

ECZEMA AND THE POTENTIAL ROLE OF FOOD ALLERGIES

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Is food allergy a possible trigger in eczema? That's a very complicated subject. Here's what we know.

1. Food allergy may be a trigger in some patients. It is rarely the only trigger.

Eczema is a term that physicians use to refer to different conditions that cause inflammation of the skin. This inflammation takes the form of red, itchy patches on different parts of the body.

Atopic dermatitis (AD) is one form of eczema. It often, but not always, runs in families. People with AD often have other allergic conditions, such as asthma, airborne allergies, and sometimes food allergies.

For people with AD, their skin is very sensitive. This means that different factors can cause flare-ups of skin inflammation. I call these triggers, and there are a number of different ones.

Potential triggers may include:

- Weather changes
- Long, hot showers
- Stress
- Bacteria on the skin
- Irritating soaps
- Many others

It's important to recognize that while there are many triggers, every individual is different. You may react to one, or several, of these triggers.

Food allergy may be one of these triggers.

2. Patients with eczema have an increased risk for food allergies. But that does not necessarily mean that the allergies are causing (or worsening) the eczema.

Persons with atopic dermatitis (AD) definitely have a higher rate of food allergies. In some cases, but not all, these food allergies may trigger a flare-up of their eczema.

Studies have shown that patients with AD have a higher rate of food allergies than those in the general population. While estimates vary widely, different research studies have estimated that in persons with AD, 20% to 80% have food allergies.

Just because a person has a food allergy, though, it doesn't mean that the food allergy is playing a role in their AD. That's an important point that we emphasize to our patients.

3. At this time, experts believe that there are three main types of food allergies that may cause or worsen eczema. Some of these result in "Immediate" reactions, while others result in delayed reactions.

- When most people think about food allergy, they think of peanut allergy. You eat a peanut, and within minutes your lips start to swell. You may even have problems breathing. This type of reaction is known as anaphylaxis. Anaphylaxis is also known as immediate type, IgE-mediated allergy. It is triggered by certain antibodies in your body.
- There is also a type of food allergy known as a delayed eczematous reaction. After eating a particular food, a patient experiences a flare of their eczema. This flare may take up to 48 hours to appear.
- Another type of food allergy is systemic contact dermatitis. This reaction is caused by T cells, and may occur anywhere from 6 to 72 hours (or even longer) after eating a trigger food. One example occurs in people allergic to fragrance additives in their skin care products. Some of these patients will react to foods such as tomatoes, citrus, and cinnamon.
- There are likely other types of food allergies.

4. You will need to discuss with your doctor the best type of food test for your suspected food allergies. Some food allergies may be picked up by blood test, skin prick test, or patch test. Other food allergies require a food challenge for confirmation.

There are several different types of food allergies, which means that there are several different tests. It also means that blood tests, skin prick tests, or patch tests may not be enough. Sometimes a food challenge in a doctor's office will be recommended.

- For immediate type reactions, a blood test or a skin prick test will identify IgE antibodies to a particular food. For those with IgE antibodies to a food, a food challenge may be required to confirm the food allergy.
- The best test to confirm a delayed eczematous reaction is a food challenge. (The exact immune pathway involved is not known.) A food diary is a helpful place to start, since it can identify potential food triggers.
- Patch testing is used to test for systemic contact dermatitis.

5. Skin prick testing and blood testing must be interpreted carefully.

If your blood tests are negative, then you probably do not have IgE-mediated food allergy. (You may still have another type of food allergy, though, and your doctor may recommend a food challenge.)

If your blood tests are positive, they must be interpreted carefully. You still may not have an actual food allergy.

This is a very important point to make. Food allergy testing only tests for immune system sensitivity to foods. A lot of people can still eat foods that their immune system recognizes, and never have an actual allergic reaction.

We call this a false positive test. Your blood test shows that you have a sensitivity to a food, but you don't actually have an allergic reaction when you eat it. The test was falsely positive for food allergy.

