

## Who prepared this brochure?

As part of the **EuroPrevall** project patient organizations, clinical doctors with expertise in food allergy, dietitians and food scientists from across Europe have created this brochure. The brochure contains the information that food allergic persons or parents to allergic children may need to understand what food allergy is about, how it is diagnosed and handled. It may also be useful for educational purposes.

Visit [www.euoprevall.org](http://www.euoprevall.org) for more information on the **EuroPrevall** project.

## Where can you find more information?

We have also published an 18-page leaflet about food allergy, which you can find at:

[www.ga2len.net/index.cfm?action=viewPublicPage&pageID=2245](http://www.ga2len.net/index.cfm?action=viewPublicPage&pageID=2245)

The **Food Allergy Portal** contains links to more than 100 websites all of which have been critically assessed by a group of allergy experts to ensure the validity of the content. You can search the webpages in 10 different European languages or by target audience at: [www.foodallergens.info/Portal/Portal.html](http://www.foodallergens.info/Portal/Portal.html).

Pictures in the brochure: [www.colourbox.com](http://www.colourbox.com)



## Food allergy Basic facts



## What is food allergy?

You may react with different symptoms when you eat certain foods or additives. You have a food allergy when your immune system is involved in the reaction to the food. Food allergy is very complex. Only your doctor can diagnose whether you have a food allergy as you may react to foods without being allergic. For example, a reaction to the milk sugar lactose and to most food additives such as sulphites is not food allergy. Therefore you need to seek professional advice if you suspect that you have a food allergy.

Food **allergens** (the parts in food responsible for an allergic reaction) are usually proteins. In most allergic reactions, the food allergens trigger immune cells to produce large amounts of the IgE antibody. This is called sensitization. Certain cells in the immune system release chemicals such as histamine when you have large amounts of IgE and eat the food that you are allergic to. It is the chemicals which causes you to have the various symptoms of food allergy.

Although IgE is normally involved in allergic reactions, the immune system can sometimes be involved in other ways. One example is gluten intolerance (Coeliac disease) where you cannot tolerate gluten which is found in such foods as wheat, barley and rye. Another example is the rare cases where people with allergies to nickel or perfume may get symptoms when they eat certain foods.

### Cross-reactivity

People with pollen or latex allergy may often experience allergic symptoms when they eat certain fruits, vegetables or nuts. This “**cross-reactivity**” occurs because the immune system cannot distinguish between the allergens in pollen or latex and similar proteins in food and may react to both. In fact, up to 70% of food allergies are related to pollen allergy. Most people with a pollen allergy can better tolerate the cross-reacting foods when they have been cooked, baked, or roasted.

This means that the following allergenic foods or products made of these foods never can be ‘hidden’ in a product in Europe:

**Cereals** containing gluten - i.e. wheat, rye, barley, oats and spelt

**Crustaceans** and **Molluscs** such as shrimp, lobster, and octopus

**Milk, Eggs, Fish**

**Peanuts, Lupin, Soybeans**

**Nuts** - i.e. Almond, Hazelnut, Walnut, Cashew, Pecan nut, Brazil nut, Pistachio nut, Macadamia nut and Queensland nut

**Celery, Mustard, Sesame seeds**

**Sulphur dioxide** and sulphites

Some foods have the label ‘May contain peanuts’ or ‘May contain milk’ etc. The food industry uses this label on their own initiative to warn allergic consumers of a possible contamination with an allergen. Different food producers use different criteria for using the ‘May contain’ label. Therefore the label represents different levels of risk.

The labelling law only covers pre-packaged food. This means that foods sold loose or from catering outlets are not covered by current allergen labelling rules. These foods represent a considerable risk to allergic consumers. That is why EU has proposed new legislation, which also will cover non pre-packed foods.

You need to communicate with caterers about your allergy and make sure that they understand the seriousness and can provide foods for your special needs.

### Medical treatment

It is often difficult to avoid certain foods and a risk remains that you by accident may eat a food, which you do not tolerate. Mild symptoms such as itching, skin rashes, and runny nose may be treated with antihistamines. If you are at risk of severe allergic reactions, your medical specialist may advise you to carry the medicine adrenaline for emergency situations.

## How do you manage a food allergy?

### Diet

When you are diagnosed with a food allergy, you need to remove all food products that cause reactions from the diet.

