

Food allergy in children.

Food allergy in all its guises is certainly increasing, as is allergy per se, especially in the under 4's. Now, 1 child in 10 has a food allergy/intolerance and this places a big burden on families in terms of social life and anxiety levels.

The commonest allergy is egg allergy followed by cow's milk protein allergy. Soya is up there too as an 'allergen', which is why Paediatricians don't recommend soya as a main milk substitute for cows protein and lactose intolerance, though yogurt, cheese etc is fine. There are 8 most common food allergens (cow's milk, egg, soya, fish, peanut, tree nuts, shellfish and wheat, and also kiwi, sesame and seeds and lentils and other legumes). Therefore, a standard food allergy blood screen is often offered looking at these foods, with extras as necessary. Blood tests are not absolutely infallible but they are easy and relatively painless. Skin prick testing is most reliable but very uncomfortable for the child and not very helpful unless there is a good idea of the likely culprit.

There are two main types of allergy. Type I Hypersensitivity causes a reaction seconds to minutes after the allergic contact, and causes increased 'memory' IgE allergy cells in the blood. Reactions are typically itching, a raised rash, facial and lip swelling, redness and, more rarely, sudden torrential diarrhoea, difficulty in swallowing and breathing. These types of reactions can 'escalate', getting more serious with each exposure and they are the type of reactions that we use adrenaline pens for. Significant facial swelling, difficulty in breathing or swallowing and a drop in blood pressure are known as '*anaphylaxis*' and constitute an emergency. Doctors can do a blood test for Type I Hypersensitivity called a 'specific IgE', one blood sample but a separate test for each food substance suspected of causing allergy. Peanut allergy can cause 'cross reactivity' with other foods, especially tree nuts and eggs. Seeds, nuts and fish allergies are likely to be life-long.

You cannot have this type of reaction without some previous exposure to the allergen, but this might be across the placenta, via breast milk, and even from house dust. Only tiny amounts are needed to sensitise a child. Specific allergies are not inherited, but the tendency to allergy is.

The other type is called Type IV Hypersensitivity, does not involve IgE allergy cells in the blood, so doesn't show up in blood tests, and is not remotely as severe in terms of a sudden life threatening event. Cow's milk intolerance classically follows this type of reaction with different symptoms (colic, diarrhoea, failure to thrive, reflux) that do not come on soon after the allergen is eaten, but often hours or days later. It is pointless doing blood tests in these cases. An exclusion diet, monitored by a doctor, should be done for at least 4-6 weeks, followed by a re-challenge, re-introducing the suspect food to see if the symptoms return. It's important to try a re-challenge as otherwise, children end up on unnecessarily restricted diets that can affect growth. Many of these allergies are temporary (cow's milk, eggs), and most children will be allergy-free by the age of 5.

Some allergies are a mixture of the two (eczema, diarrhoea and vomiting, colic, reflux) but not all babies or children with these symptoms need blood tests. Cow's milk allergy (Type I) rather than intolerance (Type IV) is not common.

If blood tests or skin-prick testing show weak positives but there has been no physical reaction seen in a child, the child should not be considered to be allergic.

How to treat? Avoid the substance – easier said than done! Trained Dieticians can help design a safe diet that ensures a child thrives. Specialised milks can be prescribed by your GP, usually after a Paediatrician's assessment, to treat milk allergy and intolerance. There is cross over allergy with other animal milks such as goats milk.

Why do we worry so much? Food allergy/intolerance can be miserable for a family and child as it makes the child so miserable and it's stressful trying to find 'safe foods'. Anaphylaxis and death, however, are what most families fear. The risk of this is tiny – the same likelihood as a child dying from a house fire or murder by a stranger. Parents, however, carry the weight of responsibility of feeding their children and facing the

consequences, which is why adrenaline pens are common, reducing anxiety and improving quality of life. They are not infallible though. They must be in date and a third of allergy related child deaths occur after one timely shot of Adrenaline has already been given, which is why avoidance is key.

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