

## Allergy to fruit

A large number of fruits have been reported to cause allergic reactions. If you know or believe you are allergic to any fruit, or fruits, this article may help you understand your allergy. While we have concentrated on those fruits that are most common in the diets of UK people, we realise that there are other fruits that may not be covered in this article.

### What is a food allergy?

Food allergy occurs when a person's immune system reacts inappropriately to proteins in a food. The first stage of the process is called sensitisation – when the immune system's "memory" registers the food as a possible threat. Antibodies to that food are produced and, at a subsequent encounter, these antibodies may connect with the food's proteins and trigger the release of certain substances in the body, such as histamine. This results in an allergic reaction. Some people, however, are sensitised to a food but never have an allergic reaction to it.

### Types of allergy to fruit

#### 1. Pollen food syndrome

Pollen food syndrome usually occurs in people who are already allergic to pollens and suffer from hay fever, although the symptoms due to hay fever can be very mild. People with pollen food syndrome experience allergic symptoms when they eat certain fruits or vegetables. This is due to the similarities between the proteins found in pollen and those present in the fruits and vegetables. Symptoms are usually mild and may respond to antihistamines but it is important to consult your doctor to confirm that this is the right treatment.

Symptoms of pollen food syndrome usually include:

- Redness, mild swelling or itching of the lips, tongue, inside of the mouth, soft palate and ears
- Itching and mild swelling affecting the throat.
- Occasionally, people might also experience symptoms in the oesophagus (gullet) or stomach, causing abdominal pain, nausea and even vomiting.
- Sneezing, runny nose, or eye symptoms can also occur.

- Rarely, more severe symptoms (such as difficulty in swallowing and breathing difficulties), known as anaphylaxis, can occur. In such cases, immediate medical help is needed.

The proteins that cause pollen food syndrome are not very strong and are often changed by heating or acid in the stomach. It is thought that this is why people with pollen food syndrome are less likely to have a severe reaction than those with other food allergies. Most sufferers of pollen food syndrome experience allergy symptoms if they eat the **raw** fruit, but are able to eat the same food if cooked without any problem.

Some medical professionals refer to pollen food syndrome as oral allergy syndrome, although strictly speaking the two are not the same. When the term oral allergy syndrome was first used in 1987 it had no connection with pollen allergy but referred to **any** allergic symptoms in the mouth that often preceded more serious symptoms. Anaphylaxis UK prefers the term pollen food syndrome when referring to those allergy symptoms to food that are linked to pollen allergy, are limited to the mouth and throat, and are usually mild. Many people with fruit allergy are in this category.

## 2. Other types of fruit allergy

Less commonly, people allergic to fruit have a different, **more serious** type of allergy. In some cases they may also be allergic to latex. Alternatively they may suffer from a newly recognised type of plant protein allergy called lipid-transfer protein (LTP) allergy. These conditions have the potential to cause more serious symptoms and there is a risk of anaphylaxis. Symptoms may include wheezing; a swelling of the throat that is serious enough to restrict breathing; and even a fall in blood pressure that can lead to collapse. Accompanying symptoms may include widespread flushing of the skin, nettle rash (otherwise known as hives or urticaria), swelling of the skin (known as angioedema) anywhere on the body, swelling of the lips, or abdominal pain, nausea and vomiting.

If you are at risk of anaphylaxis, self-injectable adrenaline (EpiPen or Jext) will be prescribed as well as an antihistamine.

## Soya – a particular concern for some people

The medical expert who reviewed this article tells us that many people with pollen food syndrome who react to fruit also react to raw soya (such as soya drink, soya yoghurt, raw tofu). For some reason, the first sip of a soya drink (or first spoonful of soya yoghurt) does not alert them sufficiently and they may consume the whole portion. Reactions can then be severe due to the quantity consumed and on rare

occasions anaphylaxis can be the outcome. This does not affect everyone with pollen food syndrome, but we advise that if you suffer from pollen food syndrome be cautious when consuming large quantities of soya (such as soya drink). A severe reaction is highly unlikely but if there is wheezing, difficulty breathing or a feeling of faintness or dizziness, administer adrenaline (if available), then dial 999 and say the person is suffering from anaphylaxis (anna-fill-axis).

