

## **Peanut and Tree Nut allergy**

### **What are peanuts & tree nuts?**

Peanuts are also called ground nuts, monkey nuts, beer nuts, earth nuts, goober peas, mendelonas and arachis. Tree nuts include almond, Brazil, cashew, hazelnut, macadamia, pecan, pistachio and walnut. In this information leaflet we refer to peanut and tree nuts as 'nuts'.

Some foods, for example, butternut squash, nutmeg, pine nut, palm nut, water chestnut, coconut contain the word nut but are not related to either peanut or tree nuts and do not need to be avoided.

### **Types of nut allergy**

There are two main types of nut allergy.

1. primary nut allergy
2. pollen food syndrome

People can be allergic to one nut or several nuts, and may even have primary nut allergy to one nut and pollen food syndrome to another nut.

*Primary nut allergy.* This is the classical type of peanut allergy, typically causing lip and facial itching/swelling, coughing, hives, abdominal pain, vomiting and possibly wheeze. Usually, an allergic reaction happens on the first known exposure - often in early childhood, but can occur for the first time at any age.

*Pollen food syndrome (PFS)*-sometimes called oral allergy syndrome or secondary food allergy. People with hay fever (pollen allergy) may have mild reactions after eating large amounts of nuts. This occurs because some nuts (hazelnut, peanut, almond, walnuts and Brazil nuts) contain small amounts of protein that to the immune system look like that of grass or tree pollen. PFS reactions are usually mild and symptoms might include itching or swelling in the mouth. PFS also can occur with some fresh fruit such as apples, peaches and cherries; and raw vegetables such as carrots and celery. Cooking the food will usually make it possible to eat it without reacting.

### **How common is nut allergy?**

Peanut allergy is common and affects about one in every 50 children, and one in 200 adults.

## **What are the symptoms of an allergic reaction?**

Common symptoms include:

- Swollen lips, face or eyes
- Itchy / tingling mouth
- Hives or itchy skin rash
- Abdominal pain or vomiting
- Mild cough, blocked nose or sneezing

Less common, but more severe symptoms include:

- Persistent cough, hoarse voice, difficulty swallowing
- Difficult or noisy breathing or wheezing
- Breathlessness
- Feeling dizzy, going pale or floppy, suddenly sleepy, collapse or loss of consciousness

Reactions can vary in severity from mild (e.g. a skin rash) to severe (e.g. wheeze or difficulty in breathing). In patients who have been assessed and given a management plan, further severe reactions are uncommon. It is often said that the severity of reaction dose increases with each reaction, but this is not true. The risk of a severe reaction is low in pre-school and school children, but increases from the ages of 15 and 25y. If asthma is not well controlled it can also make peanut reactions more severe.

## **What is the treatment of an allergic reaction?**

The treatment of an allergic reaction depends on how severe it is. For a mild reaction, take a non-sedating antihistamine (e.g. cetirizine). For a severe reaction you should use your adrenaline autoinjector (eg Epipen, JEXT, Emerade). Your specialist will provide an emergency treatment plan with details of how and when to take them.

If you have been provided with an adrenaline auto-injector it is very important that you know how and when to use it. Ask your doctor for training.

## How to reduce the risk of a reaction

The best way to reduce the risk is to check what is in the food every time even if you've eaten it before without reacting. This will mean you have to check the labels on pre-packaged foods, or ask catering staff for information in restaurants / cafes.

### Pre-packed foods

Two main types of labeling exist on pre-packed food.

- The first is the ingredients list. The following nut types will be highlighted if they are a deliberate ingredient in the food: peanuts, almond, hazelnut, walnut, cashew nut, pistachio nut, brazil nut, pecan nut, macadamia (Queensland) nut. Foods sourced from outside the European Union (EU) may not be labelled in this way.
- The second type refers to voluntary allergy advice labelling, such as the "may contain" or "not suitable for" statements referred to as precautionary allergen labeling (PAL). The term nut or the specific nut can be named in the PAL, and this does not need to be in bold.

It is important to read both the ingredients list and the PAL on any food product you intend to eat even if it has previously been eaten before as recipes can change.

