



ORAL IMMUNOTHERAPY (OIT) for Food Allergies

Food oral immunotherapy (OIT) is a food allergy treatment that retrains your child's immune system to respond differently to food. OIT is not a cure for food allergies. But it may allow your child to eat foods with less stress and worry.

While OIT is not a cure, successful treatment of OIT may provide “bite protection.” This means a lower chance of having an allergic reaction if your child accidentally eats a small amount of the food allergen. Some children may even be able to eat the food freely in their diet after reaching the final stage of their OIT treatment program.

WHO CAN GET OIT?

People with a mild-to-severe allergy to certain food allergens (like peanuts) may be able to receive OIT. Your child's doctor may do an oral food challenge and/or other specific allergy tests to confirm the food allergy before beginning OIT.

The minimum age to start OIT is around 18 months of age. But the best age for starting OIT may depend on several factors, such as your child's age, maturity, and food allergies. Talk with your doctor to decide if OIT is the best therapy for your child.



You should NEVER try OIT without the help of an allergist. Your child's allergist carefully plans and supervises the OIT process. If you try it on your own, you will put your child at risk for anaphylaxis [anna-fih-LACK-sis], a severe allergic reaction.



**KIDS WITH
FOOD ALLERGIES**
A Division of the Asthma and Allergy
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HOW DOES OIT WORK?

OIT helps the body gradually **desensitize** (tolerate) a food allergen. It does this by slowly raising the amount of food allergen your child can eat before it triggers an allergic reaction. During OIT, your child's doctor - usually a board-certified allergist or immunologist - will give your child very measured and specific amounts of the food they are allergic to.

At the first appointment, the doctor will give your child the first four or five doses (a very small amount). This appointment will last about three to four hours. This is called the **"initial dose escalation day."**

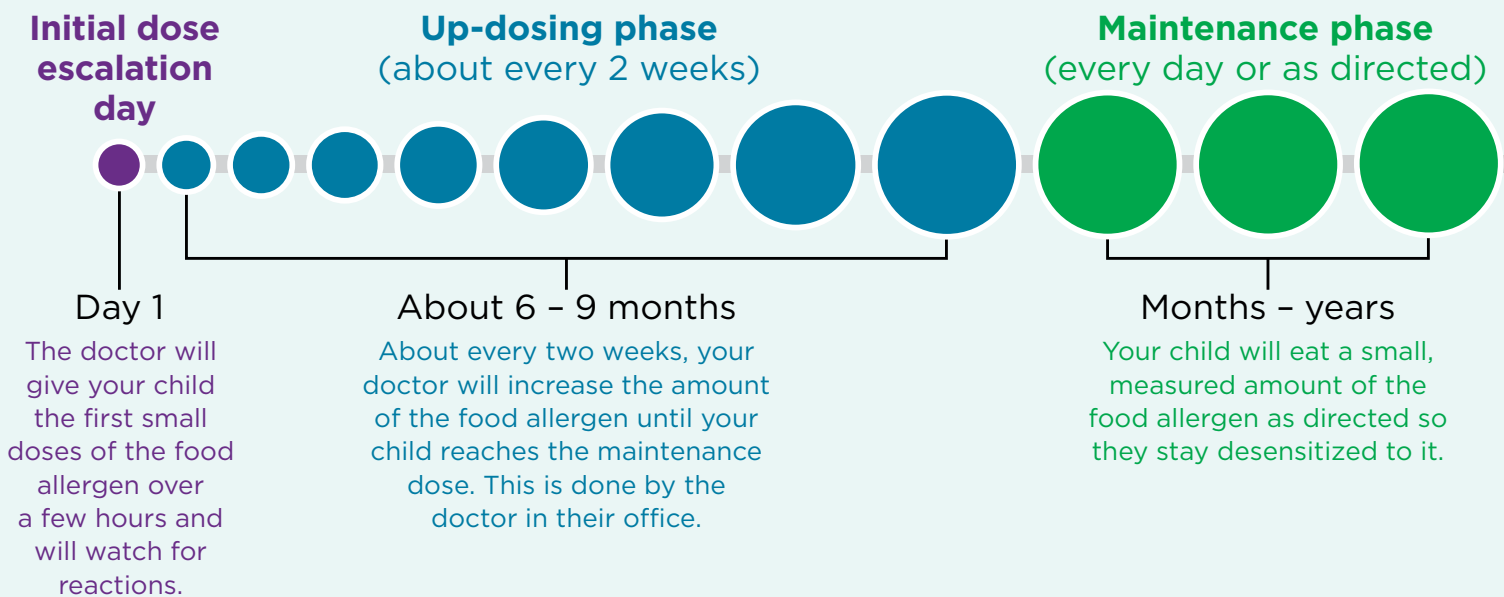
After the initial dose, your doctor will have you come back to the office about every two weeks for buildup doses (also known as **"up-dosing"**). You will do all up-dosing in the doctor's office so they can watch your child to make sure there is no reaction. They usually watch your child for about one hour. Once the doctor determines a safe dose amount, you will continue OIT at home. You will give your child that dose amount every day until your next appointment.

The doctor will gradually increase the dose over time until you reach a target dose amount or **"maintenance dose."** In the maintenance phase, your child must eat a measured amount of the food every day or as directed to continue to tolerate the food allergen. During OIT and while in the maintenance phase, your child will still need to carry an epinephrine auto-injector and read food labels carefully.