## Food intolerance

Some people who experience symptoms when they eat a food do not have a true allergy, but rather a food intolerance. Whereas food allergy is a reaction of the immune system, food intolerance may have a different cause. A much wider range of symptoms can occur. There may be migraine and unexplained fatigue, abdominal pain, bloating and frequent diarrhoea, unexplained muscle and joint pains or unexplained nasal congestion and discharge. Food intolerance to fruits could be part of a wider intolerance to foods because of a sensitivity to naturally occurring 'food chemicals' in the fruit, or due to an inability to properly digest fructose, the natural sugar found in many fruits.

## Allergy to vegetables

Read our separate article on allergy to vegetables.

<https://www.anaphylaxis.org.uk/fact-sheet/vegetables-allergy/>

## The key message

Medical advice is required in all cases where fruit causes symptoms. This will determine what type of allergy you have. Is it pollen food syndrome or is it in the more serious category? Or do your symptoms have a non-allergic cause such as food intolerance?

## Species of fruits that can trigger allergies

Any fruit has the potential to cause an allergic reaction. The following is not a complete list.

Apple

Avocado

Banana

Cherry

Citrus fruits

Kiwifruit

Mango

Melon

Nectarine

Peach

Pear

Pineapple

Strawberry

Plum

Tomato

Recently our medical advisers have made us aware of an increasing number of allergic reactions to jackfruit, which is becoming popular among people following a vegan diet.

If you are allergic to one of more of the above fruits, this does not necessarily mean you will react to any others in the list. However with some fruits there is a possibility that you will. Medical advice is needed in all cases of allergy to fruit.

Because **kiwifruit** and **banana** are the most common causes of fruit allergy within our own membership, we have written separate guidance notes on these.

### Getting a diagnosis

If you suspect you have a food allergy, it is important to see your GP as soon as possible. Some GPs have a clear understanding of allergy, but allergy is a specialist subject your doctor may need to refer you to an allergy clinic. Anyone who has suffered anaphylaxis should certainly be referred.

Your GP can locate an allergy clinic in your area by visiting the website of the British Society for Allergy and Clinical Immunology ([www.bsaci.org](http://www.bsaci.org)).

Once you get a referral, the consultant will discuss your symptoms with you in detail as well as your medical history. Skin prick tests and blood tests may help form an accurate picture. When doubt remains, the consultant may suggest a “food challenge”– where the patient eats a small amount of the suspect food, increasing the dose gradually, to test whether or not a reaction occurs. This must only be done by an experienced consultant in a medical setting.

If symptoms triggered by fruit occur only in the mouth, the likelihood is that your allergy will remain mild but medical advice on this **must** be sought.

The presence of asthma – especially when poorly-controlled – is known to be a major risk factor for the occurrence of more severe allergic reactions. We recommend that everyone with asthma should be seen at least once each year by their GP or asthma nurse to ensure their symptoms are well managed.

### Feedback

Please help us to improve our information resources by sending us your feedback at: -

<https://www.anaphylaxis.org.uk/information-resources-feedback/>

### Sources

All the information we produce is evidence-based or follows expert opinion and is checked by our clinical and research reviewers. If you wish to know the sources we used in producing any of our information products, please contact [info@anaphylaxis.org.uk](mailto:info@anaphylaxis.org.uk) and we will gladly supply details.

### Reviewer

The content of this Factsheet has been Peer Reviewed by Dr Michael Radcliffe, Consultant in Allergy Medicine, University College London Hospitals NHS Foundation Trust.

### Disclosures

We are not aware of any conflicts of interest in relation to the review of this factsheet.

## Disclaimer

The information provided in this article is given in good faith. Every effort is taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

## About Anaphylaxis UK

Anaphylaxis UK is the only UK-wide charity solely focused on supporting people at risk of serious, life-threatening allergic reactions. We provide information and support to people living with allergies through our free national helpline and local support groups. We also campaign and fundraise to achieve our ultimate aim, to create a safer environment for all people at risk of serious allergies. Visit our website [www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk) and follow us to keep up-to-date with our latest news. We're on Facebook @anaphylaxisUK, LinkedIn, Instagram @anaphylaxisUK, Twitter @AnaphylaxisUK and YouTube.