

Peanut Allergy

Advice provided by allergyuk.org



The information in this Factsheet has been developed to help you understand more about peanut allergy.

How common is peanut allergy?

Peanuts are a common cause of food allergy, caused when the immune system reacts to the protein found in peanuts. Peanut allergy affects around 2% (1 in 50) of children in the UK and has been increasing in recent decades.

It usually develops in early childhood but, occasionally, can appear in later life. Peanut allergy tends to be persistent and only approximately 1 in 5 children outgrow their allergy, usually by the age of 5 (1).

Who is at risk of peanut allergy?

Infants with eczema and/or egg allergy are more likely to develop a peanut allergy (2). It is important to know that peanuts are a legume and from a different family of plants to tree nuts (almonds, Brazil nuts, cashews, hazel nuts, macadamia, pecan, pistachios and walnuts). A peanut allergy does not automatically mean an allergy to tree nuts although it is not uncommon to be allergic to both peanuts and some tree nuts.

An allergy to peanuts does also increase the likelihood of an allergy to **sesame** and **lupin**. Advice on whether it is safe to have sesame, lupin or tree nuts in the diet should be sought from your GP/allergy specialist.

Prevention of peanut allergy

New research (3) has shown that the risk of developing peanut allergy can be reduced in infants at high risk of this allergy (i.e. those with significant eczema and/or egg allergy) by introducing food containing peanut into infants' diets within the first 12 months of life.

Early introduction is thought to help the immune system tolerate peanut protein. Infants with no eczema or known food allergy can be given food containing peanut from the time that solid food is introduced, at around 6 months, when baby is developmentally ready, but not before 4 months. This should be in the form of smooth peanut butter or peanut snacks suitable for babies (never use crunchy peanut butter or whole peanuts due to the risk of choking). If they have been diagnosed with a food allergy or eczema it is important to discuss introducing peanuts with your GP, Dietitian, Paediatrician or Health Visitor. (Delaying the introduction of peanut can increase the risk of developing a peanut allergy) so ensure you speak to your health professional as soon as possible.

It is safe for pregnant and breastfeeding women to consume peanuts unless they are allergic themselves.

What are the signs and symptoms of an allergic reaction to peanut?

Signs and symptoms usually occur



For more help, contact the **Allergy UK helpline:**
Monday to Friday, 9am to 5pm
01322 619 898

info@allergyuk.org

Key facts

Infants with eczema and/or egg allergy are more likely to develop a peanut allergy

There is no evidence that peanut protein can be circulated in the cabin air and cause a severe reaction on a plane

It is important to know that peanuts are a legume and from a different family of plants to tree nuts



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within minutes of contact with peanuts, but can also occur up to one hour later. Most allergic reactions are mild but they can also be moderate or severe. Anaphylaxis (pronounced ana-fil-laxis) is the most severe form of allergic reaction which can be life threatening.

Mild to moderate symptoms include:

- Itchy mouth, tongue and throat
- Swelling of lips, around the eyes or face
- Red raised itchy rash (often called nettle rash, hives or urticaria)
- Vomiting, nausea, abdominal pain and diarrhoea
- Runny nose and sneezing

Any one or more of the following symptoms are a sign of a severe allergic reaction (anaphylaxis) and should be treated as a medical emergency. If available, adrenaline should be given without delay and an ambulance called with the call operator informed that it is anaphylaxis.

Severe symptoms of anaphylaxis include:

- Swelling of the tongue and/or throat
- Difficulty in swallowing or speaking
- Change in voice (hoarse voice)
- Wheeze (whistling noise) or persistent cough
- Difficult or noisy breathing
- Dizziness, collapse, loss of consciousness (due to a drop in blood pressure)
- Pale, floppy, sudden sleepiness in babies.

Please see our Factsheet on anaphylaxis and severe allergic reactions for more information and guidance on what to do when these severe symptoms occur.

