

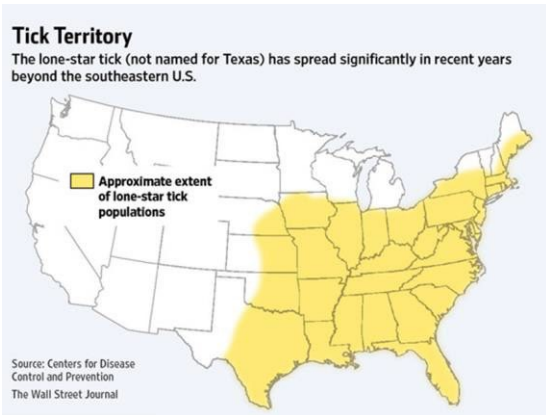
Alpha-Gal Syndrome

What is Alpha-Gal?

1. Alpha-gal is a sugar molecule; however, the scientific name is galactose-a-1, 3-galactose.
2. Alpha-gal is found in most non-primate mammals such as cows, pigs, rabbits, lamb, venison, goats, bison, buffalo, and horses, etc.

What is Alpha-gal Syndrome?

1. Alpha-gal syndrome is an allergic condition.
2. Alpha-gal syndrome has been found to occur in some people, who have been bitten by a tick, primarily the Lone Star tick in the United States.
3. The range of the Lone Star tick and the incidence of Alpha-gal syndrome in the United States has increased.



Images: CDC Tick Image Gallery



Alpha-Gal Syndrome Symptoms

1. Symptoms commonly occur, in people who have been bitten by a tick, 2 to 6 hours after they eat mammalian meat or other alpha-gal containing products.
2. Symptoms vary and they can differ from person to person. Symptoms can be mild to severe, and, in some people, symptoms can even be life-threatening.

Skin:

Hives, itching, flushing
Swelling of the lips, throat, tongue, eye lids, or face.

Diarrhea
Heartburn or indigestion
Nausea or vomiting

Gastrointestinal:

Abdominal pain, cramping

Lung:

Cough

Shortness of breath, wheezing or difficulty breathing

Other:

Drop in blood pressure

Dizziness or faintness

Heart palpitations

Anaphylaxis:

is a life-threatening reaction that involves multiple organ systems.

1. Not all people bitten by a Lone Star tick develop alpha-gal syndrome.
2. People with alpha-gal syndrome may not have symptoms every time they are exposed to alpha-gal.
3. People with alpha-gal syndrome may not have symptoms from every product containing alpha-gal.
4. Alpha-gal symptoms can be exacerbated if foods containing alpha-gal are consumed coupled with other factors as alcohol and exercise.
5. **If someone is having a severe allergic reaction, seek immediate emergency care.**
 - a. **Some people may need to carry an epinephrine pen.**

How is Alpha-gal Syndrome Diagnosed?

1. Alpha-gal syndrome has only fairly recently been recognized and is often under-diagnosed.
 - a. The main diagnostic test for alpha-gal syndrome is a blood test that looks for Immunoglobulin-E antibodies specific to alpha-gal (alpha-gal sIgE).

Foods to Avoid If You Have AGS

1. Most healthcare providers recommend people with alpha-gal syndrome not eat mammalian meats.
2. Depending on symptom sensitivity and severity, healthcare providers may also recommend avoiding other foods and products that may contain alpha-gal. For example, cow's milk, goat-milk, cow or goat milk-products, gelatin made mammalian sources, meat broth, and gravy.

Non-Food Products That May Contain Alpha-gal

1. Although very rare, some people who have severe reactions to alpha-gal may also react to ingredients in certain vaccines or medications.
 - a. Some medications and vaccines may have additives, stabilizers or coatings that contain alpha-gal.
 - b. Gelatin, glycerin, magnesium stearate, and bovine extract are some examples of ingredients that may contain alpha-gal.
 - i. For example, gelatin capsules ("gel-caps").
2. Some other medical products that may contain alpha-gal include heart valves from cows or pigs, heparin, monoclonal antibodies, and some antivenoms.

If You Have Alpha-Gal Syndrome

1. People with alpha-gal syndrome should avoid additional tick bites.
 - a. Reactions to alpha-gal can be revitalized by new tick bites.

Is Alpha-Gal a Lifelong Condition?

1. Some evidence suggest that alpha-gal containing foods may be safely reintroduced in people after long periods of avoiding alpha-gal and tick bites.
 - a. Work with your healthcare provider.

Preventing Tick Bites

1. Preventing tick bites is the best way to reduce your risk of tick-borne diseases including alpha-gal syndrome.

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