

## Sesame Allergy: The facts

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

If you know or suspect you may be allergic to sesame, the key message is to seek medical advice by visiting your GP. Your GP may need to refer you to an allergy clinic.

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

### How many people in the UK have sesame allergy?

No one knows for sure. The Anaphylaxis Campaign has 592 members who are registered as allergic to sesame. This is out of a total membership of 4,555 (summer 2016). The incidence of sesame seed allergy appears to have risen dramatically over the past two decades and this rise is probably linked to its increased use. Other seeds can cause allergic reactions but sesame appears to be the most common to do so (Patel and Bahna, 2016).

Sesame allergy tends to appear early in life and, according to at least one study, persists in 80 per cent of the cases. Those who outgrow it are likely to have done so by the age of around six (Cohen A, et al 2007).

### Symptoms triggered by sesame

The symptoms of a food allergy, including sesame allergy, may come on rapidly. Mild symptoms may include nettle rash anywhere on the body (otherwise known as hives or urticaria), or a tingling or itchy feeling in the mouth. More serious symptoms (anaphylaxis) are uncommon but remain a possibility for some people. These may include:

- Swelling in the face, throat and/or mouth
- Difficulty breathing
- Severe asthma

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.

In rare cases, sesame seeds or sesame seed oil may cause a delayed reaction mostly in the form of allergic contact dermatitis, in which the skin becomes red, swollen, and sore (Patel and Bahna, 2016).

### Getting a diagnosis of sesame allergy

Because symptoms can be severe, it is important to see your GP as soon as possible if you suspect you have sesame allergy. Some GPs have a clear understanding of allergy, but allergy is a specialist subject so it is likely your doctor will need to refer you to a specialist allergy clinic. 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. The consultant may also perform skin prick tests and blood tests as part of the diagnostic process, although these do not always give accurate results. A challenge test could also be offered – where the patient is asked to eat small amounts of the suspect food (in this case sesame) to test whether a reaction occurs.

In highlighting the difficulty in diagnosing some cases of sesame allergy, one research team reported that proteins called oleosins, which are major allergens of sesame seeds, accounted for about third of all cases of sesame allergy among the people they studied. Because oleosins do not dissolve in water they cannot be identified by allergy skin or blood tests (Leduc et al 2006). Therefore an allergy could mistakenly be classed as idiopathic (of unknown cause) when the true cause is sesame seeds. To address this problem, an oral food challenge test may be used for cases where sesame allergy is suspected but cannot be proved.

In many cases, doctors cannot easily determine whether a food allergy is mild or severe. However, there will be certain clues. For example, the severity of the reaction you suffered and the amount of food that caused it are important factors. If you reacted extremely to a very small amount of a food containing sesame, this suggests your allergy is severe.

Also, the presence of asthma – especially when poorly-controlled – has been shown to be a major risk factor for the occurrence of more severe allergic reactions (Pumphrey and Gowland, 2007).

### Emergency treatment of anaphylaxis

If severe allergy (anaphylaxis) is strongly suspected, you are likely to be prescribed a pre-loaded adrenaline injector. Your injector should be available at all times – with no exceptions. Once an injection is given, someone must dial 999 immediately as symptoms may return after a short period and more than one injection of adrenaline may be required to control the reaction.

If you are prescribed an adrenaline injector, you will need to know how and when to use it. Ask your local surgery for advice. You can also find help on the website relevant to the injector you carry.

There are three different adrenaline injectors prescribed in the UK:

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](http://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](http://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](http://www.jext.co.uk).

### Avoiding sesame

If you are allergic to sesame you must seek to avoid it completely, as even a tiny amount may trigger a severe reaction.

The good news is that all pre-packaged food sold within the EU, including the UK, must declare and highlight the presence in the ingredient list of major allergens including sesame, even if they appear in small quantities. Read the ingredient list every time you buy a product.

The catering sector, too, is covered by EU regulation. Restaurants, hotels and takeaways, as well as other catering businesses, are required by law to provide the customer with information on the presence of major allergenic ingredients including sesame. This information can be provided in writing or by word of mouth. If information is provided by word of mouth, the food business will need to ensure that written signage is clearly visible telling customers that allergen information is available from a member of staff.

You should question staff very directly, asking whether sesame is an ingredient of the food you have chosen or whether there is a risk of cross-contamination, making it clear that even small quantities of sesame may cause a reaction. Don't be afraid to ask the waiter to check with the chef.

Foods that sometimes have sesame as an ingredient include veggieburgers, breadsticks, crackers, burger buns, cocktail biscuits, Middle Eastern foods, Chinese, Thai and Japanese foods, stir-fry vegetables, salad dishes and health food snacks.

Dishes containing sesame include tahini, gomashio, hummus and halvah. It is in the seasoning called Furikake. Chinese stir-fry oils sometimes contain sesame oil. Sometimes it is found in the drink Aqua Libra.

Special care is needed when the food you buy is sold loose, such as at in-store bakeries or delicatessen counters. In-store bakery products must be viewed as particularly suspect because these may be contaminated by sesame seeds from other bread. The seeds may not be obvious – they may be in the dough or on the bottom.

Sesame seeds are difficult to control in the food industry. They often become 'electrostatic', causing them to cling to charged surfaces such as other foods and clothing, which make it difficult to prevent cross-contamination. If a food product is marked with a warning, such as "may contain sesame", take this seriously.

Heating does not destroy the allergenicity of sesame and so cooked food containing sesame cannot be viewed as safe.

Sesame oil should be regarded as extremely risky because it is almost certain that it will be unrefined and therefore contain the proteins that trigger allergic reactions.

### Could I react to other seeds or other foods?

Research shows there are some people with sesame allergy who also react to other seeds, peanuts or tree nuts (Patel and Bahna, 2016, Stutius et al, 2010). You may be able to eat these other foods without a problem but ideally this is something that should be discussed with your allergist at the time of diagnosis, or with your GP. Be cautious if you are introducing any of these other foods into the diet for the first time. If in doubt about any food, talk to your GP about allergy testing.

### Personal care products and medicines

Some cosmetics and other personal care products contain sesame, declared under the Latin name *sesamum indicum*. Little is known about how much risk such products pose for people with sesame allergy. We advise people to play safe and avoid them.

Sesame oil is also present in some pharmaceutical products. Ask your pharmacist for ingredient information.

### The key messages are:

- Seek medical advice. Visit your GP in the first instance
- Always be vigilant when food is around
- Check food labels
- Be proactive when eating out. Always question staff
- Carry prescribed medication everywhere
- Learn how and when to use your adrenaline auto-injector
- Ensure that asthma is well managed.

## References

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### About the Anaphylaxis Campaign: *Supporting people at risk of severe allergies*

The Anaphylaxis Campaign is the only UK-wide charity to exclusively meet the needs of people at risk from anaphylaxis by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website [www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk) and follow us on Twitter [@anaphylaxiscoms](https://twitter.com/anaphylaxiscoms).