You should seek advice from a dietician on how to avoid foods to ensure that your new diet does not result in nutritional deficiencies. The dietician may also help you with specific advice e.g. regarding reading food labels.

When you or others cook for you it is important to avoid contamination of your food with the food that you do not tolerate. Contamination may happen through spilling, spatters, crumbs, not separating the diet food well, and dirty hands, plates, or silverware. It is therefore very important that you tell family, friends and different caterers about your allergy.

As a general rule processing of a food does not alter the ability of the food to induce allergic symptoms. For example cooking cow's milk or freezing fish does not alter the proteins responsible for provoking symptoms.

### Food labelling and information

You need to know the ingredients of your foods.

The European Commission has created labelling laws to help allergic consumers avoid consumption of allergens in pre-packed foods. In principle all ingredients in a product will now have to be listed by law. There are still some minor exceptions but these will not apply to a list of allergenic ingredients.

## What are the symptoms of food allergies?

Symptoms of food allergies vary between different people, although a person will tend to have the same reactions each time the allergenic food is consumed. The symptoms of food allergies range from mild discomfort to severe, life-threatening reactions (anaphylaxis) that require immediate medical intervention. The first symptom is often itching and perhaps swelling of the mouth and throat followed by skin rashes. Other symptoms may include hay fever, asthma, and stomach upset. In addition an affected person may feel dizzy and feel the heart beat. In a person with anaphylaxis the blood pressure may drop, and the affected person may have trouble breathing. Untreated anaphylaxis can rapidly result in death.

The symptoms arise every time the allergic person eats the offending food. However, if you are allergic to a food that is cross-reacting with pollen you may only experience symptoms in the pollen season.

Different kinds of food poisoning can provoke symptoms that are similar to the symptoms experienced in food allergy. Often the reaction is stronger the more poisoned food that the person has eaten. In order to distinguish between a food allergy and poisoning the person with symptoms needs to see the doctor.



## Which foods may cause allergy?

Researchers have described more than 120 foods as causing food allergies. However, the foods that most commonly cause serious allergic reactions on a worldwide basis are: Milk, egg, peanut, tree nuts followed by cereals (mainly wheat), soybeans, fish, and shellfish.

Several studies indicate that most allergic reactions among children are due to a limited number of foods, namely egg, peanut, milk, and tree nuts. Egg and milk allergy are often outgrown during the first years of life.

Fruits, vegetables, tree nuts and peanuts are responsible for most allergic reactions to foods among adults. Most of the allergic reactions among adults start because of cross-reactions resulting from allergies to pollen or latex.

## How common are food allergies?

Researchers have estimated that about 1-5% of the total population have food allergies. These estimates are difficult to make due to differences in the diagnostic procedures and tests used. However, the number of people who think they have a food allergy is much higher.

Many people believe that the number of people with food allergy is increasing. It is also an impression gained by the doctors running allergy clinics that the occurrence of food allergies changes with age and varies across different geographical areas e.g. because of different dietary patterns and differences in exposure to pollen. However, we generally lack research results that can clarify whether this is in fact true.

## How is food allergy diagnosed?

Self-diagnosis of food allergy is notoriously unreliable, and failing to have a serious food allergy diagnosed could be potentially life threatening. Therefore, if you suspect that you have a food allergy you should seek specialist medical advice. People with food allergies must avoid the offending foods. Thus, the specialist can prevent unnecessary dietary restrictions by people who incorrectly assume that they have food allergies.

To diagnose food allergy the medical specialist will usually first talk with you about your symptoms, examine you for symptoms, and test if your immune system have created food-specific IgE antibodies. **Skin prick testing** and **blood tests** are the main tests used for this purpose. However, the presence of specific IgE does not necessarily mean that you will experience symptoms. Therefore, sometimes the only way to accurately diagnose a food allergy is to remove the suspected food from the diet to see if symptoms improve and if they do, give the suspect food in gradually increasing amounts to see if symptoms reappear. This is called a **food challenge**. Allergy specialists will always supervise the performance of challenge tests in a hospital or clinic, where the staff has established routines to safely manage any serious reactions.

Different Internet pages advertise many alternative diagnostic methods, which scientists and clinicians cannot recommend the use of in the diagnosis of food allergy.

