Peanut oral immunotherapy (Peanut allergy therapy)



What is a food allergy?

A food allergy:

- Is due to an abnormal immune response.
- Happens after contact with a food.
- Most often happens after swallowing a food.

What is a peanut allergy?

Peanut allergy:

- May be severe and lifelong.
- Most often starts when children are very young.
- Most often happens when they eat peanut products the first few times.
- May cause a severe life-threatening allergic reaction called anaphylaxis.

Is there a cure?

There is no cure, but there is a therapy available called peanut oral immunotherapy. It can provide protection and decrease the severity of symptoms if your child accidentally eats a peanut product. The goal of therapy is to increase your child's tolerance to peanuts slowly over time. With peanut oral immunotherapy, families may feel more comfortable when their child eats a meal away from home or when they are in social situations like school.

Why should my child start therapy when they are young?

Research shows that peanut oral immunotherapy in preschool age children:

- Is generally safe and can be helpful in raising their tolerance to peanuts.
- MAY provide remission. This occurs about 20% of the time when a young child completes peanut oral immunotherapy. This means a child would not have allergic symptoms if they ate a serving size of peanuts after therapy ends. However, there is no current clinical standard of when to feed a full serving to these patients.
 - Remission is more likely when therapy is started at a young age.
 - Early therapy may change a child's immune response to peanut.

How does it work?

Oral immunotherapy helps your child's immune system build a tolerance to peanuts. This means it will take more peanut to cause allergic symptoms. It is a long-term therapy and may be lifelong.

Peanut oral immunotherapy, continued

Your child will:

- Get a small amount, or dose, of peanut every day at home. The allergy team will decide the dose.
- Slowly increase the dose of peanut about every 2 weeks. They will do this during a clinic visit.

What happens during clinic visits?

Your child may have the following type of visits with the allergy team:

- A consultation visit to check your child's food allergy history and care plan
- Oral food challenges based on their history and test results
- Up-dosing visits where your child gets a higher dose of peanut. These visits happen about every 2 weeks for the first 4 to 6 months of therapy. At the time of these visits, your child must:
 - Be healthy and not have symptoms of being sick like fever (temperature of 100.4°F or higher), cough, congestion, vomiting (throwing up) or diarrhea (loose stools).
 - Arrive to clinic with a full stomach after a meal or heavy snack.
 - Bring their epinephrine auto-injectors with them.
 - Stay at the clinic for at least 1 hour after getting the dose.
 - Get checked by an allergy provider before going home.
- Maintenance dose visits every 3 to 4 months when the up-dosing phase is done.

Our team will talk with you about:

- How to give the dose to your child at home.
- The signs and symptoms of an allergic reaction.
- When and how to use an epinephrine auto-injector.
- Why to have epinephrine ready to use at all times.

What should I expect when giving the dose at home?

Your child should take their dose every day so that they maintain their tolerance level. It is very important that your child:

- Continues to avoid peanuts except for the therapy dose.
- Takes all doses after a meal or heavy snack.
- Takes the dose around the same time each day.
- Takes the dose at least 1 hour before bedtime.

Your child should **NOT**:

- Do things that increase body temperature and heart rate for 30 minutes before and 2 hours after getting the dose. Some of these things include:
 - Exercise
 - Sports
 - A hot shower
 - Going outside on a hot day

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Peanut oral immunotherapy, continued

Your child should **NOT**:

- Get the dose if they have symptoms of being sick, such as:
 - Fever (temperature of 100.4°F or higher)
 - Runny nose or congestion
 - Cough
 - Vomiting or diarrhea
 - Asthma flare-up

The parent or family member giving the peanut dose should:

- Know the symptoms of severe allergic reaction or anaphylaxis.
- Know how to treat symptoms and give medicines such as epinephrine.
- Have 2 epinephrine auto-injectors in case of anaphylaxis after your child gets their peanut dose.

What are the possible side effects?

There is a chance of allergic symptoms, including severe symptoms or anaphylaxis. Most often, allergic symptoms during peanut oral immunotherapy are mild to moderate. These symptoms may include:

- Itching of the lips and mouth
- Stomach (belly) pain
- Vomiting
- Hives
- Inflammation in the tube that connects the mouth and stomach. This is called eosinophilic esophagitis.

Your child is more likely to have allergic symptoms at certain times. The provider may tell you to stop giving doses if your child:

- Is sick with symptoms like fever (temperature of 100.4°F or higher), cough, vomiting or diarrhea.
- Has a medical or dental procedure.
- Is not eating well.
- Has asthma that is not well-controlled.

When should I call the provider?

Call your child's provider if:

- You are not going to give your child their daily dose.
- You are not sure if you should give a dose. It is better to not give the dose and talk to a provider first.
- Your child misses a dose for any reason.
- Your child has allergic symptoms related to dosing.

Peanut oral immunotherapy, continued

When should I call 911?

Call 911 <u>right away</u> if your child is having a severe allergic reaction after giving epinephrine. Signs of severe allergic reaction may include:

- Shortness of breath, wheezing or repeated coughing
- Pale or blue skin color
- Feeling faint, weak or dizzy
- Hoarseness or trouble swallowing
- Very bad swelling to the tongue or lips
- Repeated vomiting
- Very bad diarrhea
- Feeling something bad is about to happen
- Feels very nervous or anxious
- Confusion
- Mix of symptoms from different body areas

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.