Food allergies

This fact sheet provides information about food allergies, including what are the most common food allergens, the symptoms of food allergies and the requirements for labelling foods that contain allergens.

What is a food allergy?

Allergies are due to an immune system response to a particular type of food. There are cells underneath the lining of the skin, gut, lungs, nose and eyes called mast cells. These cells contain antibodies which act to detect allergens. When an allergen is detected, mast cells are triggered to release their contents (including histamine) into the tissues, causing an allergic reaction.

Food intolerance

Many people that believe they have a food allergy actually suffer from food intolerance.

Food intolerance is a chemical reaction to foods rather than an immune response. In some cases food intolerance involves the inability of the body to digest a food such as lactose. The symptoms of food intolerance can be similar to those of food allergy and include headaches, wheezing and a runny nose, hives, bloating, or stomach or bowel upsets. However, the symptoms of an allergic reaction to food can be very serious, and potentially life-threatening.

Examples of types of food intolerance include lactose intolerance, milk intolerance, food additive intolerance and intolerance to sulphites.

Coeliac disease

Coeliac disease is an autoimmune disease that occurs in genetically predisposed persons. It is a disorder of the small bowel caused by an immune reaction to dietary gluten, but it is not a food allergy. It occurs when the lining of the bowel is damaged by the white blood cells of the immune system and not by antibodies (as in food allergies).

Failure of the body to eliminate gluten from the diet leads to chronic inflammation and damage to the lining of the small intestine. The tissue damage results in certain nutrients not being properly absorbed by the body, and possible serious complications may result, including involvement of multiple organ systems and increased risk of some malignancies.

Symptoms of coeliac disease include nausea, wind, constipation, tiredness, reduced growth and skin problems.

How common are food allergies?

Food allergies can develop at any age, and it is estimated that 1-2% of Australians suffer some kind of food allergy.

Food allergies are most common in young children, affecting an estimated 4-6% of children between 0-6 years. However, most food allergies affecting children are not severe and children will commonly grow out of them.
What are the symptoms of food allergy?

Symptoms of food allergy usually occur within 30 minutes of eating food. There is a variation among allergenic food as to the amount required to cause an allergic reaction. Some people can have an allergic reaction to even the smallest traces of certain allergenic foods. Allergenic foods may also vary in the severity of reactions they provoke in sensitised individuals.

Common symptoms include:
- low blood pressure, dizziness, faintness or collapse
- swelling of the lips and throat, nausea, feeling bloated, diarrhoea and vomiting
- dry, itchy throat and tongue
- itchy skin or a rash, hives and sore, red and itchy eyes
- shortness of breath
- runny or blocked nose.

Anaphylaxis

Anaphylaxis is the most severe form of allergic reaction and is potentially life-threatening. However, it should be noted that deaths from food allergies are rare in Australia.

Anaphylactic attacks commonly occur within minutes of eating the allergenic food and they affect the whole body, resulting in symptoms that may include:
- difficulty/noisy breathing
- wheezing or persistent coughing
- difficulty speaking, hoarse voice
- swelling of the tongue or throat
- dizziness (may result in loss of consciousness or collapse)
- becoming pale and floppy in children

Types of food allergens

Any food that contains protein has the potential to cause allergic reactions in some individuals. However, the following eight foods account for 90% of all food allergies worldwide, although some regional and country specific differences exist:
- wheat, peanuts, soybeans, milk, eggs, tree nuts, crustacea and fish. Sesame has also been recognised as a new food allergy in Australia

Emerging allergens

As food consumption patterns in the community change and new foods and ingredients enter the food supply, new allergens are likely to emerge.

New food allergens may emerge, which will need to be considered for inclusion in the list for mandatory declaration on food labels, as outlined below. While the lists of food allergens may vary between countries, there is a need for an internationally consistent approach.

Lupin - There is evidence that lupin is emerging as an allergen in Australia.

Lupin is related to other legumes, including peanuts and soy. It has a high level of protein and dietary fibre and a low-fat content, which makes it attractive for human nutrition. Lupin is increasingly used in food products in Australia.
Food labelling requirements

Food labels provide essential information to allergic consumers to correctly identify food products which contain allergens they need to avoid.

Standard 1.2.3 of the Australia New Zealand Food Standards Code (the Code) contains specific requirements for the labelling of food containing certain food allergens.

A list was developed in order to determine which foods should always be declared on food labels because of their allergenic properties. The determination was made based on the frequency of severe reactions and estimated prevalence of allergic reactions.

