastin, and lanolin are often used in cosmetics, and may trigger a reaction.

Since the symptoms resemble those of many other IgE-mediated allergies, Alpha-gal Syndrome can be very difficult to diagnose. The only clue to even look for it is a patient reporting symptoms that develop after eating meat. But even that can be a tough association to make since the symptoms do not appear for many hours after ingesting the offending food because it takes that long for the Alpha-gal carbohydrate to be assimilated and trigger a reaction. The only way to make a certain diagnosis is to be tested by an allergist for IgE antibodies to the carbohydrate.

Alpha-gal is also found in some medications, including blood thinners, NSAIDs, and other pain medications. Alcohol consumption exacerbates these allergic symptoms. Individuals with Blood Type B or AB are less likely to develop the sensitivity since the Type B blood antigen is similar to Alpha-gal and confers a certain level of immunity, but a large majority of people are Blood Type O or A.

There is no cure for Alpha-gal Syndrome, nor even an effective treatment. The only medical approach is palliative --- recommending avoidance of the offending foods, and taking

antihistamine medications --- as well as being prepared with Epinephrine in case of an anaphylactic response.

From a Nutri-Spec perspective, we recognize that this disease creates an extraordinary nutrition need. So, while we do not “treat” the disease, we most definitely supply the nutrition needs of individuals suffering from it. To help maintain their health, your goal is to meet their specific needs for maintaining immune system balance. In particular, these individuals have a higher need for some combination of Immuno-Symbiotic Power, Complex P, Adapto-Max, Oxy-Max, Activator, and Rejuvenator. And of course, tissue Sulfation and tissue pH should be individualized for each individual based on the BALANCING PROCEDURE.