

Egg allergy: The facts

Egg allergy is common in babies and young children. It often starts before your baby is one and they will usually outgrow it during childhood. Sometimes egg allergy lasts into the teenage years and, rarely, may not be outgrown at all. It is very uncommon to develop egg allergy in adulthood. Many cases of egg allergy are mild, but some people will have more serious symptoms.

What is egg allergy?

Egg allergy is a type of food allergy. Food allergy occurs when the body's immune system wrongly identifies a food as a threat. When this happens, the body releases chemicals, such as histamine, in response. It is the release of these chemicals that causes the symptoms.

What are the symptoms of egg allergy?

The symptoms of egg allergy usually come on quickly, within minutes of eating the food.

Mild to moderate symptoms may include:

- a red raised itchy rash (known as hives or urticaria) anywhere on the body
- swelling of the face, lips and/or eyes
- a tingling or itchy feeling in the mouth
- mild throat tightness
- stomach pain, vomiting or diarrhoea

More serious symptoms are uncommon but remain a possibility for some people, including children. These may include:

- AIRWAY - swelling in the throat, tongue or upper airways, hoarse voice, difficulty swallowing.
- BREATHING - sudden onset wheezing, breathing difficulty, noisy breathing, persistent cough.
- CIRCULATION - dizziness, feeling faint, sudden sleepiness, confusion, pale clammy skin, loss of consciousness or collapse.

The term for this more serious reaction is **anaphylaxis** (ana-fil-ax-is).

Most healthcare professionals consider an allergic reaction to be anaphylaxis when it involves difficulty breathing or affects the heart rhythm or blood pressure. Any one or more of the ABC symptoms above may be present.

In extreme cases there could be a dramatic fall in blood pressure. The person may become weak and floppy and may have a sense of something terrible happening. Any of the ABC symptoms may lead to collapse and unconsciousness and, on rare occasions, can be fatal.

[Read more about anaphylaxis.](#)

Some very sensitive people may even suffer breathing problems when they inhale the fumes of cooked eggs.

Egg allergy can also cause symptoms that come on hours or even days later. When symptoms are delayed, they may include worsening of eczema, reflux caused by inflammation in the gut, trouble swallowing, diarrhoea, constipation, abdominal (tummy) pain and bloating.

Getting a diagnosis

If you think your child may be allergic to egg, see your GP who can refer you to a specialist allergy clinic if needed. They can find a clinic in your area from the [British Society for Allergy and Clinical Immunology \(BSACI\)](#).

It's important to get a referral even if the symptoms were mild because it can be hard to tell if future allergic reactions could be more serious.

Once you get a referral, the consultant will discuss your child's medical history and symptoms with you. They might suggest skin prick, blood tests, and food challenge tests to help diagnose the allergy and work out how serious it may be. [Read more about allergy testing.](#)

Some clues that your child might be at higher risk of more serious reactions are:

- they have already had a serious reaction, with any of the 'ABC' symptoms
- they have asthma, especially if it is not well controlled
- they have reacted to a tiny amount of egg.

If your child has asthma, and it is not well controlled, this could make an allergic reaction worse. Make sure you discuss this with their GP or allergy specialist and take any prescribed medicines.

Symptoms can be confusing because children can often eat egg when it's baked, in cakes for example, without having a reaction, but can't eat egg when it is lightly cooked or raw. When a child reacts to lightly cooked or raw egg but not baked egg, it might not be obvious that egg is the allergen. It's helpful to keep this in mind if you are not sure what's causing the allergic reactions.

Treating symptoms

If you have mild allergic symptoms, you may be prescribed antihistamine medicine that you take by mouth. But if you are at risk of a serious allergic reaction (anaphylaxis), you may be prescribed adrenaline – the emergency medicine used to treat anaphylaxis. It is also known as epinephrine.

Because anaphylaxis can happen very quickly, adrenaline is available in different forms that are designed to be easy to use. It's important to know exactly how and when to use your prescribed adrenaline. Healthcare professionals can show you how to use it, and there are also resources such as practice devices and videos on manufacturer websites.

Options currently available on prescription in the UK include:

- **Adrenaline auto-injectors (AAIs)** – such as EpiPen and Jext.
- **Intranasal adrenaline** – EURneffy, a needle-free nasal spray.

You must carry two in-date forms of prescribed adrenaline at all times as a second dose may be needed if symptoms do not improve after five minutes or get worse.

[Find out more about what to do in an emergency.](#)

[Find out more about adrenaline.](#)

Egg allergy and related allergic conditions

Eczema

Children with eczema are more likely to develop egg allergy and this is more likely the worse the eczema is. If your child has severe eczema and you think they may be allergic to egg, cutting egg out of their diet may help their eczema get better.

Ask for a referral to an allergy clinic as you should only try removing egg from their diet completely on the advice of an allergy specialist or dietitian.

Respiratory allergies and asthma

Babies and children with egg allergy are at much higher risk of developing respiratory allergies such as hay fever, pet or dust mite allergies, or asthma. As many as 8 out of 10 will go on to develop a respiratory allergy or asthma by the age of four. If your baby or child with egg allergy develops respiratory symptoms such as wheezing, discuss this with their doctor or specialist so they can be diagnosed and treated.

Peanut allergy

Babies with egg allergy are more likely to develop peanut allergy than other babies. If your baby is having tests for allergy to egg, their specialist may recommend tests that look for sensitivity to peanut proteins too. Introducing peanut into your baby's diet early (from around 6 months of age) may help to prevent them from developing peanut allergy but follow your doctor or allergy specialists' advice.

