



PATIENT INFORMATION BROCHURE

PEANUT ALLERGY

INTRODUCTION

- Peanut allergy is a troublesome food allergy as it is common, exposure is hard to avoid, and in some cases even trace amounts can trigger symptoms.
- Peanut is one of the most common food-induced causes of anaphylaxis, which is a severe food allergy.
- The unpredictability of peanut allergy means that strict avoidance is advised and a careful treatment plan (for times when peanut is accidentally eaten) is vital.

HOW COMMON IS PEANUT ALLERGY?

- Peanut allergy is becoming more common in countries such as the UK and USA, where about 1:50 children are now peanut allergic.
- We do not have exact data about South Africa but it seems that peanut allergy has increased here too in recent years. There are many theories as to why this increase has occurred, but to date we have no clear answers.

WHAT ARE PEANUTS?

- The peanut is not a true nut: it is a member of the legume (bean) family. Other members of the legume family include soya beans, lentils, garden peas and chickpeas.
- They differ from “tree nuts” which actually grow on trees, including pecan hazelnut, walnut, almond, cashew, brazil and macadamia nut.
- The proteins in peanuts are very different to those in treenuts; however, about 30% of peanut allergic patients are also allergic to one or more treenuts. With peanut being a legume there is a small risk of cross reactivity with other legumes such as peas (5-10%).

- Children with peanut allergy are also at higher risk of co-existent egg allergy and sesame seed allergy.
- Both coconuts and pine nuts are seeds rather than nuts, and the majority of nut allergic people can tolerate them.

CLINICAL FEATURES OF PEANUT ALLERGY

- Most allergic reactions associated with peanut are immediate type reactions (“IgE-mediated”) occurring from minutes to 2 hours post intake of a peanut-containing food.
- The majority of allergic reactions to peanut and tree nuts are mild, such as hives/urticaria and vomiting.
- Some allergic reactions to nuts can be severe, causing difficulty in breathing due to throat swelling or asthma, or a drop in blood pressure. This is known as anaphylaxis.
- Some peanut allergic people are exquisitely sensitive to even tiny amounts of peanut- e.g. if someone who has recently eaten peanut gives them a kiss.

DIAGNOSIS OF PEANUT ALLERGY

- A detailed history will determine the likelihood of allergy and the foods most likely to be involved. This will be followed by tests of reactivity to peanut, and may include a skin prick test, and a blood test (immunoCAP) for peanut specific antibody. Associated foods such as tree nut should also be tested for. Even more specialised blood tests looking at individual components of peanut protein (such as the Arah2 fraction) are also available and should be interpreted by a Specialist.
- While the results of these allergy tests are a guide to whether the person is allergic, they do not predict whether the reaction will be mild or severe. It is also important to know that not all people with a positive skin or blood test to peanut are actually allergic.
- In cases which are uncertain, the Allergist may recommend a supervised food challenge to test for peanut allergy. This entails giving initially tiny, then increasing amounts of peanut to the person in a controlled setting (hospital).

TREATMENT OF PEANUT ALLERGY

Avoidance

- At this time, avoidance is the only proven treatment for peanut and tree nut allergy.
- It is important to study labels carefully for all packaged, processed foods, baked items, cereals and health foods.
- Particular care should be taken at children's parties and Oriental restaurants.
- Children should take their own nut-free lunch to school and should not share and swap food.
- Several schools have a nut free policy in recognition of the reality that nut school setting is high.
- Several labels may state "may contain traces of nuts" if there is even the remotest possibility of cross contamination with nuts during the food manufacturing process. In general, those with severe allergies or reactions to trace amounts of nuts should avoid such foods containing the "may contain traces of" label.

Emergency treatment

- Peanuts and tree nuts are extremely difficult to avoid in their entirety, and most nut allergic people will have an accidental exposure every few years. The risk is higher in younger children, when the risk of cross contamination in a setting with groups of children sharing toys and foods is high.
- Caregivers in schools, family members and friends should be informed about the allergy and what to do in an emergency. The peanut allergic person should have a clear action plan outlining steps to take after accidental intake of a nut-containing food. Such an action plan should be highly visible at home and in the school/work environment.
- The patient should have access to their emergency treatment at all times. For milder reactions, anti-histamine may suffice. For severe reactions, injectable adrenaline will be needed.
- The Allergist should decide on the potential for a severe reaction in each individual and decide whether to prescribe an adrenaline auto-injector pen.

The high risk patient should have thorough training in the use of the adrenaline injector and carry it with him/her at all times.

- Peanut allergic individuals should wear a Medic alert or similar bracelet, especially if they have a severe allergy or also have asthma.

Experimental treatments

Several studies are currently on-going looking into new treatment approaches such as oral desensitisation with peanut. The process of oral desensitisation is still very much a research tool only.

Table 1: Foods containing/potentially containing nuts

- Peanut butter, mixed nuts, peanut oil *
- Baked goods, biscuits, crackers, pastries
- Cereals, muesli
- Asian dishes, Indonesian dishes, Thai dishes, vegetarian dishes
- Pesto
- Health bars
- Chocolates, sweets, nougat, marzipan
- Vegetable fats and oils, hydrolysed vegetable protein, “natural” additives
- Worcestershire sauce
- Cosmetics/creams containing nut oils or arachis oil

*Highly refined peanut oil contains little peanut protein and has been shown to be safe in certain studies.

THE NATURAL HISTORY OF PEANUT AND TREENUT ALLERGY

- Over time, about 20% of children with peanut or treenut allergy will outgrow their allergy; 20% will get worse and 60% stay much the same severity. It is not possible to predict reliably who will get better or worse, so regular (annual) follow up by a Specialist is advised. If the allergy persists into teenage life, it is very unlikely to disappear.
- Some people with peanut allergy will develop a new allergy over time to similar or related food. While many people with peanut or treenut allergy are advised to avoid all nuts, it is not clear whether this will actually prevent a new allergy from developing.

- Many Allergists try to determine exactly which nuts the person is allergic to, and if they are found to tolerate certain kinds of nuts they are encouraged to continue eating them in their pure form so that they do not “develop” an allergy to that nut over time.

PEANUTS DURING PREGNANCY AND WEANING

- Until a few years ago, pregnant and breastfeeding ladies were advised to avoid nuts so as to try to reduce allergies in their children. This has not been shown to reduce nut allergies, hence avoidance of nuts during pregnancy and lactation (breastfeeding) is no longer recommended.
- Several studies are currently underway looking at the best time to introduce “high allergy” foods such as peanut and egg to a weaning baby. Results of these studies are eagerly awaited. The current evidence suggests introduction of nuts any time after 6 months of age.