

Celery Allergy: The Facts

Celery allergy is thought to be rare in the UK, but more common in some European countries such as France, Germany and Switzerland. Allergic reactions to celery, when they do occur, can be severe for some people.

This Factsheet aims to answer some of the questions that you and your family might have about living with celery allergy. Our aim is to provide information that will help you to avoid celery, minimise risks and know how to treat an allergic reaction should it occur.

Celery is used in food in various forms including:

- Celery sticks
- Celery leaves
- Celery spice
- Celery seeds, which can be used to make celery salt

People with celery allergy also need to be aware of the issue of **allergy to celeriac**. Celeriac is a type of celery but the root is the main edible part rather than the stalk. Celery and celeriac are likely to contain very similar allergens and although our Factsheet is entitled Celery Allergy, you must assume that you should also avoid celeriac. Allergic reactions to celeriac are often more severe and happen more frequently in Europe where celeriac is a more commonly eaten food. In the UK reactions to celery stalk may be milder, although severe reactions are still possible especially to celery seeds, usually in the form of celery salt.

If you know or suspect you are allergic to celery, the most important message is to visit your GP and seek a referral to an allergy specialist even if your symptoms have been mild. It is possible, in a few cases, that future reactions could be more severe.

Throughout the text you will see brief medical references given in brackets. More complete references are published towards the end of this Factsheet.

The symptoms of celery allergy

The symptoms of a food allergy, including celery allergy, may come on rapidly (usually within minutes). The most common symptoms of celery allergy are a tingling or itchy mouth or throat, but can also include nettle rash (otherwise known as hives or urticaria) anywhere on the body.

More serious symptoms may include:

- Swelling in the face, throat and/or mouth
- Difficulty breathing
- Severe asthma
- Abdominal pain, nausea and vomiting

The term for this more serious form of allergy is anaphylaxis. In extreme cases there could be a dramatic fall in blood pressure (anaphylactic shock). The person may become weak and floppy and may have a sense of something terrible happening. This may lead to collapse and unconsciousness. On rare occasions, death can occur.

Pollen-food syndrome

The most common type of celery allergy in the UK is caused by a condition known as pollen food syndrome. Pollen food syndrome usually occurs in people who are already allergic to pollens and have hayfever. The proteins in these pollens are similar to those in certain raw fresh fruits and raw vegetables. This similarity means that the person's immune system mistakes the food for pollen. This is what causes the reaction to the food. If the food has been cooked, a reaction is unlikely.

For most people, the symptoms caused by pollen food syndrome are not serious. There may be an itchy feeling or tingling in the mouth, throat or lips, or perhaps a slight swelling. Usually the symptoms remain mild and do not progress to other parts of the body. However, we advise anyone affected to seek medical advice to ensure they are not one of those people who are at risk of a more serious reaction.

Getting a diagnosis of celery allergy

Because symptoms can be severe in some cases, it is important to see your GP as soon as possible if you suspect you have celery allergy. Some GPs have a clear understanding of allergy, but allergy is a specialist subject so it is more likely that your doctor will 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).

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, but positive tests do not always mean the patient will actually have an allergic reaction to celery. When doubt remains, the consultant may recommend a "food challenge"—where the patient eats a small amount of celery, 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.

Your history may contain clues about the severity of your allergy. For example, the seriousness of any past reaction and the amount of celery that caused it may prove to be important factors. If you have reacted to a very small amount of a food containing celery, this suggests your allergy is probably severe.

Also, the presence of asthma – especially when poorly-controlled – is known to be a major risk factor for the occurrence of more severe allergic reactions.

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

Treating symptoms

Mild allergic reactions can be treated with antihistamines.

If your GP or allergist believes you are at risk of a more severe reaction, you are likely to be prescribed an adrenaline auto-injector (AAI). The adrenaline auto-injectors prescribed in the UK at present are Emerade®, EpiPen® and Jext®, which are designed for self-administration. If you are prescribed an auto-injector, it should be available at all times – with no exceptions. Medical attention should still be sought after use as symptoms may return after a short period and more than one injection of adrenaline may be required to control the reaction.