[Read more about weaning babies with food allergies here](#)

Outgrowing egg allergy

Most children with egg allergy will outgrow it, some more quickly than others.

At first, children outgrow their allergy to baked egg as an ingredient, in cake for example, while they will still react to lightly cooked egg, such as in pancakes. Over the following months or years, they will begin to tolerate lightly cooked egg, and finally uncooked egg, such as in mayonnaise.

Your allergy specialist can guide you on the best time to re-introduce each type of egg and whether or not you can do this at home. Specialists often repeat skin or blood tests to see when the allergy is improving.

If your child can tolerate baked egg, it's good to include it in their diets as most specialists now agree that this can speed up how quickly children outgrow their allergy altogether. Always check with your allergy specialist about what forms of egg are okay first.

Avoiding egg

When you're shopping

Egg can be found in a wide range of foods, including:

- cakes
- pastries
- desserts
- meat products
- mayonnaise and other salad dressings
- soups
- mousses
- glazes
- pasta
- noodles
- battered and bread crumbed foods
- ice cream
- chocolates and sweets.
- to stick sugar to the rim of cocktail glasses

This list is not complete so, to avoid egg, read the ingredient lists on food packets carefully every time you shop. Egg is included in the list of top 14 major food allergens in the UK. This means it must be highlighted on ingredients labels, in bold for example.

Egg can be included in foods in different forms, for example as egg protein, dried egg white or egg lecithin, but this will always be highlighted in the ingredients list.

If you need eggs for a particular recipe, you could try an egg replacer or substitute ingredient such as chia seeds, flax or chickpea water.

When eating out

When you buy catered food, such as in restaurants, cafes and takeaways, ask staff directly whether egg is an ingredient in that food or whether there is a risk of cross-contamination. Don't be afraid to ask the waiter to check with the chef if they are not sure.

What else might I react to?

If you are allergic to hen's eggs, don't eat eggs from ducks, geese, quails or other birds because you might react to any egg. Very rarely, people who are allergic to hen's egg may not be able to eat chicken.

Finings

In some wines, a product made from egg called 'fining' is used to make the wine look clear. For most people with egg allergy, the amount of egg is so tiny it won't cause an allergic reaction. However, any wine using egg as a fining agent will have an allergen warning that says 'Contains Egg' on the label if the amount is more than 0.25 milligrams per litre.

Vaccines and egg allergy

The Measles, Mumps and Rubella (MMR) vaccine

All children with egg allergy can safely be given their MMR vaccination in any setting. The MMR vaccine is grown on cells from chick embryos, not from hen's eggs themselves, and it does not contain enough egg protein to cause an allergic reaction.

The influenza (flu) vaccine

Some flu vaccines are made using hen's eggs and may contain tiny amounts of egg protein, but egg-free flu vaccines are also available.

Adults with egg allergy can safely be given a flu vaccine in any setting as long as it has less than 0.06 micrograms of the egg protein (called ovalbumin) per 0.5ml dose of vaccine. You can find this information in the patient information leaflet for the vaccine.

Adults who have had anaphylaxis due to egg allergy that required intensive care should be offered an egg-free vaccine.

Children with egg allergy can safely have the Live Attenuated Influenza Vaccine (LAIV) nasal spray. Even though it contains minute quantities of egg protein, it's not enough to cause an allergic reaction. The only exception is for children with a history of anaphylaxis to egg so severe that it

has required intensive care. They should be referred to specialists for immunisation in hospital as a precaution.

The yellow fever vaccine

If you are allergic to egg and need a yellow fever vaccination, ask for a referral to an allergy specialist. The vaccine contains small amounts of egg protein but sometimes it can be given successfully by splitting the doses.

Hopes for the future

Oral immunotherapy is a new treatment that aims to build up tolerance to egg. It involves eating small amounts of egg regularly, for example once a day, starting with a tiny amount and slowly building up the amount until you can eat a normal serving without having a reaction. In the last few years, lots of studies have shown that it can work for some children.

The treatment needs supervision in highly specialist allergy centres because it's common to have allergic reactions during treatment and at the moment there aren't any agreed standards on exactly how much and how often egg should be eaten.

Key messages

- If you think you or your child may be allergic to egg, visit your GP.
- If you are prescribed adrenaline, carry two devices with you at all times.
- Always be guided by your allergy specialist on which foods to avoid.
- Ensure that asthma is well managed. See your GP about this.

Feedback

Please help us to improve our information resources by sending us your feedback at:

<https://www.anaphylaxis.org.uk/information-resources-feedback/>

Sources

All the information we produce is evidence-based or follows expert opinion and is checked by our clinical and research reviewers. If you would like to know the sources we used in producing any of our information, please contact info@anaphylaxis.org.uk and we will gladly supply details.

Reviewer

The content of this Factsheet has been Peer Reviewed by Professor Adam Fox, Consultant Paediatric Allergist, Evelina London Children's Hospital.

Disclosures

We are not aware of any conflicts of interest in relation to the review of this factsheet

Disclaimer

The information in this Factsheet is given in good faith. Every effort has been made to ensure accuracy. Everyone is different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

About Anaphylaxis UK

Anaphylaxis UK is the only UK-wide charity solely focused on supporting people at risk of serious, life-threatening allergic reactions. We provide information and support to people living with allergies through our free national helpline and local support groups. We also campaign and fundraise to achieve our ultimate aim, to create a safer environment for all people at risk of serious allergies. Visit our website www.anaphylaxis.org.uk and follow us to keep up-to-date with our latest news. We're on Facebook @anaphylaxisUK, LinkedIn, Instagram @anaphylaxisUK, Twitter @AnaphylaxisUK and YouTube.