

Food Allergies and Intolerances

Food Allergies

Food allergies are caused by the immune system reacting to a particular food allergen. These allergens are naturally occurring proteins in food. Almost all foods have the potential to be an allergen, however some are more common than others. In the UK, there are **14 key allergens**. These are:

- Celery
- Cereals that contain gluten
- Crustaceans
- Eggs
- Fish
- Lupin
- Milk
- Molluscs
- Mustard
- Tree nuts
- Peanuts
- Sesame seeds
- Soybeans
- Sulphur dioxide and sulphites

It is required that these allergens are emphasised on the ingredients list of pre-packaged foods so that they are easier to spot (e.g. using bold, italic or coloured fonts). Food businesses are also required to tell you if any of these allergens are ingredients in the food and drinks they provide. However, be aware that this may just be a sign saying to speak to a member of staff if you have allergies.



Many children will grow out of a food allergy, typically before 5 years of age, but some may stay into adulthood. This will require excluding foods containing the allergen(s) from your diet.

A GP will be able to advise how to do this safely and without impacting your nutrition.

Symptoms of Food Allergy

Symptoms can range from mild to severe. Some common symptoms include:

- Itchy red rash (“hives”)
- Itchy mouth, throat and/or ears
- Swelling of the face, including roof of mouth, tongue, lips and eyes
- Stomach pain and/or vomiting

Anaphylaxis can occur in more serious cases and can be life-threatening. Symptoms include:

- Difficulty breathing/wheezing
- Difficulty swallowing or speaking
- Fast heart rate
- Feeling lightheaded or faint
- Loss of consciousness

If you believe someone is suffering from anaphylaxis, call 999 immediately.

Types of Food Allergy

There are three categories that food allergies can be divided into:

- **IgE-Mediated:** this is the most common type, triggered by the production of immunoglobulin E (IgE) antibodies to an allergen. Symptoms occur quickly, usually within seconds or minutes. There is a higher risk of anaphylaxis with these food allergies.
- **Non-IgE Mediated:** these allergies are triggered by other immune cells. This type of food allergy is more difficult to diagnose as there is a delayed onset of symptoms.
- **Mixed IgE and Non-IgE Mediated:** some people may experience a mixture of both types of food allergy.

Oral Allergy Syndrome (OAS)

OAS, also known as Pollen Food Syndrome (PFS) can occur in people who have pollen allergies. This occurs if the immune system mistakes the proteins in certain foods for pollen due to having similar structures. Foods involved in this syndrome are typically raw fruits and vegetables, as well as some nuts; with most people tolerating the fruits or vegetables when well-cooked¹.



Food Allergy Prevention

There have been many studies researching the prevention of food allergies. A high-risk infant is one with at least one parent or sibling diagnosed with an allergic condition (e.g. food allergy, asthma or eczema).

Maternal Diet: there is no evidence to suggest that avoidance of allergenic foods, including peanuts, during pregnancy reduces risk of infant food allergy². Excluding foods during pregnancy could result in nutritional deficiencies.

Breastfeeding: there is no definitive evidence that breastfeeding can prevent or delay food allergies².

Allergenic Food Introduction: it is recommended that high-risk infants should be introduced to allergenic foods when they begin weaning (at around 6 months of age). These should be given as single food ingredients first to avoid introducing several allergens together³. It is also recommended that allergenic food exposure should be continued, making these foods a regular part of an infant's usual diet (unless not tolerated). This may help to reduce the risk of develop an allergy to these foods later³.

Food Intolerances

Intolerances, or non-allergic food hypersensitivity, can be caused by:

- Enzyme deficiencies e.g. lactose intolerance
- Pharmacological agents e.g. caffeine
- Naturally occurring substances, other than allergens e.g. histamine
- IBS or other functional GI disorders

Symptoms for food intolerances can include fatigue, headaches, nausea, diarrhoea, bloating and stomach pain.

These symptoms may take longer to appear compared to a food allergy and some people may only get symptoms if they eat a larger quantity of the food (while tolerating smaller quantities).

Further Information:

Allergy UK:
<https://www.allergyuk.org/>

Anaphylaxis Campaign:
<https://www.anaphylaxis.org.uk/>

References:

1. Allergy UK (2017) Oral Allergy Syndrome. Available at: https://www.allergyuk.org/assets/000/001/548/Oral_Allergy_Syndrome_original.pdf?1512985580
2. Greer, et al. (2019) The Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Hydrolyzed Formulas, and Timing of Introduction of Allergenic Complementary Foods. Available at: <https://pediatrics.aappublications.org/content/pediatrics/143/4/e20190281.full.pdf>
3. BSACI (no date) Preventing Food Allergy in Higher Risk Infants: Guidance for Healthcare Professionals. Available at: <https://www.bsaci.org/pdf/Early-feeding-guidance-for-HCPs.pdf>