

# ORAL ALLERGY

## ORAL ALLERGY SYNDROME (POLLEN-FOOD ALLERGY SYNDROME)


Pollen-food allergy syndrome (OAS) describes allergic reactions, limited to the mouth, tongue, lips and occasionally throat, which occur upon ingestion of certain fresh fruits, nuts, or vegetables by individuals who are sensitized to plant pollens (Hay Fever). These reactions are a form of localized allergy-mediated immediate hypersensitivity. The allergens in these foods are similar to plant allergens leading to cross-reactivity. The symptoms of OAS result from contact urticaria, or hives, of the mouth and throat.

Symptoms are usually limited to the mouth and throat and are only observed with raw forms of the food because the causative allergens are rapidly destroyed by cooking and digestion, although this is not uniformly true. Systemic reactions, as well as reactions to cooked foods, are observed in a small proportion of patients (~5-10%).

Sensitization to inhaled pollen proteins via the respiratory tract is believed to be the initial event. The pollen-specific IgE generated by this mechanism then binds to the surface of mast cells and basophils throughout the body, including those in the mouth and throat.

Upon eating a related food, these allergic molecules recognize similar proteins in the food, triggering localized release of inflammatory mediators and the symptoms of OAS. In most cases, the allergens are subsequently destroyed in the stomach, limiting any further reaction.

### ALLERGY PLANT | CROSS REACTING FOOD

 <b>Birch</b>	 Apple Peach Plum Pear Cherry Apricot Almond <b>Rosaceae</b>
	 Carrot Celery Parsley Caraway Fennel Coriander Aniseed <b>Apiaceae</b>
	 Soybean Peanut Hazelnut <b>Fabaceae</b> (old Leguminosae) <b>Betulaceae</b>
 <b>Ragweed</b>	 Cantaloupe Honeydew Watermelon Zucchini Cucumber <b>Cucurbitaceae</b>
	 Banana <b>Musaceae</b>
 <b>Mugwort</b>	 Celery Carrot Parsley Caraway Fennel Coriander Aniseed <b>Apiaceae</b>
	 Bell pepper Black pepper Garlic Onion <b>Solanaceae</b> <b>Piperaceae</b> <b>Liliaceae</b>
	 Mustard Cauliflower Cabbage Broccoli <b>Brassicaceae</b>