Severity of reactions

It is commonly misunderstood that food allergic reactions become more severe each time they happen, but this is not the case. Reactions are unpredictable and there is no reliable way of knowing how an individual may react. There are several reasons why

an allergic reaction may be more severe, including how much peanut allergen has been eaten and other factors such as uncontrolled asthma, exercise, and infection. Some people do seem predisposed to more severe reactions with a previous anaphylactic reaction increasing the risk of a further one.

Diagnosis

It is important to seek advice from a Healthcare professional if a peanut allergy is suspected. In the first instance, this will usually be your GP. They may arrange for allergy testing to be carried out or refer you to a specialist allergy service for skin prick testing and/or specific IgE blood testing to peanut. These tests help to confirm if food allergy is likely and rule out other possible causes. Allergy tests cannot predict how mild or severe an allergic reaction will be, or when an allergic reaction is likely to happen. Alternative types of allergy testing other than those recommended by a Healthcare professional are not advised as these may be from an unreliable source with no value in diagnosing allergy and could lead to removing food from the diet that does not actually need to be avoided. If you are unsure, call Allergy UK's Helpline to be signposted to your nearest NHS or Private allergy service.

If you have had cause for concern over peanut allergy and have been avoiding peanuts, it is important not to reintroduce peanuts back into the diet without medical advice.

More about peanuts

Peanuts are grown in areas of the world with warm climates such as America, Asia and Africa. They are grown from seed and grow under the ground. Different varieties of peanut are produced for different uses (for example, peanuts to be used in peanut butter and peanuts in the shell for roasting). Peanuts are from a family of plants called legumes, the same family as garden peas, lentils, soya beans and chick peas. Most people will be able to eat other types of

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legumes without any problems and it is rare for people with a peanut allergy to react to other legumes.

One member of the legume family that can affect people with peanut allergy is lupin as these seeds share similar proteins with peanuts. Lupin flour and seeds can be used in bread, pastry and pasta. It is often used in wheat and gluten-free food. Lupin is more commonly used in other European countries, Brazil and the Middle East.

Sesame allergy may affect up to a quarter of those with peanut allergy. It is very important to be aware of this and seek medical advice from an allergy specialist if you or your child has ever had a severe reaction to peanut as allergy testing to these other foods may also be needed.

Living with a peanut allergy

As there is currently no cure for peanut allergy, the complete avoidance of peanuts and foods which contain peanuts is important. Peanuts are widely used in a variety of foods and are a common ingredient in different types of cooking like Asian and Indian cuisine. They can also be found in foods like muesli and cereals and cereal bars. It is important to carefully check the ingredients list on food items (specifically those produced outside of the EU as they are not required to include peanut as a highlighted food allergen). Avoid foods which contain peanut and could be listed under any of the following names:

- Arachis hypogaea
- Beer nuts
- Cacahuete
- Chinese nuts
- Earthnuts
- Groundnuts
- Goober nut/pea
- Madelonas
- Monkey nuts
- Peanuts

Management of peanut allergy: medications and allergy action plans

In the case of a severe allergic reaction (anaphylaxis) adrenaline is the medication needed to treat allergic symptoms and should be given as soon as possible after symptoms of anaphylaxis are recognised.

Adrenaline auto-injectors, also known as adrenaline pens, are devices that contain the emergency medicine 'adrenaline' that can be given in the case of a severe (anaphylactic) reaction to peanut. If you or your child are prescribed an adrenaline auto-injector it is important that you are shown how to use it by the doctor, nurse or pharmacist. These devices are available as trainer pens for the type of adrenaline pen that has been prescribed (they all work differently) and are useful for practicing or showing others how to use them (they do not contain a needle or medication).

Expiry dates should be noted and reminder services are available from some of the adrenaline pen websites. Adrenaline auto-injectors that have been used or due to expire should be replaced immediately. Allergy medication prescribed for a child with a food allergy should be documented on a written allergy action plan for the child's school or after school clubs or activities. Allergy action plans are individual to the person, listing their food allergies and providing advice on the signs and symptoms of an allergic reaction, as well as instructions on what medication to give and when.

