Egg allergy

Summary

- Egg allergy is one of the most common causes of allergies in children.
- Symptoms range from hives or hay fever to a life-threatening severe allergic reaction.
- Visit your doctor or specialist doctor to discover what is causing your allergy.
- The best way to manage an egg allergy is to avoid all food containing egg or egg products.
- Speak to your doctor about making action plans for your allergic reactions.
- If you have a severe allergic reaction, call triple zero (000) for an ambulance. Do not stand or walk. Use an adrenaline autoinjector (EpiPen®).

Egg allergy is one of the most common causes of allergies in children. Many children, but not all, outgrow the allergy before adolescence.

Symptoms of egg allergy range from mild reactions to a severe allergic reaction (anaphylaxis). The most common symptoms of egg allergy are allergic skin reactions. Other symptoms include runny nose and itchy and watery eyes (similar to hay fever), cramps, nausea or vomiting. The best way to manage an egg allergy is to avoid all food containing egg or egg products.

Food allergies can be life threatening. If you, or a child in your care, have a severe allergic reaction (anaphylaxis), call triple zero (000) and ask for an ambulance. Lay the person flat and administer adrenaline autoinjector (EpiPen®) if available.

Causes of egg allergy

For all allergies, the immune system reacts to specific allergy trigger molecules (allergens). Your immune system, or that of a child in your care, produces antibodies that detect the allergen and cause inflammatory reactions and the release of a chemical called histamine. Histamine causes hives, hay fever and other allergic symptoms.

The molecules that trigger your allergic reaction can be either in egg whites or egg yolks, but allergies to egg whites are more common. The specific molecule in eggs that triggers your allergy may be present in both chicken eggs and duck eggs. Some people can therefore be allergic to both chicken and duck eggs. This is known as cross-reactivity. Speak to your doctor about cross-reactivity because it is difficult to predict.

Egg allergies and vaccines

Most vaccines in Australia do not contain any egg. Some vaccines are produced from viruses grown in chicken eggs. These include influenza (flu), yellow fever and Q fever vaccines. Some people with egg allergy can still have an influenza (flu) vaccination, so speak with your doctor.

Speak with your doctor about how your egg allergy may impact your vaccination schedule or that of a child in your care. In addition, always inform your doctor or nurse of any allergies before you receive a vaccination.

Symptoms of egg allergy

Everyone’s immune system is different and egg allergy can cause diverse signs and symptoms, ranging from mild to severe. Symptoms can appear within a few minutes or a few hours of eating eggs or products containing eggs. Many food allergies do not cause severe symptoms, but they can be life threatening in some people and should be taken seriously.

Some people have negative or adverse reactions to food (such as headache or bloating) that are not caused by allergies. These can be caused by factors such as food poisoning, toxic reactions or food sensitivities (intolerance).
from enzyme deficiencies. Although these are not allergic reactions, they are often mistaken for allergies.

If you or a child in your care have experienced any of these symptoms after eating egg, the risk of having another severe reaction after eating egg is greater than usual. Ask your doctor to refer you to a medical specialist (allergist or clinical immunologist).

**Severe allergic reaction – anaphylaxis**

Eggs are one of the most common foods to cause severe allergic reactions. Severe allergic reaction (anaphylaxis) is life threatening.

Symptoms of a severe allergic reaction include:

- difficult or noisy breathing
- swelling of the tongue
- swelling or tightness of the throat
- difficulty talking or hoarse voice
- wheeze or persistent cough
- persistent dizziness or collapse
- paleness and floppiness in young children.

Milder allergic symptoms that can occur before a severe allergic reaction include:

- swelling of your lips, face and eyes
- **hives** or welts
- tingling mouth
- abdominal pain and vomiting.

**Allergic skin symptoms from egg allergy**

Allergic skin reactions are the most common symptoms of egg allergy. Symptoms include:

- raised red bumps of skin – hives (urticaria)
- itchy skin and rash.

