

Pollen Food Syndrome

Information for parents and carers



What is Pollen Food Syndrome?

- Pollen food syndrome, also known as oral allergy syndrome, is a hypersensitivity reaction to fruits, vegetables and nuts (often referred to as plant based foods) causing mild irritant symptoms such as itching of the mouth, lips and throat when eaten in their raw form.
- Other reactions such as hives (similar to nettle rash), conjunctivitis (itchy, watery eyes), rhinitis (inflammation inside the nose), asthma, nausea and vomiting may occur later but are uncommon as symptoms are typically mild and related to the oropharynx.
- Severe symptoms such as breathing difficulties are rare.

What are the causes?

- Pollen Food Syndrome usually occurs when your child eats raw fruits, vegetables, nuts or spices.
- Pollen Food Syndrome is associated with an allergy to pollen. The body cross-reacts to certain proteins found in fruits, vegetables, nuts and spices, which are similar to proteins in tree, grass and weed pollens, and the immune system wrongly reacts to them causing an allergic reaction.
- Some children who suffer with hayfever can develop mild reactions to nuts, like hazelnut and peanut, which were previously well tolerated.
- It is sometimes also referred to as oral allergy syndrome.
- Reactions to the same foods when they are cooked are less likely as the proteins are easily destroyed by heat. The same foods can be eaten when cooked or steamed. Handling the skin/ peelings of fruits and vegetables may also cause a reaction.

- Some adults and children with silver birch allergy may develop pollen food syndrome. Allergic rhinitis symptoms (inflammation of the nasal passages when they come into contact with environmental allergens), may flare up when these pollens are in season.
- A similar allergy can effect people allergic to natural rubber latex. Latex proteins are similar to certain proteins found in some fruits, vegetables, nuts and spices so can cause similar symptoms as pollen food syndrome.

Most reactions related to PFS are mild and resolve on their own.

Symptoms of Pollen Food Syndrome

Common mild/moderate	Less common mild/moderate
 Tingling or itching sensation in the mouth, lips, tongue or ears. Rapid development of nettle rash/wheals (hives). Itchy eyes or inside the nose. 	 Swelling, particularly of the face. Rising anxiety/feeling scared. Tummy pain. Nausea and/or vomiting.

Treatment: Give antihistamines and monitor symptoms.

Severe (known as Anaphylaxis)

- Difficulty in breathing; either noisy or wheezy breathing, hoarseness, croupy or continuous cough or not be able to talk normally.
- Decreased level of consciousness, faint, pale, floppy, blue lips or unresponsive.
- Collapse.

Treatment: Dial 999 and seek emergency help immediately.

Management of an allergic reaction

Pollen Food Syndrome reactions are usually immediate, occurring within 1 to 5 minutes of the problem food coming into contact with the mouth.

If an allergic reaction occurs, the child should stop eating the food immediately, spit it out and rinse their mouth out with water.

Mild/moderate symptoms

- The child/young person should be carefully monitored and given some oral antihistamine, such as chlorphenamine or cetirizine. Certirizine is recommended in over 1 year olds, as it is a non-sedating antihistamine, which is longer acting and does not usually cause drowsiness.
- Stay with the child and continue to monitor the reaction to make sure it is getting better, not worse.

Severe symptoms

It is very rare for children with pollen food syndrome to have severe reactions.

In the unlikely event that a severe reaction occurs follow these guidelines:

- Stay with your child, do not leave them alone.
- Dial 999 for an ambulance. Inform the ambulance you have a child with a severe allergic reaction or Anaphylaxis (Ana-fil-ax-is).
- If your child is having breathing problems keep them sitting, supported upright.
- If they appear to be faint then lie them flat with their legs raised. If your child loses consciousness then they should be laid on their side.
- Stay with your child, keeping them calm and comforted until help arrives.

Below are the most commonly reported cross-reactivities among pollen, fruits and vegetables.

Unless advised otherwise your child does not need to avoid the foods in the associated groups, but you should be aware of them. If a particular food does cause a reaction then it needs to be avoided in the future.

Pollen	Associated fruits, nuts and vegetables	
Tree Pollen (causes symptoms in the Spring)	Almond	Kiwi
	Aniseed	Mango
	Apple	Nectarine
	Apricot	Onion
	Brazil nut	Orange
	Carraway	Parsley
	Carrot	Peach
	Cashew nut	Peanut
	Celery	Pear
	Cherry	Plum
	Coriander	Potato
	Cumin	Soya
	Fennel	Tomato
	Hazelnut	Walnut
Grass (causes symptoms in Summer))	Bean	Peanut
	Kiwi	Potato
	Lentil	Tomato
	Melon	Soya bean
	Orange	Watermelon
	Реа	Wheat

	Associated fruits, nuts and vegetables	
Mugwort weed	Banana	Fennel
(causes allergic rhinitis	Black Pepper	Garlic
in August)	Broccoli	Melon
	Cabbage	Mustard
	Carraway	Onion
	Carrot	Peach
	Cauliflower	Parsley
	Celery	Parsnip
	Chives	Peanut
	Coriander	Peppers
Ragweed	Banana	Melon
	Courgette	Watermelon
	Cucumber	
Latex	Avocado	Рарауа
	Banana	Passion fruit
	Chestnut	Peach
	Citrus fruit	Peanut
	Kiwi	Peppers
	Grape	Pineapple
	Mango	Plum
	Melon	Tomato

Allergen calender

Month	Allergen
January	Alternaria, Aspergillus.
February	Alternaria, Aspergillus.
March	Alder.
April	Birch, Hazel, Plane.
May	Birch, Ash, Plane, Pine.
June	Grass, Nettle, Cladosporium, Alternaria.
July	Grass, Nettle, Cladosporium, Alternaria.
August	Mugwort, Nettle, Cladosporium, Alternaria.
September	Nettle.
October	House Dust Mite.
November	Alternaria, Aspergillus.
December	Alternaria, Aspergillus.

How to contact us

If you have any questions or concerns, please contact:

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Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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