Allergy action plans for children can be downloaded for free from the following website: <http://www.bsaci.org/about/download-paediatric-allergy-action-plans>. These action plans need to be completed by a Health professional. Adrenaline auto-injectors should be kept away from bright light and extremes of temperatures but they should always be with, or easily available to, the food allergic person (for example not in a suitcase in the luggage hold of an aeroplane).

Not all people with food allergy need to have or are

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prescribed an adrenaline auto-injector. This decision is made by a Health professional (GP/Allergy specialist/immunologist) on an individual basis and will depend on need, including the severity of previous allergic reactions, age, and distance from medical help.

If you have been prescribed an adrenaline auto injector device by your doctor it is recommended that you carry two adrenaline auto-injectors at all times; this is particularly important for people who also have allergic asthma because they are at an increased risk of a severe anaphylactic reaction (5). Having well controlled asthma is important especially where food allergy and asthma are combined. This means recognising when asthma symptoms are worsening, knowing asthma triggers and avoiding them and knowing how and when to use a preventer and reliever inhaler and spacer, as well as seeing a Health professional for a regular asthma review.

Treatment for peanut allergy

As peanut allergy has the potential to cause severe life-threatening reactions and is relatively common, extensive research has been done to look at new forms of treatment. One method that is available privately in some specialist allergy clinics (but not currently on the NHS) is oral immunotherapy (OIT). This is the process of increasing the tolerance of food allergens that are eaten. The concept is that very small amounts of an allergen (e.g. peanuts) are introduced and the amount gradually increased until a target amount of the food is reached and maintained. This should never be tried without medical supervision at a specialist centre, where currently it remains the subject of active research programmes. Please contact your GP or allergy specialist if you would like more information.

Reading a food label

In the European Union (EU) ingredients lists on food labels have to clearly emphasise (for example in bold or highlighted) whether they contain any of the 14 most common allergens, these include peanuts.

Outside of the EU food labelling laws will be different so it is important to check ingredients carefully, especially where food has been imported from outside of the EU or when eating out whilst on holiday.

Example of a food label:

INGREDIENTS: Maize, Sugar, **Peanuts** (7.5%), Barley Malt Flavouring, Molasses, Honey (1%), Salt, Vitamins & Minerals: Niacin, Iron, Vitamin B6, Vitamin B2 (Riboflavin), Vitamin B1 (Thiamin), Folic Acid, Vitamin B12

Precautionary labelling: 'May contain' and 'made in a factory' statements

Currently there is no law to recommend when these statements should be used on a food product. There is large variation between products, but generally, snacks and dry foods such as cereals, cereal bars, chocolate, biscuits and nuts are at more risk of cross-contamination with allergens, at source and during manufacturing, than other foods.

It is safest to avoid all foods with "may contain" peanut warnings. However, your allergy specialist will be able to give you individually tailored advice to help assess risk and give appropriate management. For some people with peanut allergy this level of avoidance may not be necessary after this type of risk assessment.

Peanut oils

Unrefined peanut oil (also called groundnut oil) which is often found in South Asian food may still contain proteins and should be avoided. Refined peanut oil has the protein (the allergen) removed, however it is very difficult to be sure that the oil has been refined enough and therefore it is recommended that this is also avoided. Some medications (including Abidec infant vitamins) contain refined peanut oil and therefore should be avoided.

Cross contamination

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Cross contamination occurs when a nut free food comes into contact with nut proteins accidentally. This could be in the manufacturing process, storage or food preparation. Even tiny traces of peanut proteins can cause an allergic reaction, in very peanut sensitive individuals, if they are eaten. At home ensure that all work surfaces and chopping boards are well cleaned using hot, soapy water. Use separate containers for jams, butter etc. especially if you are using peanut butter and always use clean utensils for serving them.

Misleading nut-named foods

Despite having the word 'nut' in their name the following foods are not from the tree nut or peanut families so do not need to be avoided if you have a peanut allergy, unless you are also allergic to one of the following foods.

