



## Testing & Diagnosis

The doctors at the FAC are board-certified allergists, so they are specially trained to interpret results from food allergy testing. They'll use proven allergy testing, along with your medical history and a physical exam, to make a diagnosis. Here are some of the most common food allergy tests used:

### [Skin Prick Testing \(SPT\)](#)

### [Radioallergosorbent Test \(RAST\)](#)

### [Oral Food Challenge \(OFC\)](#)

### [Atopy Patch Challenge \(APT\)](#)

---

**[Skin Prick Testing \(SPT\)](#)** is the preferred testing method for true food allergy. It is safe for most patients—even infants—and it can be done during a regular clinic visit. And since the results are available immediately after the test, you will be able to discuss the results with your allergist at the same visit.

### **Preparing for your SPT**

- Five days before your appointment, stop taking antihistamines.
- Other medications you may need to stop taking are listed in the [PDF here](#) ([http://medicine.umich.edu/sites/default/files/content/downloads/SPT\\_Meds\\_to\\_Stop\\_0.pdf](http://medicine.umich.edu/sites/default/files/content/downloads/SPT_Meds_to_Stop_0.pdf)).

### **What happens during the SPT?**

- First, we place a drop of liquid extract containing a small amount of the suspected food allergen on your forearm.
- Then, with a device similar to a plastic toothpick, we gently scratch

02/25/14

the skin so that a tiny amount of the extract is absorbed.

- Over the next 10-20 minutes, we monitor the skin for a localized reaction—redness, swelling or a measurable bump, called a *wheal*.
- Afterwards, we wipe off the skin and apply or administer antihistamine (such as Benadryl) as needed. There is no bleeding, so you won't need a bandage. SPT can be mildly uncomfortable for some people, but the discomfort is usually brief.

**What the SPT shows-** A positive SPT is reliable about 50% of the time, but a negative SPT result is about 95% predictive. **Positive SPT-** By itself, the positive result just indicates that your body has made allergic antibodies, called IgE, to a specific food. This is called “sensitization,” and by itself is not enough for a diagnosis. Your allergist will use your medical history, a physical exam and his own specialized training to interpret your results. In cases of anaphylaxis (a more severe allergic reaction), a positive SPT will confirm a diagnosis of true food allergy. **Negative SPT-** The SPT is useful in ruling out a food allergy most of the time, although false negative results tend to be more common in the very young. Your allergist may order blood tests to confirm diagnosis (see RAST).

[-back to top-](#)

---

**Radioallergosorbent Test (RAST)** is a blood test that measures the amount of the allergic antibody IgE produced when your blood is exposed to a specific food protein. Like Skin Prick Testing (SPT), blood testing can detect the presence of IgE, but a positive result does not in itself make a food allergy diagnosis. RAST is often used in cases of patients who cannot tolerate SPT because of severe atopic dermatitis (eczema), extreme sensitivity, or the need to continue taking antihistamines.

### Preparing for RAST

- No special preparation is required. You can continue to take your regular medication before the test.

### What happens during the RAST?

- You will have blood drawn at the lab. The amount needed will depend upon the number of foods being tested for; multiple vials may be required.

02/25/14

- The lab will send your blood sample out to be tested. Your allergist will call you to discuss the results as soon as they're available, usually in about two weeks.
- The FAC uses a specific type of RAST called ImmunoCAP, which is a brand that has been studied more than others for its use in food allergy. ImmunoCAP allows FAC allergists to compare your test results with known values and ranges (or “classes”) that show the relative likelihood of a food allergy, which can help your allergist make a diagnosis.

**What the RAST shows** A negative RAST is as reliable as a negative SPT in ruling out a true food allergy. However, RAST has a slightly higher false positive rate than SPT, making it less reliable for confirming an allergy. If you have been diagnosed with a true food allergy, RAST can be useful in monitoring IgE values. If your RAST level falls below a given point, your allergist may recommend an Oral Food Challenge in our clinic, to determine if you still have an allergy.

