

# Food Allergy

## Frequently Asked Questions (FAQ)

### Q 1: What is food allergy?

A food allergy is when the immune system reacts to a food (allergen), which is usually harmless. The immune system produces allergy antibodies called Immunoglobulin E (IgE) that can result in symptoms.

A positive food allergy test (skin test or blood test for allergen specific IgE) means that a person's immune system has produced an antibody response to that food. This is known as sensitisation. It is possible to have sensitisation without allergy, which means that the person can eat the food without any symptoms. For this reason, food allergy should be confirmed by a clinical immunology/allergy specialist.

Food allergy occurs in around 10% of infants, 4-8% of children, and about 2% of adults in Australia and New Zealand. The most common food allergens are cow's milk (dairy), egg, peanut, tree nuts, sesame, soy, fish, shellfish and wheat. Almost any substance that is eaten (including herbal medicine) can trigger an allergic reaction.

Mild or moderate food allergic reactions are common in Australia and New Zealand. Severe allergic reactions (anaphylaxis) due to food allergy are less common and deaths from anaphylaxis are rare. Most deaths from anaphylaxis can be prevented by:

- Careful food allergen avoidance;
- Correct posture during a reaction (laying flat, in recovery position or sitting with legs outstretched); and
- Prompt administration of adrenaline (epinephrine).

### Q 2: What are the signs and symptoms of allergic reactions to foods?

**Signs and symptoms of mild to moderate allergic reactions to foods include:**

- Swelling of the face, lips, eyes
- Hives or welts on the skin
- Abdominal pain, vomiting

**Signs and symptoms of severe allergic reactions (anaphylaxis) to foods include one or more of the following:**

- Difficult or noisy breathing.
- Swelling of the tongue.
- Swelling or tightness in the throat.
- Difficulty talking or hoarse voice.
- Wheeze or persistent cough.
- Persistent dizziness or collapse.
- Pale and floppy (in young children).

Less common symptoms include infantile colic, reflux, eczema, chronic diarrhea and faltering growth in infants.

### Q 3: What factors can make allergic reactions to foods worse?

Some factors can make allergic reactions to foods worse, and these include:

- Amount of food eaten.
- Form of the food - liquid may be absorbed faster, and cooked food is sometimes better tolerated.
- Whether it is eaten on its own or mixed in with other foods.
- Intake of alcohol.

- Exercise around the same time as the allergen is eaten.
- Asthma.
- Being unwell.
- Menstruation.

#### Q 4: Are all adverse reactions to foods due to allergy?

No. The term food allergy is often misused to describe any adverse reaction to foods.

Adverse reactions to foods that are not food allergy:

- Include food intolerances, toxic reactions, food poisoning, enzyme deficiencies, food aversion, or irritation from skin contact with certain foods.
- Can result in symptoms such as headaches after having chocolate or red wine, or bloating after drinking a milkshake or eating pasta.
- Do not result in life-threatening anaphylaxis.

#### Q 5: Is there any research into food allergy?

Research into why food allergy has become more common and prevention strategies is ongoing. It is not understood why food allergy has increased in recent years and possible explanations include:

- **Hygiene hypothesis**, which proposes that less exposure to infections in early life is associated with an increased chance of developing allergies.
- **Delayed introduction of allergenic foods** (beyond 12 months of age) such as egg, peanut or tree nuts.
- **Methods of food processing**, such as roasted versus boiled peanuts.
- **Development of allergy to food by skin exposure**, such as the use of food-based skin products.

Research into food allergy treatment, management and epidemiology is also ongoing, including the areas of:

- **Oral immunotherapy (OIT) for food allergy**, also known as desensitisation, to switch off food allergy once it has developed.
- **Family history of food allergy**, including why most children with food allergy do not have parents with food allergy, why their brothers and sisters have a slightly higher chance of having food allergy, and how this is affected by nationality and where the children and parents were born.

#### Q 6: When does food allergy develop and can it be outgrown?

Food allergy can develop at any age, but it is most common in children less than five years old.

Most children allergic to cow's milk, soy, wheat or egg will outgrow their food allergy.

By contrast, allergic reactions to peanut, tree nuts, sesame seeds and seafood persist in approximately 75% of children affected. When food allergy develops for the first time in adults, it usually persists.

#### Q 7: How can people with food allergy manage their condition?

People living with food allergy can learn to manage their condition with the guidance of their clinical immunology/allergy specialist. For people who are at risk of anaphylaxis, having an adrenaline auto-injector and ASCIA Action Plan for Anaphylaxis can provide reassurance, but this is not a substitute for strategies to minimise the risk of exposure. Strict avoidance of confirmed food allergens is essential in the management of food allergy.

