

Yes, adults can develop food allergies—here are four types you need to know about

May 8 2024, by Clare Collins



Credit: Karolina Grabowska from Pexels

If you didn't have food allergies as a child, is it possible to develop them as an adult? The short answer is yes. But the reasons why are much more complicated.

Preschoolers are about [four times more likely to have a food allergy](#) than adults and are more likely to grow out of it as they get older.

It's hard to get accurate figures on adult food allergy prevalence. The Australian National Allergy Council reports [one in 50 adults](#) have food allergies. But a US survey suggested as many as [one in ten adults](#) were allergic to at least one food, with some developing allergies in adulthood.

What is a food allergy

[Food allergies](#) are [immune reactions](#) involving [immunoglobulin E \(IgE\)](#)—an antibody that's central to triggering allergic responses. These are known as "IgE-mediated food allergies."

Food allergy symptoms that are not mediated by IgE are usually delayed reactions and called [food intolerances or hypersensitivity](#).

Food allergy symptoms can include hives, swelling, difficulty swallowing, vomiting, throat or chest tightening, trouble breathing, chest pain, rapid heart rate, dizziness, [low blood pressure](#) or [anaphylaxis](#).

IgE-mediated food allergies can be life threatening, so all adults need an [action management plan](#) developed in consultation with their medical team.

Here are four IgE-mediated food allergies that can occur in adults—from relatively common ones to rare allergies you've probably never heard of.

1. Single food allergies

The most [common IgE-mediated food allergies](#) in adults in a US survey

were to:

- shellfish (2.9%)
- cow's milk (1.9%)
- peanut (1.8%)
- tree nuts (1.2%)
- fin fish (0.9%) like barramundi, snapper, salmon, cod and perch.

In these adults, about 45% reported reacting to multiple foods.

This compares to [most common childhood food allergies](#): cow's milk, egg, peanut and soy.

Overall, adult food allergy prevalence appears to be increasing. Compared to [older surveys published in 2003](#) and [2004](#), peanut allergy prevalence has increased about three-fold (from 0.6%), while tree nuts and fin fish roughly doubled (from 0.5% each), with shellfish similar (2.5%).

While new [adult-onset food allergies are increasing](#), childhood-onset food allergies are also more likely to be retained into adulthood. Possible reasons for both [include](#) low vitamin D status, lack of immune system challenges due to being overly "clean," heightened sensitization due to allergen avoidance, and more frequent antibiotic use.

2. Tick-meat allergy

Tick-meat allergy, also called α -Gal syndrome or mammalian meat allergy, is an allergic reaction to galactose-alpha-1,3-galactose, or α -Gal for short.

[Australian immunologists first reported](#) links between α -Gal syndrome and [tick bites](#) in 2009, with cases also reported in the United States,

Japan, Europe and South Africa. The [US Centers for Disease Control estimates](#) about 450,000 Americans [could be affected](#).

The α -Gal contains a carbohydrate molecule that is bound to a [protein](#) molecule in [mammals](#).

The IgE-mediated allergy is triggered after repeated bites from ticks or [chigger mites](#) that have bitten those mammals. When tick saliva crosses into your body through the bite, antibodies to α -Gal are produced.

When you subsequently eat foods that contain α -Gal, the allergy is triggered. These triggering foods include meat (lamb, beef, pork, rabbit, kangaroo), dairy products (yogurt, cheese, ice-cream, cream), [animal-origin gelatin](#) added to gummy foods (jelly, lollies, marshmallow), prescription medications and over-the counter supplements containing gelatin ([some antibiotics, vitamins and other supplements](#)).

Tick-meat allergy reactions can be hard to recognize because they're usually delayed, and they can be severe and include anaphylaxis. Allergy [organizations produce management guidelines](#), so always discuss management with your doctor.

3. Fruit-pollen allergy

Fruit-pollen allergy, called pollen food allergy syndrome, is an [IgE-mediated allergic reaction](#).

In susceptible adults, pollen in the air provokes the production of IgE antibodies to antigens in the pollen, but these antigens are similar to ones found in some fruits, vegetables and herbs. The problem is that [eating those plants](#) triggers an allergic reaction.

The [most allergenic tree pollens](#) are from birch, cypress, Japanese cedar,

[latex](#), grass, and ragweed. Their pollen can cross-react with [fruit and vegetables](#), including kiwi, banana, mango, avocado, grapes, celery, carrot and potato, and some herbs such as caraway, coriander, fennel, pepper and paprika.

Fruit-pollen allergy is not common. Prevalence [estimates are between 0.03% and 8%](#) depending on the country, but it can be life-threatening. Reactions range from itching or tingling of lips, mouth, tongue and throat, called [oral allergy syndrome](#), to mild [hives](#), to anaphylaxis.

4. Food-dependent, exercise-induced food allergy

During heavy exercise, the stomach produces less acid than usual and gut permeability increases, meaning that small molecules in your gut are more likely to escape across the membrane into your blood. These include food molecules that trigger an IgE reaction.

If the person already has IgE antibodies to the foods eaten before exercise, then the risk of triggering food allergy reactions is increased. This allergy is called [food-dependent exercise-induced allergy](#), with symptoms ranging from hives and swelling, to difficulty breathing and anaphylaxis.

[Common trigger foods include](#) wheat, seafood, meat, poultry, egg, milk, nuts, grapes, celery and other foods, which could have been eaten many hours before exercising.

To complicate things even further, allergic [reactions can](#) occur at lower levels of trigger-food exposure, and be more severe if the person is simultaneously taking non-steroidal inflammatory medications like aspirin, drinking alcohol or is sleep-deprived.

Food-dependent exercise-induced allergy is extremely rare. Surveys have

estimated prevalence as between [one to 17 cases per 1,000 people worldwide](#) with the highest prevalence between the teenage years to age 35. Those affected often have other allergic conditions such as hay fever, asthma, allergic conjunctivitis and dermatitis.

Allergies are a growing burden

The [burden on physical health, psychological health](#) and health costs due to food allergy is increasing. In the US, this [financial burden was estimated as \\$24 billion per year](#).

Adult food allergy needs to be taken seriously and those with [severe symptoms](#) should wear a medical information bracelet or chain and carry an [adrenaline auto-injector pen](#). Concerningly, surveys suggest only [about one in four adults](#) with food allergy have an adrenaline pen.

If you have an IgE-mediated [food allergy](#), discuss your management plan with your doctor. You can also find more information at [Allergy and Anaphylaxis Australia](#).

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Yes, adults can develop food allergies—here are four types you need to know about (2024, May 8) retrieved 11 July 2024 from <https://medicalxpress.com/news/2024-05-adults-food-allergies.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.