

# **Allergy, Sinus & Asthma Consultants, Inc.**

## **Oral Allergy Syndrome (OAS)**

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If you suffer from allergic rhinitis caused by pollen (hay fever), your mouth or throat may become itchy after eating certain foods. It occurs in about 50-75% of adults and children with allergies. This reaction occurs because the proteins found in some fruits, vegetables, seeds and/or nuts are very similar to those found in pollen. These proteins can confuse the immune system and cause an allergic reaction or make existing symptoms worse, which is referred to as cross-reactivity. In the case of pollen and foods, the result of cross-reactivity is called oral allergy syndrome (OAS) also known as pollen fruit syndrome (PFS).

OAS is a form of a contact allergic reaction that occurs upon contact of the mouth and throat with raw fruits, vegetables, seeds or nuts. The most frequent symptoms of OAS include itchiness or swelling of the mouth, face, lip, tongue and throat. Symptoms usually appear immediately after eating, although in rare cases, the reaction can occur more than an hour later. OAS is generally considered to be a mild form of food allergy. Rarely, OAS can cause severe throat swelling leading to difficulty swallowing or breathing. In a person who is highly allergic, a systemic reaction, called anaphylaxis (an-a-fi-LAK-sis), may be caused by a pollen cross-reactive raw fruit or vegetable, but this is very uncommon. OAS can occur at any time of the year.

Although there is no definitive test for OAS, affected individuals often have a positive allergy skin test or blood test for specific pollen, along with a history of symptoms after ingestion of the suspected foods.

### **Different Reactions Based on Different Allergies**

Some people report symptoms with only one food and others with many different fruits and vegetables. Some people report that only certain varieties of the fruit cause symptoms, for example specific apple varieties.

In the case of OAS, individuals react to different foods based on what type of seasonal allergies they are affected by. If mouth itching is noted with nuts, you should see an allergist /immunologist because mild mouth symptoms may signal a more serious allergic reaction to nuts. This convenient table lists the possible pollen and plant food cross-reactivities.

### **Managing Your Symptoms**

If you have symptoms of OAS, avoid eating these raw foods, especially during allergy season because in many patients, OAS worsens during the pollen season of the pollen in question.

→ One way to reduce cross-reactions with food is to **bake or microwave** the food because high temperatures break down the proteins responsible for OAS.

→ Eating **canned food** may also limit the reaction. And, **peeling the food** before eating may be helpful, as the offending protein is often concentrated in the skin.

→ Some studies have shown that treatment with allergy shots can improve the symptoms of OAS.

*You should talk to your physician if:*

- Your OAS symptoms are causing significant throat discomfort;
- Your OAS symptoms are getting progressively worse;
- Your OAS symptoms are caused EVEN AFTER YOU COOK/HEAT the fruits and vegetables;
- Your OAS symptoms are caused nuts;
- You develop systemic reactions after eating raw fruits or vegetables such as hives, vomiting or difficulty breathing.

 <b>Birch</b>	 Apple Peach Plum Pear Cherry Apricot Almond <b>Rosaceae</b>	<h1>Spring</h1>
 Carrot Celery Parsley Caraway Fennel Coriander Aniseed <b>Apiaceae</b>	 Soybean Peanut <b>Fabaceae (old Leguminosae)</b> Hazelnut <b>Betulaceae</b>	
 <b>Ragweed</b>	 Cantaloupe Honeydew Watermelon Zucchini Cucumber <b>Cucurbitaceae</b>	<h1>Late Summer- Fall</h1>
 <b>Musaceae</b>	 Banana <b>Musaceae</b>	
 <b>Mugwort</b>	 Celery Carrot Parsley Caraway Fennel Coriander Aniseed <b>Apiaceae</b>	 Bell pepper Black pepper <b>Solanaceae Piperaceae</b>
 Mustard Cauliflower Cabbage Broccoli <b>Brassicaceae</b>	 Garlic Onion <b>Liliaceae</b>	
 <b>Orchard</b>	 Cantaloupe Honeydew Watermelon <b>Cucurbitaceae</b>	 Peanut White potato Tomato <b>Fabaceae (old Leguminosae) Solanaceae</b>
 <b>Timothy</b>	 Swiss chard Orange <b>Amaranthaceae Rutaceae</b>	<h1>Summer</h1>