- **Chestnut**- is an edible product of a group of trees in the beech family
- **Coconut** - the fruit (seed) of a coconut palm tree
- **Water chestnut** - aquatic vegetable
- **Nutmeg** - seed of the nutmeg tree
- **Butternut Squash** - technically a fruit
- **Pine nut** - the edible seeds of pine trees

Eating out

Businesses selling food are required by EU law to provide information on allergens in food. Therefore don't be afraid to ask what foods contain, as it is not always clear from menu descriptions. It is important to highlight a peanut allergy and request that people cooking and handling food are cautious and avoid cross contamination. It is also helpful to telephone places you are planning to visit before you go to make sure they can cater for your dietary needs.

When eating away from home with a food allergy, allergy medication should always be taken with you, or on behalf of a child, in case of accidental exposure which commonly happens when eating outside of the home.

Allergy UK are able to provide a translation card service which can be used when travelling or eating out abroad. (These are available in multiple languages at a small cost from Allergy UK's Helpline (01322 619898). These cards have English on one side and the translated food allergen(s) in the language required on the other.

They can also be used in the UK as a card written in English with the allergens you need to avoid. This can save a lot of time, and showing the card makes sure the seriousness is understood. These cards are the size of a credit card and can easily be stored in a purse, wallet or pocket.

Air travel

Many nut allergic people and their families find that air travel, in particular, can provoke anxiety about the possibility of having an allergic reaction on board. The high altitude, close proximity of fellow passengers and the re-circulated cabin air can all contribute to this fear if the cabin crew serves nuts or someone opens a packets of nut near them.

There are many things that can be done to reduce this risk, such as making sure that hands are washed before eating or putting hands into the mouth; wiping clean the tray table and arm rests with wet wipes; requesting a nut free meal or providing your own food; avoiding airline pillows and blankets; requesting an announcement made asking that other passengers do not consume nuts/nut products, and making sure that all prescribed medication is immediately available to you in the cabin (not stored in the luggage in the hold).

There is no evidence that peanut protein can be circulated in the cabin air and cause a severe reaction and such reactions are very rarely reported in flight. Where research studies have been done it has showed that the peanut protein is too heavy to be circulated in this way. It is always advisable to contact the airline before booking or travelling to ask what provision is

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made to protect the nut allergic person on board so that an informed decision can be made. Don't forget to contact all airlines if there are connecting flights. (see our travelling with food allergy Factsheet) (6).

Allergy alerts

Sometimes processed or pre-packaged foods have to be withdrawn or recalled from food suppliers like supermarkets and shops as there may be a risk to people who have bought or eaten these products because the allergen labelling is missing, wrong or there has been a contamination risk.

These Alerts are available from the Food Standards Agency (FSA) website. It is also possible to subscribe to the FSA's free email or SMS text message alert system to receive messages when Allergy Alerts are issued. Allergy UK also lists Allergy Alerts that have been made known to them and you can subscribe to its free email Alert system, contact the Allergy UK Helpline on 01322 619898 for more details.

Nuts and nut-named foods in skincare products and cosmetics

Sometimes tree nuts, peanuts or foods with the word 'nut' in them can be used in cosmetics such as moisturisers, soaps and shampoo.

Cosmetic products must include information on the ingredients in decreasing order of the weight of the ingredient. This enables those looking to avoid a certain ingredient to be able to identify and avoid it. Nut oils like peanut or almond oil can be used in cosmetics and toiletries and can be a problem to those with an allergy to those foods.

The amount of protein allergen that remains in a product after the processing will vary, depending on the processes used.

The risk of developing allergic sensitisation to a food via the skin or hair from oils or cosmetics containing

nut is not fully understood. Products that come into contact with the skin that contain a food allergen should be avoided in those with a food allergy to that food ingredient.

Shea Nut, Argan nut, and coconut are commonly used in skin and hair products.

Anxiety

Having a food allergy can be very stressful because of the fear of having an allergic reaction and the need to avoid food allergens can be time consuming and expensive when buying 'free from' or alternative foods. Feeling anxious about managing your own or child's allergy is understandable and patient organisations such as Allergy UK are here to provide support, advice and guidance to those living with, or concerned about, allergy.

Clinical contributions

Allergy UK Health Advisory Board

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Allergy UK Clinical Team

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References

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