

# Alpha-Gal Syndrome Nutrients of Concern

Alpha-gal syndrome is a food allergy that some people get after being bitten by the lone star tick. After the bite, the person's body may react badly to eating red meat like beef, pork, or lamb, and sometimes dairy and byproducts like gelatin. Symptoms usually show up a few hours after eating. These can include stomach pain, hives, or more serious allergic reactions.



Because the reaction can be scary, some people become anxious and start avoiding more foods than they need to. This can make it harder to enjoy meals or eat out with friends. Doctors are still learning more about this condition, but avoiding red meat and other trigger foods is the best way to stay safe. AGS trigger foods can vary from person to person. Talk with your healthcare provider for individualized recommendations.

## What Happens When You Stop Eating Red Meat or Dairy?

When people stop eating certain foods, like beef, pork, milk, or cheese, they might not get enough important nutrients. Missing these foods can lead to low levels of iron, vitamin B12, calcium, and protein.

Foods	Key Nutrients
Red meat (beef, pork, lamb)	iron, zinc, B12, protein
Dairy (milk, cheese, yogurt)	calcium, vitamin D



## Why Are These Nutrients Important?

- **Iron** helps carry oxygen in your blood, gives you energy, and supports brain growth. It's especially important for pregnant women and kids. Low iron can cause tiredness and poor growth.
- **Zinc** helps your immune system and supports healthy growth and healing.
- **Vitamin B12** helps your body turn food into energy.
- **Protein** builds and repairs muscles and tissues in your body.
- **Calcium** builds strong bones and teeth.
- **Vitamin D** helps your bones stay strong and supports your muscles and immune system.

## What Can I Eat Instead?

If you can't eat red meat or dairy, there are other foods that can provide these nutrients. Here are some alpha-gal friendly foods:

Nutrient	Alternative Sources	Examples
Iron	Spinach, kale, lentils, chickpeas, seeds, white beans, kidney beans, fortified cereals, salmon, tuna, seafood	Add white beans and spinach to soups or try a tuna salad sandwich.
B12	Fortified cereals, nutritional yeast, salmon, tuna, eggs, turkey, chicken	Sprinkle nutritional yeast on popcorn or roasted vegetables for a cheesy flavor.
Zinc	Lentils, chickpeas, seeds (pumpkin, chia), cashews, oats, black beans, salmon, sardines, turkey, shrimp	Snack on a homemade trail mix with cashews and pumpkin seeds or top oatmeal with chia seeds.
Protein	Lentils, chickpeas, beans, tofu, nuts, nut butters, eggs, turkey, chicken, fish, seafood	Spread peanut butter on apple slices or bake trout fillets with garden vegetables.
Calcium	Fortified plant milks, fortified orange juice, collard greens, kale, white beans, broccoli	Blend kale into a fruit smoothie or make roasted broccoli as a side.
Vitamin D	Sunlight, fortified plant milks, rainbow trout, salmon, mushrooms, eggs	Scramble eggs with sauteed mushrooms and garden vegetables for breakfast.

## Should I Take Vitamins or Supplements?

It's best to get your nutrients from food, but sometimes supplements can help.

## When Should I Consider Supplements?

- **Vitamin B12:** This vitamin is found in meat and dairy. If you don't eat those foods, you may need a supplement or eat foods like cereal or plant-based milk that have B12 added. Double check to make sure the vitamin B12 supplement is plant-based.
- **Iron:** If you don't eat meat or have low iron, you may need a supplement. Talk to a doctor first, because too much iron can be harmful.
- **Vitamin D:** If you don't get much sunlight, especially in the winter, a plant-based vitamin D supplement can help your bones and immune system stay strong.
- **Calcium:** If you don't drink milk or eat dairy, you may need calcium to help keep your bones healthy, especially as you get older.

## Thinking About Taking Supplements?

Before you start any supplements, talk to your healthcare provider or pharmacist. Some supplements, especially those made with gelatin or in gel-capsules may trigger an AGS reaction. Your pharmacist can help you select ones that are safe for you.



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