

Peanut allergy and tree nut allergy – the facts

Peanut allergy and tree nut allergy can sometimes result in severe allergic reactions and understandably this can cause intense anxiety among those families affected.

This factsheet aims to answer some of the questions which you and your family might have about living with peanut allergy or tree nut allergy. Our aim is to help you to minimise risks and also provide supporting information on where additional help and advice is available.



In the first part we give more information on peanut allergy and tree nut allergy and how to get a diagnosis. In the second part the focus is on the ongoing management of peanut allergy or tree nut allergy. Throughout the text you will see brief medical references given in brackets. If you would like the full references please call the Anaphylaxis Campaign helpline, on Tel: 01252 542029.

The questions covered include:

1. How common are peanut allergy and tree nut allergy?
2. How can I get a diagnosis of peanut allergy or tree nut allergy?
3. Will the peanut allergy or tree nut allergy be lifelong?
4. Are teenagers and young adults likely to be more at risk of life-threatening allergic reactions than younger children?
5. What should I do if an allergic reaction to peanuts or tree nuts occurs?
6. What if I come into contact with peanuts or tree nuts through touch or smell?
7. What if I want to travel by air – what are the risks?
8. How do I live life with a severe allergy?

What are peanut allergy and tree nut allergy?

The peanut is a legume, related botanically to foods such as peas, beans and lentils. Tree nuts are in a different botanical category and include almonds, hazelnuts, walnuts, cashew nuts, pecans, Brazil nuts, pistachios and macadamia nuts.

Many people with peanut allergy or tree nut allergy experience only mild symptoms, such as a tingling in the mouth or on the lips but it is difficult to predict who will remain in the mild category. Life-threatening symptoms can sometimes occur, including wheezing, swelling in the throat and fall in blood pressure leading to collapse. Fatal reactions are very rare but have occurred.

We would always advise you to see your GP and ask to be referred to an NHS allergy clinic for a proper assessment.

How common are peanut allergy and tree nut allergy?

Research has shown that peanut allergy among children increased significantly during the 1990s. In 2002 a medical team on the Isle of Wight found that around one in 70 children across the UK was allergic to peanuts, compared with one in 200 a decade before. A more recent follow-up study by the same group suggests a slight fall in cases (Venter et al 2010).

The high rates of peanut allergy were acknowledged in a UK Government report in 2004, which put the figure among children in England at around 250,000 (House of Commons 2004). Similar trends for peanut allergy have been noted in the USA (Sicherer et al, JACI 2010).

A 2011 paper shows that tree nut allergy is more common in older age groups than among children (Venter and Arshad 2011).

How can I get a diagnosis of peanut allergy or tree nut allergy?

If you suspect or know you have peanut allergy or tree nut allergy you need to seek a referral to an NHS allergy clinic for a thorough assessment, which will include tests to confirm which types of nut are responsible for causing your symptoms.

Your medical background may help to define the likelihood of your having a severe allergic reaction. According to experts (see Muraro et al 2007) you are at high risk if:

- You have had a severe reaction in the past, such as swelling in the throat, breathing difficulties (even mild) or faintness
- You have asthma as well as allergy, particularly if that asthma requires regular preventer treatment
- You have had an allergic reaction to a tiny amount of peanut or tree nut

Once you have been diagnosed, you will need guidance on how to avoid the culprit foods and how to treat a reaction. Your allergy clinic should offer help and should also provide the opportunity to have a consultation with a registered dietician. If you need additional advice then consult your GP.

The Anaphylaxis Campaign can provide information, advice and ongoing support.

Visit www.anaphylaxis.org.uk or call our helpline on Tel: 01252 542029

To find your nearest allergy clinic visit the website of the British Society for Allergy and Clinical Immunology www.bsaci.org

Will your peanut allergy or tree nut allergy be lifelong?

Peanut allergy was once thought to be lifelong in all cases, but recent studies show that about 20% of young children outgrow their peanut allergy (Burks 2008). Doctors are unable to tell which children will be the lucky ones, although blood tests taken in the early years of life may provide clues (Ho et al 2008). Some experts are of the opinion that if a child has not outgrown their peanut allergy before the age of ten, it is likely that it will persist.

Challenge testing, where peanuts are introduced to the child in a controlled way in hospital, may be required to test whether the child's peanut allergy has been outgrown.

Research suggests that 10% of young children outgrow tree nut allergy (Skripak and Woods 2008).

Managing your peanut allergy or tree nut allergy

Are teenagers and young adults likely to be more at risk of life-threatening allergic reactions than younger children?