### *Precautionary Allergen Labelling (PAL)*

The wording used for PAL varies between companies, and their use is not legally required. PALs are difficult to interpret, and foods with and without PAL both carry a risk of nut contamination. Snack foods (e.g. biscuits, chocolates, cakes) pose a greater risk than non-snack foods, even if there is no PAL. The safest approach is to avoid foods with PAL and all snack foods, but this limits which foods you can eat. Consuming products with PAL statements is thought to be safe in some circumstances (in the UK there is no record of any death caused from nut contamination in pre-packed food with PAL). Whether or not you should avoid PAL foods will depend on the severity of your allergy and other factors; discuss this issue with your allergy specialist.

Patients with PFS do not need to avoid foods with PAL.

### *Non pre-packed foods*

By EU law, catering outlets must declare which allergens have been deliberately added to food. You should inform catering staff about your allergy every time you eat out. Asian restaurants, ice-cream shops, bakery shops are areas where accidental nut exposures and reactions occur commonly.

## Commonly asked questions

Should I avoid all nuts if I have a primary nut allergy?

Some specialists advise complete avoidance of tree nuts and peanuts if you have a specific nut allergy. This is likely to reduce the risk of accidental reactions through contamination of one nut with another.. If you wish to try eating the nuts you are not allergic to, the first step is to get clear information about which nuts you are allergic to and which you are not allergic to. You should discuss this with your allergy specialist.

*Is there a risk with nut oils?*

There is almost no protein in highly refined nut oil is negligible and in one study peanut allergic patients tolerated refined peanut oil. However specialty, unrefined 'gourmet', 'aromatic' or cold pressed oils from both peanut and tree nuts still contain nut protein in sufficient amounts to result in an allergic reaction. These products must be avoided. EU products containing extracts from a nut source must be labelled as containing nut, even highly refined oils.

*How severe is my/my child's nut allergy?*

Generally, assessment of severity of future reactions is based on the severity of each person's worst previous reaction. Generally speaking, once patients are aware of the allergy, further severe reactions are rare, though this is dependent on good nut avoidance. Those who have had mild reactions can sometimes have a severe reaction at another time, occasionally this is because a large amount of nut has been eaten.

*Should I avoid other foods if I have a nut allergy?*

Peanuts are legumes and examples include soya, peas, chickpeas, fenugreek, beans, lentils and lupin. Most people tolerate these other legumes without problems, and these foods should not be excluded. Many people have both peanut and tree nut allergy, the exact nuts can be defined by specialist allergy testing. People with PFS sometimes have allergy to raw fruits and vegetables. People with cashew nut allergy are usually allergic to pistachio nut, and vice versa; people with walnut allergy are usually allergic to pecan nut, and vice versa.

*Will skin contact or sniffing peanut result in a severe reaction?*

This is very unlikely. Either a mild reaction eg: hives, watering eyes, or no reaction should occur.

*Should I take any precautions with air travel?*

Skin contact can result in a mild reaction and this can be avoided with simple precautions. Patients must ensure that the usual care is taken to avoid eating nuts in food. In addition it is important to ensure you carry your emergency medications with you at all times.

*If I have a nut allergy, will kissing someone who has consumed nuts cause a reaction?*

It can occasionally, but most reactions will be mild. It also depends on how much nut is left in the mouth and how long ago the nut was eaten. Kissing on the cheek causes no reaction or a red itchy patch.

*Will I outgrow my nut allergy?*

In practice, very few people outgrow their allergy during later childhood, or adulthood. There is a small chance of spontaneous resolution, around 1 in 5-10 of younger children. If your skin prick test wheal size or specific IgE blood test level is smaller when retested at least twice then, this may suggest you are outgrowing your allergy and you should discuss this with your allergy specialist.

*Would my nut allergy prevent me from doing any specific career?*

In most cases nut allergy will not affect your career choice. However, the armed forces will not accept people who are at risk of having anaphylaxis, or who need to carry an AAI. So if your nut allergy is still active you will not be accepted. People who only have local symptoms or who have outgrown their allergy may be allowed in but will need clearance from an army-approved allergist. Further information is available from the armed forces or the BSACI.

Further details can be obtained by contacting:

Allergy UK  
Planwell House  
LEFA Business Park  
Edgington Way  
Sidcup, Kent DA14 5BH  
Helpline: 01322 619898

Anaphylaxis Campaign  
1, Alexandra Rd  
Farnborough  
Hampshire GU14 6BU  
Helpline: 01252 542029

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