



**Medical
Blueprints**

LONE STAR TICKS TO BLAME FOR MEAT ALLERGIES? REPORT #2985

BACKGROUND: Ever been bitten by a tick? It is no fun, but have you been bitten by a tick and then suddenly are allergic to red meat? Well, that is a thing and it's called Alpha-gal syndrome, and this is caused most often by a bite from the Lone Star tick as it transmits a sugar molecule that can trigger an immune system reaction that later produces allergic reactions to red meat like beef and pork. The lone star tick is found predominantly in the southeastern United States and most of the cases for this occur in that region. Some of the symptoms include hives or itchy rash, heartburn or indigestion, drop in blood pressure, severe stomach pain and even can cause people to faint. Alpha Gal can become a life threatening situation if it is not treated properly and can lead to worse health problems.

(Source: <https://www.mayoclinic.org/diseases-conditions/alpha-gal-syndrome/symptoms-causes/syc-20428608#:~:text=Overview,gal%20into%20the%20person's%20body.https://www.cdc.gov/ticks/alpha-gal/index.html>)

CAUSES: The cause of Alpha-gal syndrome is relatively simple, it is caused by a tick bite. Specifically, the Lone Star Tick, which is found more often than not in the south east states like Florida, Georgia and Texas. The syndrome however has been diagnosed more in Europe, Asia and Australia where there are other ticks that carry the alpha-gal molecules. Another cause is from the Cancer drug cetuximab which causes the condition to be more prevalent in the areas where lone star ticks are more relevant. Researchers think the time delay reactions of Alpha Gal syndrome is due to the molecules taking longer ways to form than other allergens that are digested into your circulatory system.

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DIAGNOSIS AND TREATMENT: Diagnosing for Alpha gal syndrome is two ways, a blood test and a skin test. The blood test can confirm and measure the amount of antibodies you have in your blood stream while the skin test is a prick of your skin and then expose that skin to small amounts of substances extracted from red meat and if the skin develops a bump, you have the syndrome. Treating is simple: don't eat and avoid foods that cause the reaction, and always check ingredients on labels when buying from a store to make sure they do not contain red meat or meat-based ingredients. If you do develop a meat-based allergy, there are plenty of new options to still get the essential proteins that you get from meat: Impossible Meat, which is made for people who eat a vegan lifestyle but are missing key nutrients of other vegan options. For example, the protein contents in one impossible burger is the same amount of protein as one regular meat burger. The impossible burger though has less saturated fats and no cholesterol. And with about sixty five percent of Americans already converting to Impossible meat, it is a great way to still get the same amount of protein if you develop a red meat allergy.

(Source: <https://www.mayoclinic.org/diseases-conditions/alpha-gal-syndrome/diagnosis-treatment/drc-20428705#:~:text=A%20blood%20test%20can%20confirm,commercial%20or%20fresh%20red%20meat.https://www.nytimes.com/2019/12/03/well/eat/fake-meat-vs-real-meat.html>)

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