

## Food allergen challenges frequently asked questions (FAQs)

### Q 1: What is a supervised food allergen challenge?

A supervised food allergen challenge is a procedure where small and increasing amounts of a particular food are fed to a person while under medical supervision. The person is monitored to determine if the food being tested causes an allergic reaction. Most food allergen challenges involve a time period of about 2 to 3 hours to eat the required doses of food, followed by 2 hours of medical observation.

If an allergic reaction occurs, the challenge is stopped and if necessary, treatment for the allergic reaction is given. In this scenario the challenge is called '**positive**' and the food allergy diagnosis is confirmed.

If the challenge is completed without an allergic reaction, the challenge is called '**negative**' and the person will then be asked to regularly include the food in their diet.

### Q 2: Who can perform supervised food allergen challenges?

Food allergen challenges should only be performed in carefully selected patients by a clinical immunology /allergy specialist or appropriately qualified and experienced medical practitioners, in consultation with an allergy specialist. For patients who are assessed to be at risk of a severe allergic reaction (anaphylaxis), food allergen challenges must be performed by well-trained and experienced staff with immediate access to emergency treatment for anaphylaxis.

### Q 3: Why are supervised food allergen challenges performed?

Food allergen challenges are mainly used to:

- Determine if a person has outgrown an existing food allergy.
- Identify a suspected food allergy when the history or allergy tests are unclear.
- Determine if a person with a positive allergy test to a food (that they have never actually eaten) has a true food allergy.
- Establish whether a person allergic to egg and/or milk can tolerate these foods in a baked form.

### Q 4: Why are supervised food allergen challenges sometimes performed following other allergy tests?

A positive food allergy test (using skin prick tests or blood tests for allergen specific IgE) means that a person's immune system has produced an antibody response to that food. We call this sensitisation.

However, it is possible to have sensitisation without allergy, which means that test is positive, yet the person can eat the food without any symptoms. For this reason, it can be important in some circumstances to confirm the significance of a positive allergy test with a food allergen challenge.

### Q 5: What are the implications if there is no allergic reaction resulting from a food allergen challenge?

If the challenge (in a person who is sensitised or was previously allergic) does not result in any allergic reaction, the person no longer needs to avoid that food and it should be regularly included in the diet. This can have a major impact for patients and their families, as they no longer need to unnecessarily avoid a food that may otherwise form a major part of their usual diet.

**Q 6: What are the implications if there is an allergic reaction resulting from a food allergen challenge?**

If an allergic reaction occurs during the challenge:

- This will be treated with whatever medications and other measures are needed.
- It will be necessary to stay under medical supervision for a period of time after the challenge.
- The food must continue to be avoided.

Unfortunately, the severity of the allergic reaction during the challenge does not provide any information regarding the severity of any future allergic reactions. For example, if a person has only a mild allergic reaction during the challenge, a reaction on another occasion could be much more severe and even potentially life threatening (anaphylaxis).

**Q 7: How do you prepare for a supervised food allergen challenge?**

- You may be asked to bring in the challenge food on the day, depending on what food allergy is being assessed.
- The person being challenged must be well on the day of the challenge, with no fever. If asthma is present, it must be stable with no recent wheezing.
- If the person being challenged has a prescribed adrenaline (epinephrine) autoinjector, this should be brought to the food allergen challenge. If a severe allergic reaction occurs, it may be an opportunity for the person (if old enough and well enough) or parent to administer the adrenaline autoinjector in a controlled setting. Staff will always have a supply of adrenaline available, even if you have your adrenaline autoinjector with you.
- Be prepared to stay at the challenge facility for at least half a day. This may be longer for some people.
- If there is no allergic reaction resulting from your challenge, be prepared to include the food on a regular basis in your diet. This is what you will be asked to do, because evidence suggests that this will help to maintain your tolerance of that food.

**If your child is having a supervised food allergen challenge:**

- Talk to them beforehand and ensure they are aware that if they have an allergic reaction this will be managed.
- Bring things to occupy them, as the food allergen challenge can take some time.
- You may be asked to bring in a soft or liquid food which your child is not allergic to, and likes to eat, to help with the challenge process. It can be used to mix with the challenge food.
- If more than one child in a family is being challenged on the same day it is recommended that each child has a parent or other carer with them.
- If there is no allergic reaction resulting from their challenge, be prepared to include the food on a regular basis in their diet. This is what you will be asked to do, because evidence suggests that this will help to maintain their tolerance of that food.

**Q 8: How are allergic reactions resulting from supervised food allergen challenges treated?**

Food allergen challenges are performed in a controlled medical environment with medical and nursing staff experienced in treating anaphylaxis. Therefore, the way an allergic reaction is treated in a hospital may vary slightly from the instructions on the ASCIA Action Plan for Anaphylaxis. This is because hospital staff have ready access to blood pressure and oxygen checks, oxygen masks and other equipment.

Although treatment of anaphylaxis in a hospital may be different, it is important that you closely follow instructions on the ASCIA Action Plan for Anaphylaxis when you are not in a hospital setting.

**Further information**

The following information is available free of charge from the ASCIA website:

- General information about food allergy and dietary avoidance for food allergens (diet sheets) [www.allergy.org.au/patients/food-allergy](http://www.allergy.org.au/patients/food-allergy)
- ASCIA anaphylaxis e-training for first aid (community) [www.allergy.org.au/patients/anaphylaxis-e-training-first-aid-community](http://www.allergy.org.au/patients/anaphylaxis-e-training-first-aid-community)

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**Disclaimer**

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Content updated 2017