Fatal reactions are very rare, but where they do happen, they are more likely to occur between the ages of 17-27 (Pumphrey, 2004).

As young people begin to manage their allergies for themselves they may be less cautious with regard to risk, reluctant to ask direct questions in restaurants and subject to peer pressure. Drinking alcohol will impair their judgment and may even make a reaction worse.

A list of key messages is included at the end of this Factsheet.

What should I do if an allergic reaction to peanuts or tree nuts occurs?

Adrenaline injectors are prescribed to those thought to be at risk of a severe reaction. Those currently available on prescription include EpiPen, Anapen or Jext. It is vital that everyone who is prescribed an injector should become familiar with the instructions for administering the injection, which are provided in the leaflet accompanying the device.

You should carry your injector with you at all times and administer it as soon as a serious reaction is suspected, then call an ambulance immediately. If there is no improvement after five minutes, a second injector can be administered, if available.

Quick-acting antihistamines are prescribed for mild to moderate reactions.

For information on how to obtain a training injector device, visit www.anaphylaxis.org.uk

How do I avoid coming into contact with peanuts and tree nuts?

Shopping - Always read food labels, even if you are buying a product you have eaten many times before. Recipes sometimes change. Check both the inner and outer wrapping of multipacks.

Under European law, certain major allergens must always be declared when they are used as ingredients of pre-packed food. These include peanuts and common tree nuts (almonds, hazelnuts, walnuts, cashew nuts, pecan nuts, Brazil nuts, pistachio nuts, macadamia nuts and Queensland nuts).

“May contain” warnings (sometimes known as advisory labelling) are used by food companies where there is a risk of cross-contamination during the production process. Advisory labelling is widespread and causes immense frustration to shoppers but the Anaphylaxis Campaign believes these warnings should be heeded at all times and never ignored. Often there are genuine risks. You may eat a product many times without a problem, but cross-contamination may have occurred the next time you eat it.

Eating out - Foods sold in restaurants and other catering outlets, or at in-store bakeries and delicatessen counters, are generally unlabelled and so pose a particular problem. It is important to be direct with staff, pointing out the seriousness of the allergy. If staff cannot guarantee that any dish is safe, it is best to eat elsewhere.

General food tips

1. Watch out for satay sauce (made with peanuts), pesto sauce (which can contain tree nuts) and marzipan and praline (confectionery products made with nuts). Salad dressings may contain nut oils.
2. Curries and other Eastern dishes are high risk because many of them contain peanuts or tree nuts and their presence may not be obvious if the food is spicy. Studies focusing on takeaway meals have shown that even when nut-free meals were ordered, a significant proportion still contained nuts (Leitch and Walker 2005).
3. Foods likely to contain peanuts or tree nuts include the following: Cakes, biscuits, pastries, cereal bars, confectionery, ice cream, desserts, vegetarian products, salads and salad dressings. This list is not exhaustive.
4. Watch out for peanut shoots as they are being sold in some UK shops. They can be used in stir-fry dishes and salads and could be mistaken for bean sprouts. Always read food labels carefully.
5. Roasting and heat treatment do not reduce the allergenicity of peanuts or tree nuts. In fact laboratory experiments have suggested that roasting and heating peanuts (but not boiling) may actually increase their allergenicity (Maleki et al 2000).

Which other foods should I avoid?

A significant proportion of people with peanut allergy are also allergic to tree nuts or will become allergic. Some people allergic to one tree nut, e.g. Brazil nuts, may become allergic to others, e.g. walnut (Ewan and Clark 2005). There is also the possibility of certain nuts coming into contact with others during food production.

In our view, the safest approach is to avoid all nuts. Your allergy clinic may be able to advise whether it is possible to include certain nuts in your diet. Extra tests may be needed to determine this. If you do eat specific nuts, it is usually advisable to do so at home so you can better control any risk of cross-contamination. Eating nuts from the shells avoids this risk.

Peanuts are actually legumes. In our experience, the number of people with peanut allergy who react to other legumes (such as peas, beans and lentils) is relatively small and this is supported by research from the USA (Sicherer 2001). Care is needed, but most people find they can tolerate these other legumes without problems. If in doubt, raise this with your allergy specialist.

If you are allergic to peanuts, watch out for lupin, also a legume. Lupin flour may be found in some baked goods sold in the UK, particularly those which are imported. Various studies have shown that a significant proportion of people who are peanut allergic react to lupin (Peeters et al 2009). Under European Law, lupin must be labelled when it appears in pre-packed food.

