

Allergic disorders such as asthma, hayfever and eczema have been increasing over the last 20 years. Food allergy is also on the increase and reactions are becoming more serious. Along with insect stings and patient administered medications, food allergy is the most common cause of fatal allergic reactions (anaphylaxis). Between 10 to 20 people in Australia die each year from anaphylaxis.

Food allergy symptoms

These may be mild (causing mild skin rash or runny nose), severe involving any of the body systems (skin, gastrointestinal tract, respiratory tract), or potentially fatal (anaphylaxis) in a small number of cases. The symptoms of food allergy depend on the severity of the allergy, the amount of allergen eaten, whether the food is solid or liquid (liquid is absorbed faster), whether it is eaten on its own or with other foods and whether the food is cooked or raw.

Early warning signs of allergic reactions to food include abdominal and oral symptoms such as sensation itching or tingling in the mouth, tightness in the throat. They can also include nausea; abdominal cramping and vomiting; acute urticaria (hives); angioedema (swelling of soft tissues); redness, itching and tearing of eyes as well as headache; blocked nose, runny nose, itching and sneezing (Rhinitis/Sinusitis). Symptoms may begin within minutes to hours after ingesting the offending food and become severe within 30 minutes to 2-3 hours.

What foods are involved in food allergy?

A limited number of foods are responsible for the vast majority of food-induced allergic reactions. In children the main foods are cows milk, egg, peanut, fish, tree nuts, wheat and fish. In adults the main foods that result in allergic reactions are peanuts, tree nuts, fish and shellfish.

What is anaphylaxis?

Anaphylaxis is the most severe of allergic reactions, it involves many organs of the body. The most dangerous symptoms are breathing difficulties or a drop in blood pressure (shock), either of which can be potentially fatal. Anaphylaxis symptoms may be mild and require little to no treatment, or they can be life threatening. Anaphylaxis can occur from ingesting only minute amounts of allergen and in some cases, simply from being near someone who has eaten or handled the offending substance. The main food culprits in anaphylaxis in both children and adults are peanuts followed by tree nuts, milk and shellfish. Although anaphylactic reactions are rare they can be fatal.

Factors that contribute to the development of allergy

- Family history of atopy (allergy)
- Early exposure to food allergens, including those introduced via the uterus and breast milk from the mothers diet, and foods introduced early in a child's life (1 to 5 years of age).
- Frequent exposure. Peanut and peanut products are found in a wide range of processed foods. When children develop food allergies it is usually in response to foods common in their diet.
- Hidden ingredients in food. Unknown ingestion of foods containing allergens. An American study tested 70 packaged food products including cereals, candies, snack foods and bakery products, peanut was found in 17% of products.
- Lack of information and a need for better education. The only treatment for food allergy is avoidance. Pregnant and breast-feeding women need to be aware that what they eat can affect the development of allergy in their child. When shopping and eating out, consumers need to be aware of which foods may contain peanuts or other food allergens.

Food Allergens

1.Peanuts and other legumes.

Peanuts are not really nuts but belong to the legume group along with soybeans, green beans, peas, garbanzo & lima beans. Peanut is a strong allergen that persists over a long period and is a hidden allergen in many processed foods. Peanut allergy can cause hives (urticaria), eczema, swelling (angioedema), wheezing, choking, vomiting, runny nose, itching, difficulty breathing, nausea, asthma, tearing of eyes and in severe cases anaphylaxis. The majority of reactions are mild but in some individuals, serious respiratory problems and anaphylaxis can occur. The table at the end indicates some of the potential sources of peanuts, tree nuts and seeds in foods as they are found in a wide variety of consumer products and can be hard to avoid.

2. Tree Nuts and Seeds:

Some contain allergens and can produce clinical symptoms of allergy. Examples of nuts and seeds that can produce allergy symptoms are pine nut (anaphylaxis & urticaria), sesame seed, cottonseed protein, almonds, brazil nuts, cashews, chestnuts, hazelnuts, macadamia nuts, pecans, pistachios, walnuts.

3. Fish and Shellfish:

Seafood allergy includes allergy to fish such as cod, salmon, tuna or dory; crustaceans such as crab, prawns or lobster and molluscs such as shellfish - oysters, clams. Seafood allergy is more common in adults than children and is usually a life-long problem. Allergy symptoms most often experienced are nasal allergy symptoms and anaphylaxis.

Diagnosis of food allergy.

Diagnosis of food allergy requires specialised medical knowledge and investigations such as a thorough medical history, skin prick tests, food challenge tests and RAST blood tests for specific foods. Because there are so many causes of adverse reactions to food, it is important that these investigations are carried out under experienced medical supervision.

Treatment and Management of food allergy

Food allergy is managed by avoiding the offending substance. When infants and children are involved, medical supervision is required to ensure that their nutritional needs are not compromised by elimination of certain foods. Prevention by eliminating offending foods is the far superior form of treatment than anti histamines, corticosteroids, or asthma medications etc.