**Hay fever symptoms from egg allergy**

People with an egg allergy can experience hay fever symptoms (allergic rhinitis) including:

- sneezing
- itchy and runny nose
- red, itchy and watery eyes
- itchy roof of the mouth or throat
- cough
- congestion of the nose
- blocked sinuses.

**Diagnosis of egg allergy**

Diagnosing an allergy can be difficult. If you think you or a child in your care may have an egg allergy, keeping a record or diary of symptoms can help you and your doctor to understand what is causing the symptoms.

Your diary could include information about whether the symptoms occur:

- inside your home, outside or both
- for a short time or longer
- at night, during the day or when you wake up
- after you have had a particular food or drink
- after you have taken a particular medication, either prescription or over the counter from a pharmacy or supermarket
Visiting your doctor about your symptoms

If you have allergic symptoms, visit your family doctor who will ask some questions about your allergic reactions. You can also discuss your record of your symptoms. To diagnose your allergy, your doctor may refer you to a specialist doctor known as an allergist or clinical immunologist.

Allergists can test for allergies using a number of possible methods depending on the type of potential allergy. To test for an allergy to eggs, the allergist may:

- do a skin prick test
- do a blood test
- ask you to temporarily avoid all eggs or products containing eggs (elimination diet), then follow up with the introduction of egg back into your diet (food challenge) under strict medical supervision.

Unproven methods to test for allergies

A number of methods claim to test for allergies, but they have not been medically or scientifically proven. They can be costly and could lead to dangerous avoidance of certain foods. The Australasian Society of Clinical Immunology and Allergy (ASCIA), the organisation representing allergists in Australia, recommends that you do not use certain methods to have potential allergies tested. These methods include:

- cytotoxic food testing
- electrodermal testing
- hair analysis
- iridology
- kinesiology
- pulse testing
- reflexology
- Vega testing.

Always speak with your doctor if you are thinking of using a complementary medicine or therapy to test for allergies.

Treatment for egg allergy

The only treatment for food allergies is to avoid the food that causes your allergy. Even if you are careful, it is difficult to avoid all contact with a specific food. If you are at risk of a severe allergic reaction (you have been prescribed an adrenaline autoinjector), ASCIA recommends that you have an ASCIA ‘Action plan for anaphylaxis’. If you are not at high risk and have not been prescribed an adrenaline autoinjector, ASCIA recommends that you have an ASCIA ‘Action plan for allergic reactions’.

To assist with food avoidance, people with food allergies need to become familiar and comfortable with reading food labels. ASCIA has fact sheets to help you understand how to read food labels and what to avoid if you have an egg allergy.

Some people can tolerate eggs in cooked or baked products, because the molecules (proteins) in eggs change when they are cooked and are then no longer recognised by your immune system as dangerous. Your doctor can advise you about whether you can eat certain products.

Inaccurate diagnosis can lead to expensive and ineffective treatments, and unnecessary food avoidance, which can lead to malnutrition and food aversion, especially in children. Always speak to your doctor about your food allergy diagnosis and treatment options.

Emergency treatment for severe allergic reactions

Emergency responses for a severe allergic reaction are:
- lay the person flat – do not allow them to stand or walk
- administer adrenaline with an autoinjector (such as an EpiPen®)
- always dial triple zero (000) to call an ambulance in a medical emergency.

If you are at risk of a severe allergic reaction make sure you:

- have a severe allergic reaction action plan
- carry an adrenaline autoinjector (such as an EpiPen®) to treat a severe allergic reaction
- wear medical identification jewellery – this increases the likelihood that adrenaline will be administered in an emergency
- carry a means of calling triple zero (000), such as a mobile phone
- avoid medication (where possible) that may increase the severity of allergic reaction or complicate its treatment – such as beta blockers
- seek medical advice.

Where to get help

- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Your doctor

  **NURSE-ON-CALL**, Tel. 1300 60 60 24 – for health information and advice (24 hours, 7 days)

  **St John Ambulance Australia** (Victoria) Tel. 1300 360 455

  **Allergy & Anaphylaxis Australia**, Tel. 1300 728 000

This page has been produced in consultation with and approved by:

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