

Vegetable Allergy

There are different types of vegetable allergy, and sometimes reactions to vegetables can be serious. Visit your GP if you have symptoms after eating vegetables so that you can find out what type of allergy you have and how to manage it.

What is a vegetable allergy?

A vegetable allergy is a type of food allergy. Food allergy occurs when the body's immune system wrongly identifies a food as a threat. When this happens, the body releases chemicals, such as histamine, in response. It is the release of these chemicals that causes the allergic symptoms.

There are different types of vegetable allergy. Symptoms are often due to either pollen food syndrome (PFS) or an allergy to lipid transfer proteins (LTP) where symptoms can be more serious, and you may be at risk of a more serious reaction (anaphylaxis).

Other adverse effects due to vegetables include gastrointestinal symptoms such as acid reflux, nausea, loose stools, bloating and tummy pain.

[You can also read about allergies to fruit.](#)

Vegetables that can trigger allergies

The following are some of the vegetables that are commonly eaten in the UK that can cause reactions, but it is not a complete list, and any vegetable has the potential to cause an allergic reaction.

- aubergine
- beetroot
- cabbage
- carrot
- celery
- cucumber
- garlic
- lettuce
- onion
- peppers
- sweetcorn

- potato (sometimes potato starch is used as an anti-caking agent in a pizza)

Mushrooms (part of the fungi family) can also be a cause of allergic reactions and adverse symptoms.

Vegetable allergies vary by region because of local eating habits and the kinds of fruit people eat nearby.

Pollen food syndrome

Most people with an allergy to vegetables have pollen food syndrome. Pollen food syndrome usually occurs in people with hay fever who are allergic to pollens. This can lead to allergic reactions to vegetables (or fruits). This is because the proteins in pollens are similar to the proteins in the vegetables and fruits.

Symptoms are usually mild and may respond to antihistamines but speak to your doctor to make sure this is the right treatment for you.

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 of the throat
- occasionally, people might also have symptoms in the oesophagus (food pipe) or stomach, causing abdominal pain, nausea and vomiting
- sneezing, runny nose, or symptoms affecting the eyes

Rarely, more serious symptoms can occur, known as **anaphylaxis** (ana-fil-ax-is). You can read more about this below.

If someone has pollen food syndrome, serious symptoms are unusual because the proteins that cause the allergy are unstable and are destroyed with heat or once they reach the stomach. Most people with pollen food syndrome have allergic reactions to some raw vegetables (and some raw fruits), but they are able to eat cooked and tinned vegetables (and fruits) without developing symptoms.

More serious allergy symptoms (anaphylaxis)

Most people with an allergy to vegetables have pollen food syndrome, but some people have more serious reactions which are not related to pollen. The term for this more serious reaction is anaphylaxis.

More serious symptoms are often referred to as the **ABC** symptoms and can include:

- **AIRWAY** - swelling in the throat, tongue or upper airways, hoarse voice, difficulty swallowing.
- **BREATHING** - sudden onset wheezing, breathing difficulty, noisy breathing, persistent cough.
- **CIRCULATION** - dizziness, feeling faint, sudden sleepiness, confusion, pale clammy skin, loss of consciousness or collapse.

In extreme cases there could be a dramatic fall in blood pressure. The person may become weak and floppy and may have a sense of something terrible happening. This may lead to collapse and unconsciousness and, on rare occasions, can be fatal.

Most healthcare professionals consider an allergic reaction to be anaphylaxis when it involves the ABC symptoms.

[Read more about anaphylaxis.](#)

Allergy to lipid transfer proteins

Lipid transfer proteins (LTPs) are proteins found in plant foods. Lipid transfer protein allergy affects people who have become sensitised to LTPs. It can cause reactions to vegetables, fruits, nuts and/or cereals, and reactions can be serious.