It is important for people with food allergy to:

- Know the signs and symptoms of allergic reactions and know what to do when a reaction occurs.
- Read and understand food labels for food allergy.
- Tell wait staff that they have a food allergy when eating out.
- Be aware of cross contamination of food allergens when preparing food.
- Carry their adrenaline injector (if prescribed), and ASCIA Action Plan at all times.

**Q 8: Who needs an ASCIA Action Plan?**

People with food allergy should have an ASCIA Action Plan for Anaphylaxis if they have an adrenaline injector prescribed. Many people with food allergies will have an exposure every few years, even when they are very careful to avoid their confirmed food allergens.

**Q 9: Does cooking the food remove the allergen?**

Cooked or baked foods, such as cow's milk and/or egg in muffins, cakes or biscuits, may be tolerated by some people with allergy to cow's milk and/or egg. Unless tolerance to cooked or baked foods is confirmed, this should be discussed with your clinical immunology/allergy specialist before introducing these foods.

**Q 10: Are allergic reactions to inhaled foods common?**

No. Allergic reactions to food in the form of fine dust are uncommon. Most food proteins do not easily disperse as aerosols. Food handlers may have reactions to inhaled foods, including soy beans in processing plants, seafood allergens in some factories, and wheat dust in bakeries.

Foods which are more likely to cause an allergic reaction in the home environment in highly sensitised people include steam from cooking, which can carry particles of the food, and dried egg powder.

Most reactions that seem to occur without the food being eaten, especially in young children, are due to behaviours common in this age group, such as messy eating and mouthing objects. Volatile esters, which are carbohydrates, not proteins, can convey the smell of a food but cannot trigger symptoms.

**Q 11: If someone is allergic to peanuts or tree nuts, will they also be allergic to coconut?**

Allergic reactions to peanut and tree nuts are relatively common, whilst allergic reactions to coconut (which is a seed) are rare. Some people with coconut allergy also have allergy to eggs, or tree nuts such as walnut and hazelnut.

**Q 12: Does having an allergy to one meat mean that someone will be allergic to all meats?**

Meat is a major source of protein in Western diets. Whilst allergic reactions to beef and chicken are rare food allergies, these are the most common of meat allergies. Studies suggest that people allergic to one mammalian meat may have sensitivities to similar allergens present in many others. This can be triggered by tick bites. You should discuss the need to avoid all meats with your clinical immunology/allergy specialist.

**Q 13: Can hand sanitiser remove food allergen from hands?**

No. The aim of hand washing is to remove allergens rather than disinfect. Soap and water are ideal, but if they are unavailable, hand sanitiser wipes may be used. Liquid sanitiser that is not rinsed off does not remove the allergen.

**Q 14: What is Pollen Food Syndrome?**

Pollen food syndrome, also known as oral allergy syndrome, occurs mainly in people with allergic rhinitis (hay fever) who are sensitised to inhaled grass or tree pollens, which contain proteins that are in certain foods.

These allergens are known as cross reactive proteins. Pollen allergy usually develops before pollen food syndrome. People with pollen food syndrome find that some uncooked vegetables, fresh fruits, spices and nuts will make their mouth and throat itchy or swell. If the food is cooked, the protein is usually destroyed, as the cross reactive proteins in pollens and foods are often quite fragile. This is why many people with pollen food syndrome can eat the cooked food without a problem.

It is rare to have severe allergic reactions (anaphylaxis), but some foods which commonly cause pollen food syndrome can also cause food allergy, and this can sometimes progress to anaphylaxis.

**Q 15: Where can further information and support be obtained?**

For other food allergy information go to [www.allergy.org.au/patients/food-allergy](http://www.allergy.org.au/patients/food-allergy)

For allergy prevention and infant feeding information go to [www.allergy.org.au/patients/allergy-prevention](http://www.allergy.org.au/patients/allergy-prevention)

For patient/consumer support organisations go to [www.allergy.org.au/patients/patient-support-organisations](http://www.allergy.org.au/patients/patient-support-organisations)

© **ASCIA 2021**

ASCIA is the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand.

ASCIA resources are based on published literature and expert review, however, they are not intended to replace medical advice. The content of ASCIA resources is not influenced by any commercial organisations.

For more information go to [www.allergy.org.au](http://www.allergy.org.au)

To donate to immunology/allergy research go to [www.allergyimmunology.org.au](http://www.allergyimmunology.org.au)