

Oral Allergy Syndrome (OAS) patient information

Dr Sai Murng, Consultant Immunologist

Oral Allergy Syndrome (OAS) is a mild form of food allergy with symptoms limited to the mouth and throat. Symptoms tend to include itching, tingling, stinging pain and mild swelling of the lips, tongue, mouth and throat. Occasionally these can be accompanied by itching of the ear and tightening of the throat. Symptoms are typically mild and unlikely to become serious or life threatening.

Who gets this condition?

OAS can occur in any 'sensitised' person of any age and sex but is more common in adults than children. A sensitised person is someone whose immune system responds to something in particular, in this case certain pollen, fruit and vegetables, but they may not always get allergy symptoms.

What causes this condition?

OAS is immediate allergy usually caused by certain raw fruits, vegetables and nuts in a sensitized person. A typical example is seen when a person with a hay fever eats these plant foods. They contain proteins which are common to many other plant foods including pollens that cause hay fever. It is however, only the raw form of these fruits and vegetables which cause OAS. This is because the 'protein' responsible for causing these symptoms is 'unstable' and is destroyed by heat during cooking or digestion.

OAS shouldn't be confused with other food allergies caused by 'stable' allergens such as peanut allergy, which can still cause a reaction after cooking or being digested (e.g. anaphylaxis due to peanut allergy).

Some people will react to only one food whereas other will get the symptoms to many different foods. The following table shows those fruits which tend to be associated with OAS:

Pollens origin (sensitization)	Major fruits, vegetables and spices associate with OAS
Birch (e.g. hay fever in February -May)	apple, almond, apricot, celery, carrot, chili pepper, kiwifruit, hazelnut, mango, pear, peach, plum, potato, sweet cherry, spices (Aniseed, Caraway seed, Coriander) etc.
Japanese cedar	tomato
Mugwort (e.g. hay fever in August- September)	celery, carrot, mango, spice etc.
Grass (e.g. hay fever in June-July)	melon, watermelon, tomato, potato, kiwifruit, orange, peanut etc.
Ragweed	melon, water melon, cantaloupe, zucchini, cucumber, banana etc.
Plane	Hazelnut, apple, lettuce, corn, peanut, chickpea

Can I pass it on to other people?

OAS is not inherited so this will not pass to your children.

How is it diagnosed?

Within the allergy clinic we diagnose OAS in a variety of ways:

- **From a detailed clinical assessment.** This is carried out for everyone showing symptoms of OAS. For some people this alone will be sufficient and no further tests will be required.
- **Skin testing** is sometimes carried out to confirm the allergy.
- **Blood test** for specific allergy. This is useful especially when skin testing is not suitable e.g. when antihistamine has been taken in the previous 48 hours.
- **Oral food challenge test.** This type of test is carried out when the above tests do not give a clear answer.

There are many unproven types of tests for allergic diseases. We utilise methods of diagnosis which we believe are the most reliable on the basis of the scientific evidence; for information on alternative diagnostic tests see below.

How is it treated?

- **Avoidance** – Majority of people with OAS can continue to eat the foods with no or minimal symptoms. Some may need to avoid particular foods, if the symptoms are troublesome. **You certainly do not need to avoid all the foods in the table above if they don't give you any symptoms.**
- **Processing food-** If you cannot tolerate the symptoms with raw foods it is possible to eat the cooked form if you prefer. (e.g. cooked apple for OAS due to raw apple)
- **Antihistamines** Symptoms of OAS respond well to these drugs which are available over the counter. They are generally well tolerated.
- If you have OAS you will not require an EpiPen, as symptoms are mild and not life threatening.
- Desensitisation is indicated if one has severe hay fever not responding to medications. Whilst desensitisation is not generally provided as a treatment for OAS at present, some patients who have had desensitisation for hay fever have shown improvement in their OAS symptoms.

Can it be cured?

For the majority of people with OAS the condition will persist. However it will not progress into a systemic allergy. You should be reassured that the condition is not life threatening and it should not have any serious impact on your diet.

What can I do to control my symptoms?

People with OAS can eat the cooked form of the fruit or vegetable. You don't need to be overly concerned about losing the nutritional benefit of these foods. However if you have symptoms to many foods and you wish to speak to a dietician ask your doctor to arrange this for you.

Where can I get more information and help?

The Anaphylaxis Campaign

Local and national sources of information

British Society for Allergy and Immunology www.bsaci.org