

# Introduction to food allergy and intolerance

Early childhood services

The incidence of food allergies among young children in Australia has increased significantly over the past 10–15 years, now affecting up to 10% of Australian infants.

The reasons for this increase are not fully understood, although environmental changes such as exposure to bacteria and pollutants, and changes in diet have been suggested as contributing factors\*.

The Department of Education and Early Childhood Development outlines requirements for first aid, anaphylaxis management and emergency asthma management in early childhood services and childcare under the Education and Care Services National Regulations 2011.

Visit:  
<https://www.education.vic.gov.au/childhood/providers/regulation/Pages/anaphylaxis.aspx>  
for more information.

## 01

### Food allergy

A food allergy is an immune reaction to a protein in a particular food, such as cow's milk protein or egg protein.

Symptoms of food allergy can include stomach or bowel problems (including reflux, colic, vomiting, diarrhoea), skin rash, eczema, hives, breathing difficulties (such as asthma and wheezing), as well as itching, burning and swelling around the mouth.

There are 2 types of food allergy – immediate (IgE mediated) and delayed (non IgE mediated).

IgE mediated means the IgE allergy antibodies are a cause of the allergic reaction. This type of reaction is the most common type of food allergy with symptoms including hives, redness of the skin, vomiting and in more severe cases anaphylaxis.

Symptoms of IgE mediated food allergy often occur rapidly (within a few hours) after eating the food that has triggered the reaction. A reaction can occur after eating only a small amount of the trigger food and can be life threatening.

Non IgE mediated food allergies are caused by other parts of the immune system but the exact mechanism is not well understood. This type of allergy mainly affects the bowel and the skin. Symptoms develop hours after eating the food and can be dose-dependent.

Non IgE mediated food allergies are rarely life threatening but can lead to failure to thrive in young children\*\*.

In Australia, food manufacturers must state on food labels if these common allergens are present in food products.

When purchasing food, check food labels carefully for allergens. Labels should be checked even if you have bought the product before, as product recipes can change.

### Common food allergens

- cow's milk
- eggs
- soy
- nuts
- fish and shellfish
- wheat

## 02

### Food intolerance

Food intolerance is not an immune reaction. The symptoms of food intolerance can be similar to food allergy symptoms, and can also include headaches, bloating, irritability and heartburn. Food intolerances can cause minor to major discomfort but they are not fatal. Symptoms of food intolerance can take up to 48 hours to develop and they are cumulative, which means that eating more of the food will result in a worse reaction.

The two most common types of food substances that can cause food intolerances are:

- poorly absorbed short-chain carbohydrates, such as lactose, fructose, sorbitol, fructans
- food chemicals such as salicylates, amines, glutamate, colours, additives and preservatives.

For more information about food compounds which cause intolerance reactions refer to our fact sheet on [Food intolerances](#).



## 03

### Coeliac disease

Coeliac disease is not an allergy or intolerance. It is the immune system's reaction to gluten which causes damage to the lining of the gut.

People with Coeliac disease must follow a strict gluten free diet for life, and the consequences of not following this diet are quite severe.

For more information refer to our fact sheet on Coeliac disease.



### References

\* Food allergy: riding the second wave of the allergy epidemic, Prescott and Allen, *Pediatric Allergy and Intolerance* V22:2, p 155-60, March 2011

\*\*What is allergy?, Australasian Society of Clinical Immunology and Allergy, <http://www.allergy.org.au/patients/about-allergy/what-is-allergy>, 2010, accessed 19 March 2013.