For further information on this please see the factsheet on lipid transfer protein:
[LTP allergy](#)

Other reactions or symptoms after eating vegetables

Some people do not have an allergy to vegetables but develop symptoms after eating certain vegetables. Symptoms can include:

- migraine
- fatigue
- tummy (abdominal) pain
- bloating and frequent diarrhoea
- muscle and joint pains
- blocked or runny nose
- foggy headed
- and many other reported symptoms

Care must be taken to only avoid those vegetables that are definitely causing problems, or the diet may become overly restricted, unbalanced and difficult to manage.

Sensitivity to chemicals

Another possibility is that sensitivity to naturally occurring chemicals can cause symptoms, but this is not the same as an allergy.

For example, **salicylates** are found in the skins of some vegetables and fruits, as well as tea, spices, honey, ginger and some drinks. They are also found in aspirin. Salicylates can cause wheezing or other symptoms such as nettle rash (hives).

Vaso-active amines are also found in some fruits, vegetables and other foods. In sensitive people, they can cause headaches, rashes, flushing, itching, swelling, runny or blocked nose, irregular heartbeat, diarrhoea, nausea, vomiting or abdominal pain.

Getting a diagnosis

If you think you may be allergic to any vegetables, see your GP who can refer you to a specialist allergy clinic if needed. They can find a clinic in your area from the [British Society for Allergy and Clinical Immunology \(BSACI\)](#).

It's important to get a referral even if your symptoms were mild because it can be hard to tell if future allergic reactions could be more serious.

Once you get a referral, the consultant will discuss your medical history and symptoms with you. They might suggest skin prick tests, blood tests and food challenge tests to help diagnose the allergy and work out how serious it may be.

[Read more about allergy testing.](#)

Some clues that you might be at **higher** risk are:

- you have already had a serious reaction, with any of the '**ABC**' symptoms.
- you have asthma, especially if it is not well controlled.
- you have reacted to a tiny amount of the food.

If the symptoms only affect your mouth, the likelihood is that your allergy will remain mild, but you must still seek medical advice.

Treating symptoms

If you have mild allergic symptoms, you may be prescribed antihistamine medicine that you take by mouth. But if you are at risk of a serious allergic reaction (anaphylaxis), you may be prescribed adrenaline – the emergency medicine used to treat anaphylaxis. It is also known as epinephrine.

Because anaphylaxis can happen very quickly, adrenaline is available in different forms that are designed to be easy to use. It's important to know exactly how and when to use your prescribed adrenaline. Healthcare professionals can show you how to use it, and there are also resources such as practice devices and videos on manufacturer websites.

Options currently available on prescription in the UK include:

- **Adrenaline auto-injectors (AAIs)** – such as EpiPen and Jext.
- **Intranasal adrenaline** – EURneffy, a needle-free nasal spray.

You must carry two in-date forms of prescribed adrenaline at all times as a second dose may be needed if symptoms do not improve after five minutes or get worse.

[Find out more about what to do in an emergency.](#)

[Find out more about adrenaline.](#)

Key Messages

- If you have symptoms after eating vegetables, visit your GP.
- If you are prescribed adrenaline, carry two devices with you **at all times**.
- Always be guided by your allergy specialist as to which foods you should avoid
- Ensure that asthma is well managed. See your GP about this.
- Do not restrict your diet any more than you need to – only cut out foods you have reacted to in the past, or that you have been advised to cut out by a healthcare professional.
- Keep a diary of all the reactions you have had - include details of what you had been eating at the time of the reactions, the symptoms and timings.

Feedback

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

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 or you would like a version of this factsheet with the references included, please contact info@anaphylaxis.org.uk and we will gladly supply details.

Reviewers

The content of this Factsheet has been Peer Reviewed by Tanya Wright, Specialist Allergy Dietician.

Disclosures

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

Disclaimer

The information provided in this factsheet is given in good faith. Every effort has been 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 raise awareness 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 and follow us to keep up-to-date with our latest news. We're on Facebook @anaphylaxisUK, LinkedIn, Instagram @anaphylaxisUK, Twitter @AnaphylaxisUK and you can find our podcast [here](#).