

Peanut Allergy

Fact Sheet



DEFINITIONS

“Anaphylaxis” – when blood pressure drops abruptly and breathing difficulties occur

Immunoglobulin E (IgE) – a protein in our immune system that identifies foreign objects. In peanut allergy, peanut protein is considered the foreign object.

DID YOU KNOW?

Peanut allergies are less common in Asia and Africa, where they are staple foods. Peanut-based Ready-to-Use Therapeutic Food (RUTF) has been successfully used in newborns and infants for health and growth purposes in places like Malawi, without any presence of allergy.⁽¹²⁾

CAN I EAT PEANUT OIL?

According to the Food Allergy & Anaphylaxis Network (FAAN), “Studies show that most allergic individuals can safely eat peanut oil (not cold pressed, expelled, or extruded peanut oil - sometimes represented as gourmet oils).” For those who are allergic, they recommend asking a doctor whether or not to avoid peanut oil.

TO MANAGE AN ALLERGY

The following approaches can help:

- *Reading labels* – which highlight allergens on the ingredient list
- *Planning ahead* – by using a “chef card,” which lists ingredients to avoid
- *Practicing proper sanitation* – with cleaning agents to remove cross contamination
- *Carrying medicine* – such as epinephrine
- *Controlling asthma* – with proper medical care since asthma is a main risk factor for death due to anaphylaxis
- *Letting people know* – by wearing a bracelet or necklace identifying the allergy

How many people have food allergies?

- It may seem like more, but only 4% of adults and 4% of children have food allergies.^(1,2,3)
- About 90% of food allergies are caused by: tree nuts (almonds, walnuts, pecans, cashews, pistachios ,etc.), peanuts, milk, eggs, fish, shellfish, wheat, and soy.⁽³⁾

What about Peanut allergies?

- About 0.6 % of people have peanut allergy, which can vary from mild to severe.^(1,2,3)
- Nearly 20% of peanut allergies can be outgrown.⁽⁴⁾
- Four times as many people are allergic to seafood than to peanuts.

It seems like more people have peanut allergies, why?

- The prevalence of peanut allergy doubled from 1997 to 2002.⁽⁵⁾
- There may be better reporting and improved detection of allergies, which should be diagnosed by a physician.
- The reported increase in peanut allergy mirrors an overall increase in childhood allergies.

Are all peanut allergies severe?

- No, some are mild, however in those who have severe reactions, ingesting just a trace amount can cause a reaction.
- It is critical to manage peanut allergies, as with any allergy, to avoid severe reactions, such as “anaphylaxis.”

What is the allergen in peanuts?

- The major proteins Ara h1, Ara h2, and Ara h3 are the allergens in peanuts.
- Smelling the aroma of peanuts cannot cause an allergic reaction.

What about peanut oil?

- Highly refined peanut oil is different from peanuts and from “crude” or gourmet peanut oil because it does not contain peanut allergens.
- Highly refined peanut oil is purified, refined, bleached, and deodorized, which removes the allergic proteins from the oil.
- The majority of peanut oil used by foodservice and consumers has been highly refined and processed.
- The FDA does not consider highly refined peanut oil as a food allergen.

Peanut Allergy

Fact Sheet (side 2)



RESOURCES

The Peanut Institute
www.peanut-institute.org

American Peanut Council
www.peanutsusa.com

American Academy of Allergy, Asthma & Immunology (AAAAI)
www.aaaai.org/

Food Allergy and Anaphylaxis Alliance (FAAA)
www.foodallergyalliance.org/

Food Allergy and Anaphylaxis Network (FAAN)
www.foodallergy.org

Food and Allergy Research and Resource Program (FARRP)
www.farrp.org/

International Food Information Council (IFIC)
www.ific.org

National Institute of Allergy and Infectious Diseases (NIAID)
www3.niaid.nih.gov/

National Peanut Board
www.nationalpeanutboard.org

Anaphylaxis Canada
www.anaphylaxis.ca

Should schools ban peanuts?

Many experts feel that bans give a false sense of security, except in situations like daycare centers that involve very young children.

Education of faculty, school food service personnel, parents, and students on how to manage food allergies has been more effective than bans. In fact, there is no evidence showing that bans are effective.

FAAN does not advocate bans, but recommends that “parents, doctors, and school officials to work together and develop a plan that best fits their situation.”

What new research is there on peanut allergies?

Promising Research

Oral immunotherapy has been the most promising new therapy, in which increasing levels of peanut allergen are fed to allergic children in a controlled research setting over a number of weeks.

One study showed that children could eat up to 10 peanuts,⁽⁶⁾ while in another mini study demonstrated they could eat up to 15 peanuts without a reaction^(7,8) – many more than they would ingest accidentally.

These results remain experimental and this approach should only be conducted in a research setting, but they are especially promising, since they were effective for all of the children in these studies.

Additional Research

The FDA is currently testing a unique Chinese herbal formula called “Food Allergy Herbal Formula-2,” which may prevent anaphylactic reactions following the treatment.⁽⁹⁾

“Anti-IgE therapy” is showing promise, which increases the threshold of sensitivity to peanut allergens.⁽¹⁰⁾

Also, the blocking of different hormones involved in anaphylaxis is currently being tested in mice.⁽¹¹⁾

References:

1. National Institute of Allergy and Infectious Diseases: <http://www3.niaid.nih.gov/>.
2. The Food Allergy and Anaphylaxis Network (FAAN): www.foodallergy.org
3. Burks AW. Early peanut consumption: postpone or promote? *J Allergy Clin Immunol.* 2009 Feb;123(2):424-5.
4. Fleischer, DM, et al. The natural history of peanut and tree allergy. *Curr Allergy Asthma Rep.* 2007. Jun;7(3): 175-81.
5. Sicherer SH, et al. Prevalence of peanut and tree nut allergy in the United States determined by means of a random digit dial telephone survey: a 5-year follow-up study. *J Allergy Clin Immunol.* 2003 Dec;112(6):1203-7.
6. Clark AT, et al. Successful oral tolerance induction in severe peanut allergy. *Allergy.* 2009 Feb 17.
7. Leung DY, et al. Effect of anti-IgE therapy in patients with peanut allergy. Longitudinal Study of Parents and Children Study Team. *N Engl J Med.* 2003 Mar 13;348(11):986-93.
8. Arias K, et al. Concurrent blockade of platelet-activating factor and histamine prevents life-threatening peanut-induced anaphylactic reactions. *J Allergy Clin Immunol.* 2009 Apr 29.
9. Srivastava KD, et al. Food Allergy Herbal Formula-2 silences peanut-induced anaphylaxis for a prolonged posttreatment period via IFN-gamma-producing CD8+ T cells. *J Allergy Clin Immunol.* 2009 Feb;123(2):443-51.
10. Jones SM, Scurlock AM, Pons L, et al. Double-blind placebo-controlled (DBP) trial of oral immunotherapy in peanut allergic children. *J Allergy Clin Immunol.* 2009;123:S211.
11. Varshney P, Jones SM, Pons L, et al. Oral Immunotherapy (OIT) Induces Clinical Tolerance in Peanut-Allergic Children. *J Allergy Clin Immunol.* 2009;123:S174.
12. Lin CA, et al. An energy-dense complementary food is associated with a modest increase in weight gain when compared with a fortified porridge in Malawian children aged 6-18 months. *J Nutr.* 2008 Mar;138(3):593-8.