



# ORAL ALLERGY SYNDROME

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## What is Oral Allergy Syndrome (OAS)?

OAS is an allergic reaction to certain proteins in a variety of fruits, vegetables, and nuts. This syndrome occurs in some people with pollen allergies. Symptoms usually affect the mouth and throat. These reactions are not related to pesticides, metals, or other substances.

## Who is affected, and what pollens are involved?

Most people who have OAS also have hay fever. Older children and adults are the most likely to have this syndrome. You have a higher risk of this syndrome if you are allergic to the pollens of:

- Birch
- Grass
- Ragweed
- Plantain
- Mugwort (sage)

These reactions can occur at any time of the year. However, symptoms may be worse during the pollen season.

## What are the symptoms, and when do they occur?

Symptoms typically include itching and burning of the lips, mouth, and throat. Some people also have watery itchy eyes, runny nose, and sneezing. Sometimes peeling or touching the foods may result in a rash, itching, or swelling where the juice touches the skin. Occasionally, reactions may lead to hives and swelling of the mouth, pharynx, and windpipe. In rare cases, severe allergic reactions have been reported such as vomiting and diarrhea, asthma, generalized hives, and anaphylactic shock. Symptoms usually develop within minutes of eating, drinking, or touching the food. Occasionally, symptoms occur more than an hour later.

## Are all reactions to fruits and vegetables associated with OAS?

No. A variety of fruits, vegetables, and their juices (including orange, tomato, apple, and grape) sometimes cause skin rashes and diarrhea. This is especially true in young children. Strawberries occasionally cause hives. If you are allergic to nuts, you could get hives, a rash, or even anaphylaxis. These same reactions can sometimes come from eating fruits or vegetables.

## What foods are involved?

Foods associated with birch, ragweed, grass plantain, and mugwort (sage) pollen are listed on the next page. Most reactions are caused by raw foods. This is because the proteins that cause allergies are usually destroyed by cooking. The main exceptions to this are celery and nuts, which may cause reactions even after being cooked. Some plant parts, such as the skin, may be more allergenic than others. The allergic qualities of some fruits seem to decrease during storage.

While it doesn't happen very often, some food allergies can cause anaphylactic reactions. These foods include: kiwi, hazelnut, white potato, celery, parsley, beans, and cumin.



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Here is a list of foods that have been reported to cross-react with pollens. In addition, people with latex allergies may notice symptoms when they eat or drink certain foods. These are listed as well.

## **Foods most commonly associated with birch, ragweed, grass, mugwort, and plantain pollens.**

### **Pollen allergy: Birch**

May be associated with a reaction to: apple, cherry, pear, peach, plum, prune, nectarine, apricot, kiwi, carrot, celery, potato, tomato, spinach, parsnip, green pepper, lentils, peas, beans, peanut, parsley, anise, dill, fennel, caraway, cumin, wheat, buckwheat, almond, hazelnut, walnut

### **Pollen allergy: Mugwort (sage)**

May be associated with a reaction to: apple, melon, watermelon, anise, coriander, cumin, fennel, celery, carrot

### **Pollen allergy: Grass**

May be associated with a reaction to: cherry, orange, kiwi, melon, watermelon, potato, tomato, peanut

### **Pollen allergy: Ragweed**

May be associated with a reaction to: banana, cantaloupe, honeydew, chamomile, cucumber, zucchini, sunflower seed

### **Pollen allergy: Plantain**

May be associated with a reaction to: melon

### **Other allergy: Latex**

May be associated with a reaction to: avocado, banana, carrot, chestnut, kiwi, potato, tomato

## **What can sensitive individuals do to avoid a reaction?**

- If you get a rash, itching, or swelling when touching or peeling these foods, wear gloves. This will help prevent the foods touching your skin.
- If you are hypersensitive to the foods listed above, try preparing them in a different way. People often find that they can consume these foods if they are well cooked (conventional or microwave) or canned. The exception is nuts, which usually cause symptoms whether raw or cooked. Many authorities feel that nuts pose a higher risk. Avoid nuts if there is any reason to believe you are allergic to them.