

Food Allergen Challenges Frequently Asked Questions (FAQs)

Q 1: What is a supervised food allergen challenge?

Food allergen challenges are procedures where small and increasing amounts of a food (as set out in standard protocols) are fed to a patient in a medical clinic. The patient is monitored to confirm if the food being tested causes an allergic reaction.

Challenges are supervised by a clinical immunology/allergy specialists or trained and experienced paediatricians.

Most challenges take two to three hours to eat the required doses of food, followed by two hours of observation.

Q 2: What happens if there is no allergic reaction resulting from a food allergen challenge?

If the challenge is completed without an allergic reaction it is called 'negative', which means that the patient:

- No longer needs to avoid that food.
- Will need to regularly include the food in their diet. Evidence shows that this will help to maintain tolerance of that food.

This can have a major positive impact for patients and their families, as they no longer need to avoid a food that may be a major part of their usual diet.

Q 3: What happens if there is an allergic reaction resulting from a food allergen challenge?

If an allergic reaction occurs, the challenge is usually called "positive", and the challenge is stopped:

- The allergic reaction is treated with medication.
- The patient needs to stay under medical supervision for a few hours after the challenge.
- The patient is diagnosed as allergic to the food, and therefore needs to avoid that food.

The severity of the allergic reaction during the challenge does not predict the severity of future allergic reactions. For example, if a person has a mild allergic reaction during the challenge, a reaction at another time could be more severe or life threatening (anaphylaxis).

Q 4: 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 a trained and experienced paediatrician. For patients who are at risk of a severe allergic reaction (anaphylaxis), food allergen challenges must be performed by trained and experienced staff, with immediate access to emergency treatment for anaphylaxis.

Q 5: Why are supervised food allergen challenges performed?

Food allergen challenges are used to confirm:

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

Q 6: Why are supervised food allergen challenges sometimes performed after other allergy tests?

A positive food allergy test using skin tests or blood tests for allergen specific immunoglobulin E (IgE) antibodies, means that a person's immune system has produced an antibody response to that food. This is known as sensitisation.

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

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, which depends on the food allergy that is being assessed.
- The person being challenged must be well on the day of the challenge, with no fever.
- If the person being challenged has asthma, it must be stable with no recent wheezing.
- If the person being challenged has a prescribed adrenaline (epinephrine) autoinjector, it should be brought to the food allergen challenge. If a severe allergic reaction (anaphylaxis) occurs, it may be an opportunity for the person, or parent, to use 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 half a day. This may be longer for some people.
- If there is no allergic reaction resulting from the challenge, be prepared to include the food on a regular basis in your diet. Evidence shows that this will help maintain 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 it 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. Evidence shows that this will help to maintain 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 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.

It is important to follow instructions on the ASCIA Action Plan for Anaphylaxis when not in a hospital setting.

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