[-back to top-](#)

---

**Oral Food Challenge (OFC)** is the most accurate test to determine whether you have a food allergy. It can also determine whether you have outgrown the food allergy you once had. During an OFC, you will eat pre-measured doses of a suspected food allergen and be closely monitored in the clinic for any type of reaction. The goal is for a patient to tolerate a full serving of a food by the end of the test.

### **Preparing for your OFC**

- The FAC allergist will develop a plan for your OFC based on your individual medical needs. A few weeks before your OFC appointment, our food allergy nurse will call to discuss this testing plan with you.
- She will go over medications to stop, and the type of food that will be used to deliver a suspected allergen. You may be asked to bring it with you or to provide a recipe.
- She can also address any other considerations or concerns you may have.
- The test starts with you eating a small pre-measured dose of a food. You are then monitored for a set interval of time.

02/25/14

- If no allergic symptoms develop during that interval, you'll be given another dose of food and monitored again. At any sign of an allergic reaction, we will stop the OFC and administer medication as needed.
- [Click here \(http://foodallergycenter.org/\)](http://foodallergycenter.org/) to watch a user-friendly series of videos from the Massachusetts General Hospital for Children describing OFC's.

**What happens during the OFC?** OFCs, as with all allergy testing at the FAC, are medically supervised to ensure safety. They are conducted in testing suites in two locations: the food allergy clinic at Domino's Farms and C.S. Mott Children's Hospital (for Food Protein-Induced Enterocolitis Syndrome and other high-risk patients).

- The test starts with you eating a small pre-measured dose of a food. You are then monitored for a set interval of time.
- If no allergic symptoms develop during that interval, you'll be given another dose of food and monitored again. At any sign of an allergic reaction, we will stop the OFC and administer medication as needed.
- [Click here \(http://foodallergycenter.org/\)](http://foodallergycenter.org/) to watch a user-friendly series of videos from the Massachusetts General Hospital for Children describing OFC's.

**PLEASE NOTE:** Our allergists, nurses and staff follow a proven testing protocol to ensure patient safety during an OFC and all other allergy testing. If an allergic reaction occurs, we are equipped to promptly recognize and treat symptoms. Do not try eating a known or suspected food allergen, or feeding one to a child, outside of a doctor's office. Symptoms of an allergic reaction are unpredictable; they can worsen quickly and become dangerous, requiring immediate life-saving medical treatment. **Next Steps** If the OFC confirms that you have a food allergy, your allergist will discuss a care plan with you. If you "pass" the OFC by tolerating a full serving of food upon completion of the test, your allergist will provide guidance for adding or reintroducing the food to your diet.

[-back to top-](#)

---

**Atopy Patch Testing (APT)** is used in patients who have had documented reactions to a certain food but whose skin prick and blood tests are negative.

02/25/14

The APT detects a delayed reaction that is not triggered by the specific allergic antibody IgE. This so-called “cell-mediated” type of reaction involves a separate part of the immune system.

### **Preparing for your APT**

- APT will require a series of visits to our clinic over a few days.
- About a month before the first appointment, you'll need to stop taking certain medications, including oral steroids. Your allergist and/or food allergy nurse will go over this with you in detail, so you understand which medications to stop and when to stop them.

### **What happens during the APT?**

- First, we will use a special tape to place a prepared 'panel' of food extracts on your back.
- You will be required to keep this panel dry, and in place on your back, for 48-72 hours.
- We will schedule a return appointment in our clinic so your allergist can remove the panel and obtain the test results.

**What the APT shows** APT can provide useful information for managing eosinophilic disorders (like EoE) and atopic dermatitis, as well as monitoring FPIES. These conditions can be caused, in part, by an underlying food allergy. Your allergist and/or specialist will use the results of APT to help direct dietary changes for these conditions.

[-back to top-](#)