Pollen-food Syndrome (PFS)

PFS is caused by the body reacting to proteins found in food from plants which are similar to pollen. It usually occurs in people who have hay fever in the Spring. It may also be called Oral Allergy Syndrome (OAS) and it is the most common type of food allergy affecting adults.

Why does PFS happen?

PFS happens because the body mistakes the food proteins for pollen proteins and the immune system wrongly reacts to them.

Typical symptoms include immediate itching and sometimes swelling of the lips, tongue, mouth and soft palate.

How is PFS diagnosed?

If you get symptoms of itching, tingling or swelling, in your mouth or throat, after eating raw fruits, vegetables or nuts, and you have hay fever which starts in March/April, you probably have PFS. The best test to confirm this is a skin prick test to birch pollen and the fresh foods you have symptoms to.

This should only be carried out by a healthcare professional with the relevant training.

However, if you are allergic to pollen, many plant foods will test positive on skin prick testing, because of the cross-reactions. So a positive skin prick test is only important if you also have symptoms to that food.

Don’t cut out all foods which are positive, just those you have had a reaction to.

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What foods normally cause PFS?

The foods most likely to trigger symptoms are:

- raw apple
- strawberry
- kiwi
- hazelnut
- Brazil nut
- almond
- walnut

However, many others can also be involved such as:

- pear
- cherry
- peach
- nectarine
- apricot
- plum
- melon
- orange
- peanut
- celery
- carrot
- tomato

People with PFS may also get a reaction when peeling potatoes.
Managing PFS

Try cooked or canned versions of the raw foods you have problems with. You may find that you tolerate them in this form as the heating or processing breaks down the proteins that you react to.

Other Tips

- Sometimes peeling a fruit or microwaving it for a minute can enable you to eat it

- Try other varieties of the food you have reaction to, such as Pink Lady apples if you cannot tolerate Granny Smith apples

- If you have mild symptoms to raw nuts, you should be able to tolerate nuts in foods and foods which contain traces of nuts – check with your doctor first

- Most PFS reactions are not life-threatening and the symptoms can often be helped by drinking lots of water and taking an antihistamine tablet, so keep some handy

- For more severe reactions you may have been prescribed an adrenaline pen. If so, always carry this with you, and if you have asthma make sure it is well controlled

Summary

Pollen food syndrome (PFS) is caused by the body reacting to proteins founds in plant foods which are similar to pollens.

The body mistakes the food proteins for pollen proteins and the immune system wrongly reacts to them. Once diagnosed by a medical professional, and on advice from your doctor and/or dietitian, you can manage your PFS by following the advice in this Fact Sheet.

If you have a reaction it can be eased by drinking lots of water, taking an antihistamine tablet or using a prescribed adrenaline pen.

Further information:

Food Fact Sheets on other topics including Food Allergy and Intolerance Testing are available at www.bda.uk.com/foodfacts