In fact, a research paper in the medical journal *Pediatrics* asked whether a positive blood test for food allergy actually corresponded with a real-world food allergy. They found that the blood test only correlated with a real-world food allergy in fewer than half of the cases.

This is a very important point, and one that a lot of patients don't realize. This is actually the reason that I decided to write a large review paper on the subject.

Several of my friends, around the same time, had asked me about food allergy testing.

One was told that her child was allergic to 20 different foods. Because of this, she put her child on an extremely restricted diet. (It did not help the eczema, but did make the whole family miserable.) That's not the approach that most allergists would recommend. [The New York Times even wrote an article about "false alarms" in food allergy testing.](#)

There's another point to make here too. If you have severe eczema, and your blood tests are negative, then you probably don't have IgE-mediated food allergy. BUT you still may have another type of food allergy. The only test that covers all types of food allergy is a food challenge done in a very specific way.

6. This is a very challenging question: "I have eczema, but I don't have any symptoms right after eating certain foods. Should I be worried about food allergies?"

The answer to that is surprisingly complicated. Researchers have investigated this question, and there are still many unanswered questions. Many of these questions center around a type of allergy called "delayed eczematous reactions."

In this reaction, a flare of the eczema may not happen until hours, or even days, later. Skin tests and blood tests often don't pick up on this type of allergy. This means that a food diary may be helpful, while a food challenge may be needed to confirm the allergy.

If you are worried about food allergies, I always recommend starting with a food diary. If you experience a flare, you should look back over the prior 48 hours or so to see if you can pinpoint any potential food triggers.

7. What is a food challenge?

During a food challenge, the doctor gives the patient a particular food, and then watches to see if they have an allergic reaction after they eat it.

To provide the highest accuracy, neither the doctor nor the patient should know what the food is. (This is called a double-blind test.) The patient should also get some "food" items that are placebos (meaning there's no actual suspected trigger food). This type of test is known as a double-blind, placebo-controlled food challenge.

Food challenges are always done in a physician's office, because of the risk of a severe allergic reaction.

To have the most accurate results, you'll need to monitor your eczema status for 48 hours following the food challenge. That's because one type of food allergy causes delayed flares of eczema. These flares may take up to 2 days to appear.

Not all clinics perform food challenges; you may need to go to a specialized eczema or allergy clinic.

8. There are certain patients who are most likely to have food allergies as a trigger for their eczema.

In research studies, children with severe AD under the age of five, who are not responding to standard eczema therapy, are the most likely group to have food allergies that are playing a role in their AD. In this group of patients, doctors may recommend food challenge testing.

If a child has immediate symptoms following ingestion of specific foods, doctors may recommend testing, starting with a blood test or a skin prick test.

For patients with AD controlled with medication, and who have no history of reactions to specific foods, food allergy testing is usually not recommended.

9. There are risks to elimination diets. Children should not change their diet unless they have undergone testing, due to the risk of nutritional deficiencies. For adults, while we do not recommend six-food elimination diets, a single food elimination for 6 weeks may be attempted.

There are 6 foods that trigger most of the food allergies that cause flares of eczema. These are nuts, cow's milk, hen's eggs, seafood, soy, and wheat.

It's very difficult to eliminate all 6 of these foods. If you were to try this, you would increase your risk of nutrient deficiency.

For children, even eliminating just one of these foods could lead to medical problems. For children, experts recommend testing before eliminating any foods from

the diet. For example, several cases of severe protein deficiency in infants and toddlers have occurred due to milk avoidance.

For adults, if you suspect one of these foods as an eczema trigger, you could try to cut out that single food for 4-6 weeks and monitor your eczema.

But we do NOT recommend eliminating all 6 foods from your diet without testing first. In fact, a panel of national eczema experts published recommendations regarding eczema and food allergies. They do not recommend 6 food elimination diets.

10. For more information and research studies, see this article published for a medical audience.

I co-authored an article summarizing the research studies in this area. This article was written for a medical audience, and was [published in the medical journal *The Journal of Clinical and Aesthetic Dermatology*.](#)