

Oral allergy syndromes

People affected by oral allergy syndromes suffer immediate symptoms in the lips, mouth and throat when they eat certain kinds of fresh fruit, raw vegetables, nuts or spices.

Although this is food allergy, there is usually another cause. In many cases the primary cause is allergy to pollen (hay fever). In others it may be allergy to natural rubber (latex).

Pollen-related symptoms

Many hay fever sufferers who are sensitive to the proteins in pollen also react to similar proteins in fruit or vegetables. This usually only happens when the food is eaten raw.

Being sensitive to pollen, people with this condition will most likely have hay fever in the tree and/or grass pollen season. Because the proteins in pollen are similar to those in some foods, the antibodies created to the pollen mistake the food for pollen and this causes the reaction to the food. The scientific term for this condition is Pollen Food Syndrome.

Common symptoms, which usually come on immediately, include:

- Redness, swelling or itching of lips, tongue, inside of mouth, soft palate and ears
- Itching in the throat. Swelling in the throat is a possibility, although this is unlikely to prove serious
- Occasionally symptoms in the oesophagus (gullet) or stomach can be involved, including pain and discomfort, nausea and even vomiting.

Most people are unlikely to ever have a severe reaction and mild reactions are unlikely to get worse over time. However, medical advice should be sought in all cases. This is particularly important if the swelling causes difficulty in swallowing or breathing, or if the symptoms include asthma.

The condition is more likely to develop in people who have had pollen allergy for a long time. It is more frequently seen in adults than children, although becoming increasingly more common in children, as hay fever develops in younger age groups.

Pollens involved

Different types of pollen can be implicated, but the most common trigger in the UK is birch pollen, which causes hay fever symptoms from about the end of March until the end of May. At least half of those people sensitised or allergic to silver birch pollen can develop symptoms. Many people may not realise they have the condition as in its mildest form people may only experience a sensation in the lips or tongue after eating raw fruit.

The other main pollen that can cause symptoms is grass pollen and people who are sensitive to both birch and grass pollen are the most likely to develop symptoms to a wide range of foods. Weed pollens such as mugwort can also be a trigger.

Foods involved

The commonest foods to cause symptoms are raw fruits (e.g. apples, apricots, pears, cherries, kiwi, mango, plums, peaches, nectarines, tomatoes) and raw vegetables (e.g. carrots, celery and peppers). A number of other plant foods may occasionally cause the condition including raw legumes (such as mange tout and raw peas) and certain spices. People have reported nose and eye symptoms and itchy hands when handling raw potatoes and parsnips.

Hazelnut, almond and walnut are common causes of oral symptoms among adults. However, there are many other cases of nut allergy which are unrelated to pollen allergy and these may be more serious.

Latex-related symptoms

Another type of oral allergy syndrome affects some people who suffer from latex allergy. This is caused by a reaction to proteins found in natural rubber or latex. Latex allergy is particularly common among people who come into regular contact with latex such as healthcare workers and people with spina bifida.

Because some latex allergens are similar to the allergens in certain foods, people who are allergic to latex might also find they react to foods such as apple, avocado, banana, carrot, celery and chestnut. The scientific term for this condition is Latex Food Syndrome.

The symptoms can be similar as those described for pollen-related reactions (above).

Other allergic conditions

Allergic reactions to fruit and vegetables are not always related to pollen or latex. In some cases, there is a primary allergy to the food itself. Reactions may be more severe.

Symptoms in the mouth can also be caused by foods other than raw fruit and vegetables. Examples are nuts, peanuts, egg, prawns and fish. This is not an oral allergy syndrome and these allergies may be more serious.

Any reaction to a food should be investigated by your GP. Mild symptoms should not be ignored. The GP should be able to decide what type of food allergy you have and whether you need to have further investigations by an allergy clinic.

Diagnosis and management

The correct identification and avoidance of the culprit food or foods must be the main aim. Previous experience of what has happened when eating certain foods is the most important evidence. Skin and blood tests can help to confirm the diagnosis, and may help a doctor to identify the occasional patient for whom there is a risk of a severe reaction and who will therefore be advised to carry an adrenaline injection as a precaution.



It does not necessarily follow that all the foods of a particular group will cause trouble for someone who reacts to one or two of them. Unless you are advised otherwise, only the foods that have caused symptoms need to be avoided. But you should stay alert to the possibility that sensitivities to other foods in the same group might develop in the future.

When trying a fruit or vegetable for the first time, it is best to be cautious. Rub the lip with a small amount and chew a small portion and spit it out. Wait for 15 minutes to see if any symptoms develop.

Once you are sure that a particular food is causing symptoms (and especially if tests confirm the allergy) it is important to exclude it in future. However, eating the food cooked may not be a problem.

Importantly, if there are any concerns at all about symptoms when they occur, immediate medical assistance should be sought.

Desensitisation treatment to an oral allergy syndrome is not available at the present time, although it may become available in the future.

This Factsheet has been **Peer Reviewed** by **Dr Isabel Skypala, PhD FBDA RD, Director of Rehabilitation and Therapies, Royal Brompton & Harefield NHS Foundation Trust** and **Dr Michael Radcliffe, Consultant in Allergy Medicine, Royal Free NHS Trust**

Disclaimer – The information provided in this leaflet is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

About the Anaphylaxis Campaign – “supporting people with severe allergies”

The Anaphylaxis Campaign is the only UK charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website www.anaphylaxis.org.uk.