If your child tolerates all of the doses, your child will have about 11 to 13 total clinic visits to reach the maintenance dose. If your child reacts to a dose or gets sick, the doctor will adjust future doses to prevent reactions. Most children can reach the maintenance dose in around five to six months.

If your child has reactions, sickness, or scheduling conflicts, this process may take longer. After completing the initial dose escalation day and up-dosing, your child will continue taking maintenance doses at home with follow-up appointments every few months.

The Oral Immunotherapy (OIT) Process for Food Allergies



If your child stops eating the allergen, they may start having symptoms to the food allergen again.

IS OIT SAFE AND EFFECTIVE?

The use of OIT has been studied for many years. OIT can be effective. Up to 80 to 90% of children have success with OIT.^{1,2} But these results may not be the same for every food.

Palforzia, also known as peanut (arachis hypogaea) allergen powder-dfnp (PTAH) or previously called AR101, is the first and only FDA-approved treatment for **peanut allergy**. It contains a very specific amount of peanut flour. The FDA approved it on Jan. 31, 2020. Palforzia is approved for children ages 4 to 17 who have a been diagnosed with a peanut allergy.

There are no other FDA-approved OIT treatments for food allergens at this time (as of October 2021).

Many doctors have been offering OIT treatment using food in various forms, such as a liquid, flour, or the actual food itself. These methods are not approved by the FDA. Talk with your child's doctor about the most appropriate OIT option for your child.



OIT does not permanently reverse a food allergy. It may not be the right treatment for everyone.



What Are the Risks of OIT?

Your child may have side effects during OIT since they are eating the food they are allergic to. Most symptoms are mild, but they can also be serious. They can include:

- Itching of the mouth/tongue
- Sore, scratchy, or itchy throat
- Runny nose
- Cough
- Nausea
- Heartburn
- Vomiting/diarrhea
- Stomach pain
- Hives
- Swelling (angioedema)
- Aversion to the treatment/food (may hate the taste)

There is a risk for a severe allergic reaction known as anaphylaxis with OIT. Studies on peanut OIT showed a child is more likely to experience a severe allergic reaction while undergoing OIT compared to no treatment at all. Dosing in OIT is controlled by the doctor and carefully measured to reduce the risk of anaphylaxis, but there is a risk. Overall, children undergoing OIT have higher rates of anaphylaxis and use epinephrine more often than children who are not undergoing OIT.³

For peanut OIT, the risk of an allergic reaction requiring epinephrine (the treatment for anaphylaxis) may be as high as 7.6%.⁴

Eosinophilic esophagitis (EoE) is a possible but rare side effect of OIT. EoE is where your child's esophagus (swallowing tube) becomes inflamed (swollen). This is an allergic disease of the esophagus that causes trouble swallowing, vomiting, and stomach pain. Around 5% of people who do food OIT develop EoE as a side effect – and most cases clear up after stopping OIT.⁵ The risk of developing EoE to peanut OIT (Palforzia, PTAH) is about 1%.⁶



What Are the Benefits of OIT?

OIT offers many benefits. After reaching the OIT maintenance phase, you and your child may experience greater freedom. It can lower stress and reduce the risk of anaphylaxis if the treatment is successful. (Studies have shown that during OIT, families do not experience a difference in quality of life compared to no treatment.³)

IS OIT THE RIGHT TREATMENT FOR MY CHILD?

Know what you are hoping to accomplish and ask your allergist if OIT will help you accomplish that goal. It's important to know the factors involved in OIT and how it may impact your family. The OIT regimen will impact other areas of your life.

If you move forward with OIT, you will need to commit to and follow the OIT process for success. This includes frequent clinic visits. The first day will be the longest (lasting up to four hours). You will then need to plan for up-dosing appointments about every two weeks.

You or another adult caregiver will need to supervise home dosing to prepare doses and watch for reactions. It is best if your child can take their home dose around the same time every day, usually in the morning. Make sure your child has a meal or a snack before or with their dose.

Your child's doctor may adjust the dose if your child gets sick, starts their period, or has asthma or allergy symptoms. Continue allergy and asthma medicines as prescribed. However, avoid non-steroidal anti-inflammatory drugs (NSAIDs) like ibuprofen.

Have your child avoid exercise, strenuous physical activity, and hot showers for 30 minutes before and two hours after dosing. (Follow the directions from your doctor. The amount of time may be longer or shorter.) This may be challenging to schedule for some kids who are active in sports or other physical activities.

Alcohol and illicit drug use can cause adverse reactions to the OIT treatment, so it's very important to talk with your child/teen about not using these substances.

Overall, OIT is a long-term commitment. Once your child has completed up-dosing, they will have to keep taking maintenance doses long term. If they stop dosing, they may start having symptoms to the food allergen again.

While undergoing OIT treatment, kids must:

- **Frequently visit their allergist**
- **Avoid physical activities and exercise for a set time before and after treatment**
- **Eat before the treatment dose**
- **Avoid hot showers or overheating near treatment time**
- **Avoid alcohol and drug use**
- **Avoid taking NSAIDs like ibuprofen**
- **Continue carrying their epinephrine auto-injectors**
- **Stick to a strict schedule**
- **Be aware of the risks of side effects and symptoms**

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**OIT may be a valuable treatment that may reduce stress and improve quality of life.
Talk with your child's doctor about the risks and benefits.**



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