Treatment and Management of Anaphylactic Reactions

Epinephrine is the drug of choice to slow a potentially deadly anaphylactic reaction. Anaphylactic patients who are exposed to an allergic trigger may begin suffering from respiratory distress, which can quickly intensify, making breathing difficult or impossible. Severe

symptoms include obvious respiratory distress, wheezing, cyanosis or loss of consciousness and the patient may require intubation (assistance with breathing).

Immediate Management of anaphylaxis includes:

1. Removal of the offending substance and minimisation of other co-factors – i.e. spit out food, stop exercise,
2. Ensure patient does not choke or inhale vomit,
3. Promptly call for medical emergency assistance,
4. Inject epinephrine,
5. Observe for relapse under medical supervision for a minimum of 12 hours.

Severe symptoms (rebound) recur in up to 20% of severe food allergic patients when additional allergen is absorbed.

What you can do about food allergy

1. Avoid allergy in Young children and infants

Avoiding the consumption of peanuts and nuts in young children, when sensitisation is most likely to occur, is suggested as a possible means of preventing these allergies.

2. Decrease exposure to common allergenic foods in infancy.

- Maternal avoidance of peanut, egg, fish and dairy products during lactation. This should only be done under medical or dietetic supervision due to the potential for nutritional deficiencies.
- Do not introduce wheat, egg and fish until infant is more than 12 months old.
- Do not introduce peanut and peanut products until child is older than 36 months

3. Reduce anaphylaxis risk

When children are involved it is essential to educate the child itself, school personnel, day care providers and restaurant personnel about food induced anaphylaxis.

- The most common early warning symptoms are itchy mouth, hands or feet.
- Seek medical advice on the need to have an emergency kit containing epinephrine
- Obtain and wear a medic alert bracelet

4. Reduce general food allergy

- Accurate identification of all foods to which the individual is sensitised is essential.
- Parents and older children should be taught to read and interpret lists of ingredients on packaged foods.

- Petition government for proper food labeling.
- Prepare your own food for school excursions, parties, family outings.
- Education – Educate yourself and others

A good understanding of food labelling and hidden ingredients is important to manage food allergy. Patients must be given advice about reading and understanding food label information relating to ingredients and food additive numbers. There are many hidden ingredients in processed food, and labelling may not be helpful or may be actually misleading.

More information on food allergy and anaphylaxis

The Australasian Society for Clinical Immunology and Allergy (ASCIA). www.allergy.org.au

FACTS A support group for food-induced anaphylaxis. Coordinator Meg Johnson, 02-9913 7793. www.allergyfacts.org.au .

Medic Alert Australia www.mediclert.com.au

Information about labelling requirements and approved additive code numbers is produced by Food Standards Australia New Zealand. A booklet entitled 'The Official Shoppers Guide to Food Additives and Labels' can be purchased from bookshops and supermarkets. RRP \$4.95. Alternatively the information can be downloaded from the Food Standards Australia & New Zealand (FSANZ) Website at [FSANZ website](http://www.foodstandards.gov.au)

Royal Prince Alfred Hospital, Australia link [RPAH allergy website](http://www.rpah.org.au)

Potential Sources of peanuts (and tree nuts)

Spreads and sauces

Sweets, cakes and biscuits ~~and~~ Fried Out and Savoury foods

Peanut butter and Nut pastes

Crushed nuts in sauces

Pesto an Italian sauce made with nuts

Bouillon and Worcestershire sauce.

Gravy, peanut butter maybe used as a shortening or oil

Marzipan is a paste of ground almonds and sugar

Health Food confectionery bars

ALL cakes and pastries with unknown ingredients, particularly; health cakes; such as carrot cake, pumpkin

Biscuits, sweet or savoury, (especially chocolate coated)

Confectionery such as praline and nougat

Chocolate, particularly compounded, as in Easter Eggs, health food bars, fancy and imported chocolates

Ice cream and desserts

Mixed nuts

Hydrolysed Vegetable Protein

Vegetarian dishes

Asian foods eg; Satay, Indonesian and Thai Foods. Spicy foods may mask immediate sensation due to

Salads and salad dressings

Baked goods

If you have severe peanut allergy do not eat foods if you do not know what they contain

Alcoholic Drinks

Others

Others

Amaretto alcoholic drink used in cocktails

Frangelico alcoholic drink made from nuts sometimes used in desserts

Prometrium, a progesterone cream derived from peanuts

Animal and bird feeds. Requires attention when visiting farms, wildlife parks or feeding a pet bird at home

Cosmetics containing Loramine Wax and Peanutamide (alternative names for peanut)

Food additive 322 - Lecithins - may contain peanut or soy

Shampoos, shaving cream, health care products may contain peanut and almond oil

Sunscreen lotion

Some brands of lipsticks and foundations

Breakfast foods

Muesli and fruited breakfast cereals. Ingredients need to be checked on all breakfast cereals.

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