People with nut allergy frequently ask if they should avoid certain foods with “nut” in the name – even those that are botanically different to tree nuts. These include pine nuts, coconut, nutmeg and chestnut. If you are allergic to nuts and have never had a reaction to any of these foods, it is likely that they are safe for you to eat. We would always advise that you check with your allergy doctor first. As the medical literature shows, each of them is known to cause allergic reactions in a small number of people (not necessarily people with nut allergy). If there is any uncertainty about any product, play safe and avoid it.

What if I come into contact with peanuts or tree nuts through touch or smell?

People with peanut allergy are often concerned that casual contact with peanut – such as through touch or smell – could trigger a life-threatening reaction.

A study undertaken in the USA (Simonte et al 2003) gives some reassurance. Researchers observed 30 children with severe peanut allergy while they were being exposed to peanut butter through touch and smell. Accidental contact was simulated by pressing a dab of peanut butter on the child's back for one minute, and by holding a dish containing three ounces of peanut butter one foot from the child's nose for 10 minutes.

- None of the children experienced anaphylaxis.
- There were no reactions to inhalation.
- During contact with the back, one-third of the children had a mild reaction, such as redness, itching, or a single hive limited to the site of contact. Medication was not needed to treat these reactions.

Researchers concluded that at least 90% of similarly allergic children would not experience a severe reaction to similar exposures, however the study looked at peanut butter but not peanut in other forms. We know of a very small number of people who claim to have reacted moderately severely to touch or smell. We advise people to be guided by their allergy clinic.

Oils - Research has shown that refined peanut oil will not cause allergic reactions for the majority of peanut allergic individuals, and if anyone does suffer a reaction it is likely to be mild (Hourihane et al 1999). Unrefined (also sometimes called crude) peanut oil is more likely to cause symptoms.

Speciality oils such as walnut oil contain significant levels of protein and should be avoided.

Peanut oil (sometimes known as groundnut oil) may be used for frying in some fish and chip shops and this may be unrefined.

Under European Law all peanut oil has to be declared on the labels of pre-packed food.

Personal care products and medicines - Medicines, soaps, cosmetics and personal care products sometimes contain peanut or nut oils. These are likely to have been refined, but you may wish to play safe and avoid such products. Labels may show ingredients in Latin (e.g. arachis is the Latin for peanut). Contact the Anaphylaxis Campaign for Latin translations.

Researchers are looking into the possibility that some skin preparations containing refined peanut oil may cause allergic sensitisation, which is the process by which someone becomes allergic to something in the first place (Strid et al 2005). Research is ongoing.

Nut oils such as almond may be used for massage. We believe they should be avoided by people with nut allergy or people with a family history of allergy.

What if I want to travel by air – what are the risks?

People with peanut allergy are often worried that they might have a reaction during air travel, caused by airborne proteins released from the free peanut snacks distributed to passengers. We believe this to be an unlikely cause of symptoms for the vast majority of people and – when they do occur – they are likely to be mild. However, you must be guided by your doctor or consultant, and your allergy history.

For more detailed information on this subject visit www.anaphylaxis.org.uk/information/travel



How do I live life with a severe allergy?

A diagnosis of peanut allergy or nut allergy can be daunting but by thinking ahead and employing coping strategies, people affected can get on with their lives.

The key messages are:

- Always be vigilant when food is around
- Check food labels
- Be proactive when eating out
- Carry prescribed medication everywhere
- Learn how and when to use your adrenaline auto-injector
- Ensure that asthma is well managed.

If there is a question you need answered about peanut allergy or tree nut allergy email us at info@anaphylaxis.org.uk.

The content of this Fact Sheet has been Peer Reviewed by Dr Adam Fox, Consultant Paediatric Allergist at Guys' & St Thomas' Hospitals, London; and Sue Clarke, who is Clinical Lead for Allergy and Paediatric Respiratory at Education for Health and Nurse Adviser to the Anaphylaxis Campaign.

Disclaimer – The information provided above is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

About the Anaphylaxis Campaign – “*supporting people with severe allergies*”

The Anaphylaxis Campaign is the only UK wide charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website www.anaphylaxis.org.uk.



The Information Standard

The information contained within this factsheet has been certified by the Information Standard as reliable information. The Information Standard is a certification scheme for health and social care information. It has been established by the Department of Health to help patients and the public make informed choices about their lifestyle, their condition and their options for treatment and care. <http://www.theinformationstandard.org.uk>.



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