

Food Allergy Testing: What You Need to Know

Your allergist may recommend allergy tests, such as a skin prick test or blood test, to know if you have a food allergy.



+ Skin Prick Tests (SPT)

A skin prick test (SPT) is a common test for food allergies. Food allergy symptoms happen when your body reacts to a food and makes an antibody called IgE (immunoglobulin E). Allergy doctors use SPTs as a quick and reliable way to check for IgE antibodies for certain foods.

During an SPT, your doctor will put a drop of liquid with a specific food allergen on your arm or back. They will then prick or scratch your skin through each drop using a small needle. This lets a tiny amount of the food allergen go just under your skin. Your doctor may test a single food allergen or several foods at once. Results should appear within 15 to 20 minutes. Your allergist will review results with you and help you understand what it means.

- **The test is considered POSITIVE if a wheal (sounds like “wheel”) appears on your skin.** Wheals are raised, white bumps inside a small circle of itchy, red skin. In general, a large wheal is more likely to indicate a true food allergy, but the size of the wheal is not always an accurate predictor. **If no wheal appears, it is unlikely that you are allergic to the test food.**

If you have dark skin, the wheal may be difficult to see, so you may need additional tests.

Having a negative test means it is unlikely you have a food allergy.

Will the SPT hurt?

SPTs are usually painless, with no bleeding. The scratches may feel like a fingernail scratch.

How accurate are SPTs?

SPTs are not always accurate. If you take an antihistamine (like Benadryl® or Zyrtec®) before the SPT, you may get the wrong results. Your allergy doctor will often ask you to stop taking antihistamines before your SPT. A positive test plus a history of food allergy symptoms is needed for a diagnosis of food allergy, which is why it is critical to have a medical professional interpret these results.

+ Blood Tests

Blood tests can detect IgE antibodies (proteins) in your blood that react to certain foods. A blood test may be used along with other tests, like SPTs, to help make a food allergy diagnosis.

Unlike the skin prick test, the blood test is not affected by antihistamines, and it can be performed on patients of any age, patients with extensive rashes (e.g., eczema, hives), and patients who are pregnant.

What do my blood test results mean?

Your doctor should explain your blood test results to you. Test results do not show how severe your allergy is. Instead, they tell you about your chances of having a food allergy.

How accurate are blood tests?

Blood tests are helpful in ruling out allergy with a negative result, but a positive result doesn't always mean there is an allergy. Doctors must consider a person's history of, or lack of, allergic reactions. A diagnosis of an allergy requires both symptoms and a positive blood test.

What is Allergen Component Testing?

Allergen component testing looks at specific proteins within whole allergens to understand more precisely how a patient may react when exposed to a specific allergen. For example, some healthcare professionals may order component tests for peanuts, which tests for proteins within the peanut (the “whole allergen”) such as Ara 1, 2, 3, 6, 8, and 9. This may provide your healthcare professional with more in-depth information about your allergy, which can help determine your risk for a systemic reaction.

Compared to skin prick testing and blood testing that uses whole allergens, component testing with food allergens can enhance the overall risk assessment and provide useful guidance for when to perform oral food challenges.

Food Elimination Diets

What is a food elimination diet?

A food elimination diet is used to identify potential food allergens by removing and reintroducing specific foods. This can be useful in diagnosing food allergy. For example, your allergist may ask you to remove milk or egg from your diet for a time to help find which food you are allergic to.

How does this diet work?

An elimination diet lasts about 2 to 4 weeks. Your doctor will choose which food or foods to remove from your diet. Any changes or improvement in symptoms are recorded. Then, your doctor will have you slowly add that food or foods (one at a time) back to your diet under supervision. If you have adverse symptoms or an allergic reaction when the food is reintroduced, it is possible that you may be allergic.

Can I try this diet on my own?

No. You should try an elimination diet only under your doctor's care.

Oral Food Challenge (OFC)

During an oral food challenge (OFC) you are given small amounts of food over several hours, under the supervision of a medical professional. Emergency treatment is available due to the risk of an allergic reaction. The amount of food you receive is slowly increased, at specific intervals. After each food dose, your doctor looks for signs and symptoms of an allergic reaction.

Why would I need an oral food challenge?

In some cases, even after an elimination diet, SPTs, and blood tests, doctors still cannot make a clear diagnosis. Oral food challenges are the gold standard and are the most accurate tests for a food allergy.

In other cases, OFCs can be done with people who have a known food allergy to see if they have developed a tolerance. A positive OFC would confirm the food allergy is still present.

What if I have a reaction during my OFC?

Most reactions are mild, such as flushing or hives. Severe reactions, including anaphylaxis, are not common but they can occur. Your doctor will give you medicine for symptoms, if needed. A negative oral food challenge (no symptoms) helps to rule out a food allergy. If you have a positive oral food challenge, you are considered to have a food allergy.

Are OFCs safe?

While allergic reactions may occur during OFCs, severe reactions, including anaphylaxis, are very rare. Medical staff doing OFCs follow strict rules to make them as safe as possible. OFCs should only be performed at a hospital or medical clinic where emergency medicines (e.g., epinephrine) are easily available if needed.

Allergy Test Results

What will happen if I find out that I have a food allergy?

If you have food allergy, your doctor will talk to you about how to manage it and will prescribe an epinephrine delivery system. Appropriate food allergen restrictions will be made with attention to avoiding any nutritional deficiencies. Finally, a written emergency action plan should be developed with your doctor.

Where can I learn more about allergy testing?

To learn more, including a video about testing, visit: foodallergy.org/foodallergy101 and choose *Diagnosis and Testing*.