- Emerade® is the most recent single use adrenaline auto-injector to become available. It has a needle guard to protect against needle stick injury. Visit www.emerade-bausch.co.uk.
- EpiPen® has a spring-loaded concealed needle. The built-in needle protection keeps the needle covered during and after use. Visit www.epipen.co.uk.
- Jext® has a locking needle shield which engages after use, designed to protect against needle injury. Visit www.jext.co.uk.

If you are prescribed an adrenaline auto-injector, you will need to know how and when to use it. It is vital that you ask your GP or allergist for training. You can also find help on the website relevant to the injector you carry.

If you also have asthma it is important to ensure that it is treated to achieve good control. This should be discussed with your GP or allergist.

Avoiding celery

The first line of defence is to avoid foods that contain celery or celeriac. It is vital to read food labels carefully every time you shop. Remember that ingredients are sometimes changed. The good news is that all pre-packaged food sold in the UK must declare and highlight the presence, in an ingredient list, of major allergens including the presence of celery or celeriac even if they appear in small quantities.

Watch out for “may contain” warnings, which indicate the possibility of cross-contamination during the food production process. We advise people to heed these warning statements whenever they appear.

The food allergen labelling laws that cover pre-packed food now also apply to the catering sector. When eating out or buying takeaway food, food businesses are required to provide information on allergenic ingredients. This information can be provided in writing and/or orally. If information is provided orally, the food business will need to ensure that there is some sort of written signage that is clearly visible, to indicate that allergen information is

available from a member of staff. Systems should also be in place to ensure that, if requested, the information given orally is supported in a recorded form (in writing for example) to ensure consistency and accuracy.

In some European countries, food businesses are required to provide the information only in writing. You should question staff very directly, asking whether celery is an ingredient of the food you have chosen or whether there is a risk of cross-contamination. Don't be afraid to ask the waiter to check with the chef.

A stick of celery or celeriac is easy to recognize, but other forms of the food are less easy to spot. For example, celery salt can be used in a variety of food including soups, sauces, stews, stocks, bouillons and seasonings. It can also be used as a seasoning for tomato juice. Other possible sources of celery include:

- Canned soups
- Stock cubes
- Salads
- Pre-prepared sandwiches
- Crisps
- Spice mixes
- Marmite
- Batter for frozen foods
- Some cured bacon (celery juice can be used).

For some people, allergic reactions to cooked celery will take place even after high temperatures are used (Vieths et al 2002; Ballmer-Weber et al 2002).

The key messages

We know that being diagnosed with a food allergy can be daunting, but by thinking ahead and taking simple steps to manage risk and by avoiding eating or touching the food you are allergic to, you can be more confidently in control of your life.

Our key things to think about include...

- Always being extra careful when you are around food
- Always checking the small print on food packaging labels
- Being proactive when you are eating out such as making catering staff aware of your allergy
- Carrying your prescribed medication with you everywhere you go
- Knowing how to use your adrenaline auto-injector and when to use it in an emergency
- Making sure your asthma is well-managed.

References

Ballmer-Weber, B.K., Hoffmann, A., Wüthrich, B., Lüttkopf, D., Pompei, C., Wangorsch, A., Kästner, M., Vieths, S., 2002. Influence of food processing on the allergenicity of celery: DBPCFC with celery spice and cooked celery in patients with celery allergy. *Allergy*, 57(3), pp.228-35.

Vieths, S., Scheurer, S., Ballmer-Weber, B., 2002. Current understanding of cross-reactivity of food allergens and pollen. *Ann N Y Acad Sci*, 964, pp.47-68.

Reviewers

The content of this Factsheet has been peer-reviewed by Dr Isabel Skypala, Consultant Allergy Dietitian – Royal Brompton & Harefield NHS Foundation Trust and Honorary Senior Clinical Lecturer – Imperial College, London. She has reported no conflicts of interest in her 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 the Anaphylaxis Campaign: supporting people at risk of severe allergies

The Anaphylaxis Campaign is the only UK wide charity solely focused on supporting people at risk of severe allergic reactions. We provide information and support to people living with severe allergies through our free national helpline and local support groups, and campaign and fundraise to achieve our ultimate aim, to create a safer environment for all people at risk of severe allergies.

Visit our website www.anaphylaxis.org.uk and follow us to keep up to date with our latest news. We're on Facebook @anaphylaxiscoms, LinkedIn, Instagram @anaphylaxis_campaign, Twitter @Anaphylaxiscoms and YouTube.