This list of food is as follows, and the presence of any of these products must be declared on the label, in the format specified in the Code:

- cereals containing gluten and their products, namely, wheat, rye, barley, oats and spelt and their hybridised strains other than where these substances are present in beer and spirits
- crustacea and their products
- egg and egg products
- fish and fish products, except for isinglass derived from swim bladders and used as a clarifying agent in beer and wine
- milk and milk products
- peanuts and soybeans, and their products
- added sulphites in concentrations of 10mg/kg or more
- tree nuts and sesame seeds and their products other than coconut from the fruit of the palm Cocos nucifera
- bee pollen presented as a food, or a food containing bee pollen as an ingredient
- propolis presented as food, or food containing propolis as an ingredient
- royal jelly when presented as a food, or food containing royal jelly as an ingredient.

There are three ways in which allergens may be displayed on an ingredient list:

1. in brackets - eg. wheat flour, sugar, margarine (contains milk), salt, flavour (contains wheat starch).
2. in bold - eg. wheat flour, sugar, margarine (contains milk), salt, flavour (contains wheat starch).
3. in a separate declaration - eg. wheat flour, sugar, margarine (contains milk), salt, flavour (contains wheat starch). Contains wheat and milk.

Note: For unpackaged food, allergen information must be displayed next to the food for sale. In any other circumstances involving the sale of food, a food business must provide information about allergens in food upon request by the customer.


Precautionary labelling

Some food labels may include a warning to show that the food product may inadvertently contain a food allergen, for example, ‘may contain traces of nuts’ or ‘made on the same equipment as products containing nuts’. This means that even if nuts aren’t deliberately included as ingredients in the food, the manufacturer cannot be sure that the food doesn’t accidentally contain small amounts of them. These are not mandatory declarations, however if you are allergic to any of the foods mentioned in these warnings, you may wish to avoid these food products as a precautionary measure.
Advice for food businesses

Staff training
- Inform staff of the importance of providing accurate information about the ingredients in food and show them where they can get further information.
- If food is contaminated with an allergen, inform your staff and customers of this risk.

Cross-contamination
- When handling foods that contain known allergens, take extra care not to contaminate other foods or equipment. Set aside a time or work area that is used solely for the preparation of allergen-free foods and use separate utensils for foods that are designated to be allergen-free.
- Ensure that staff clean and sanitise all equipment and surfaces that come into contact with allergens.
- Include special instructions in your cleaning schedule to prevent cross-contamination during cleaning.

Availability of allergen information
- When naming food for display or menus, include known allergens or include specific ingredients in the description of the food (for example, ‘fish with almond butter’).
- Make information about allergenic food easily accessible by staff when serving food or when a customer makes an enquiry.
- If customers request food suitable for special dietary requirements you must ensure your business provides this.
- Keep a copy of the ingredient information of any foods that have been removed from their original packaging or labelling.
- When displaying unwrapped food you might need to follow further instructions.

For more information on Standard 1.2.3 - Mandatory Warning and Advisory Statements and Declarations of the Code, visit the Food Standards Australia New Zealand website at www.foodstandards.gov.au.

Advice for consumers with a food allergy
- Always read the label on packaged food.
- When eating out, do not be afraid to ask questions about food served at the food business in relation to the presence of allergens, or potential contamination of other foods with allergens. As outlined above, it is the food business’ responsibility to provide you with this advice upon your request. Always ensure you advise staff of your allergy prior to ordering food.
- If you have a severe allergy, it’s best to avoid eating food from a self-service area or buffet. It’s easy for small amounts of allergenic ingredients to get into food by accident (because people use the same utensils for different dishes), so even if it looks safe, you can’t be sure.
- Do not share straws, cups, cutlery or other food utensils.
For further information

The following is a list of organisations where you can locate further information on food allergies. The website addresses provided directs users directly to food allergy information.

- Food Standards Australia New Zealand- Information for allergy sufferers  
- Queensland Health – Nutrition Education Materials Online  
- Anaphylaxis Australia  
  www.allergyfacts.org.au
- Health Insite – Food Allergies  
- Australasian Society of Clinical Immunology and Allergy  
  www.allergy.org.au
- Allergy New Zealand  
  www.allergy.org.nz
- Queensland Health – Introducing solids – Food Allergies  

Contact your local Queensland Health Public Health Unit (PHU) if you would like to make a complaint relating to food labelling or have any further questions regarding labelling or food allergies. Contact details for Public Health Units can be found at www.health.qld.gov.au/cho.