Experts recommend early peanut introduction to reduce allergy risk

Recent scientific research has shown that peanut allergy can be prevented by introducing peanut-containing foods early in life.

In a clinical trial called Learning Early about Peanut Allergy (LEAP), researchers randomly divided over 600 infants into two groups. One group was given peanut-containing foods to eat regularly, beginning as early as four months of age, and the other was instructed to avoid peanuts until five years of age. Researchers found that infants who consumed peanut-containing foods early in life reduced the risk of developing peanut allergy by 81%.

In a follow-up study, researchers also showed that infants who were introduced to peanut protein early in life continue to be able to tolerate peanuts, even if peanuts are avoided later in childhood. These findings are significant because they show that waiting to introduce peanuts, as was previously recommended, actually increases an infant’s risk of developing peanut allergy.

In light of this research, the National Institute of Allergy and Infectious Diseases (NIAID) sponsored an expert panel to issue new guidelines for peanut introduction. The LEAP studies form the basis for these new guidelines, which were published in January 2017.

A committee of 26 professional organizations, advocacy groups and federal agencies, including those listed here, was established to develop the new peanut allergy guidelines:

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**Summary of New Guidelines**

Three separate guidelines have been developed for infants at various risk levels for developing peanut allergy. In most cases, peanut-containing foods should be introduced to infants around six months of age, after the introduction of other solid foods.

**Infant has severe eczema, egg allergy, or both:** Check with your infant’s healthcare provider before feeding your infant peanut-containing foods. He or she may choose to perform an allergy blood test or skin prick test. With the healthcare provider’s approval, introduce peanuts at 4-6 months of age to reduce the risk of peanut allergy.

**Infant has mild to moderate eczema:** Introduce peanut-containing foods around 6 months of age to reduce the risk of developing peanut allergy. You may choose to introduce peanut-containing foods at home, or in the provider’s office under supervision.

**No eczema or any food allergy:** Do not delay introduction of peanut; introduce into the diet within the first year of life when both the family and the infant are ready.
Eat Peanuts During Pregnancy to Reduce Infant’s Allergy Risk

The American Academy of Pediatrics (AAP) does not recommend that pregnant women avoid allergenic foods such as peanuts during pregnancy. Current research shows that consuming peanuts during pregnancy and lactation does not increase the infant's risk of developing peanut allergy. On the contrary, some studies show that consuming peanuts during pregnancy actually decreases the infant’s risk of developing a peanut allergy.

A study published in the Journal of the American Medical Association found that mothers who ate peanuts during pregnancy may help build up a baby's tolerance to them after birth. The effect was strongest when mothers are peanuts at least five times per week.

Tips for introducing peanuts to infants:

- Add warm water to creamy peanut butter to soften and liquefy it
- Serve corn puffs containing peanut
- For older infants, stir peanut butter in to applesauce or other fruit purees
- Whole peanut is not recommended for introduction because this is a choking hazard in children less than four years of age.

Oral Immunotherapy Shows Promise for Treatment of Peanut Allergy

Recent research shows that oral immunotherapy (OIT) may be an effective means by which to reduce a patient’s reactivity to the peanut allergen. Oral immunotherapy induces the body's immune system to tolerate a food that it is currently overreacting to. This is done by consuming extremely small quantities of the allergen on a regular basis, in gradually increasing amounts. Previous randomized, controlled clinical trials have provided evidence that daily peanut OIT can reduce the severity of allergic reactions to peanut.

The most recent research suggests that early OIT in preschool-aged children is most effective. A study published in the Journal of Allergy and Clinical Immunology showed that 91% of children aged 9-36 months were able to tolerate 5 grams of peanut protein (the equivalent of about 20 peanuts) after OIT. These findings demonstrate that OIT is an effective way to disrupt peanut allergy in young children. Studies currently underway are examining whether this desensitization effect of OIT on peanut allergy is permanent, or if it requires “maintenance” to prevent the occurrence of allergic reactions.

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Refined Peanut Oil is Not Allergenic

The Food and Drug Administration (FDA) Food Allergen Labeling and Consumer Protection Act (FALCPA) of 2004 indicates that highly refined oils are exempted as major food allergens. Most peanut oil in the U.S. food supply is highly refined. Other peanut oils, sometimes referred to as “gourmet,” “aromatic,” or cold pressed oils, may not remove the peanut allergen, and should not be consumed by individuals with peanut allergy.

Schools: To Ban or to Educate?

Most allergy advocacy groups do not support school food bans. In fact, recent research published in the Journal of Allergy, Asthma, & Immunology shows that banning peanuts in schools or in classrooms has no effect on the incidence of allergic reactions, as measured by incidence of epinephrine administration. Many experts feel that a ban gives a false sense of security, and a ban may not keep all peanut products entirely out of schools. Instead, experts say it is important for school-aged children to learn to manage their allergy in all environments, and recommend that schools develop plans to effectively manage peanut allergies.

Food Allergy Research & Education (FARE), the leading national organization working on behalf of the 15 million Americans with food allergy, recommends that “parents, doctors, and school officials work together and develop a plan that best fits their situation.” By educating parents, physicians, school administrators, teachers, school nurses, kids in the classroom, and others in the child’s environment, a safety net can develop around a child with a peanut allergy. FARE and other organizations have developed a variety of resources and products to help to keep children with food allergies safe.

Frequently Asked Questions:

What causes peanut allergy?
The cause of peanut allergy is not clear. However, certain risk factors are associated with the development of peanut allergy. These risk factors include other food allergies, allergies such as hay fever, and the skin condition atopic dermatitis (eczema).

What are the symptoms of a peanut allergy?
Symptoms of an allergic reaction to peanuts include itchy skin or hives, an itching or tingling sensation in or around the mouth or throat, nausea, a runny or congested nose, or less commonly, anaphylaxis.

If I am allergic to peanuts, can I consume peanut oil?
The Food and Drug Administration (FDA) states that highly refined oils are exempted as major food allergens. Most individuals with peanut allergy can safely eat peanut oil (but not cold-pressed, expelled or extruded peanut oil – sometimes represented as gourmet oils). If you are allergic to peanuts, ask your doctor whether or not you should avoid peanut oil.

Can the smell of peanuts or peanut butter cause an allergic reaction?
The proteins Ara h1, Ara h2, and Ara h3 are the major allergens in peanuts. The aroma of peanuts - which stems from small molecules other than these proteins - does not cause an allergic reaction.

Are peanut bans in schools the best way to keep my child safe?
There is no evidence showing that bans are effective in preventing allergic reactions, and many experts feel that bans give a false sense of security. Education of faculty, school food service personnel, parents, and students on how to manage food allergies is more effective than a ban.
Key Facts:

- In most cases, peanut-containing foods should be introduced to infants around six months of age, after the introduction of other solid foods.
- Proper management of peanut allergy is encouraged and can be highly successful.
- Eating peanuts during pregnancy will not increase an infant's risk of peanut allergy.
- Highly refined peanut oil (vast majority of peanut oil in the U.S.) does not cause allergies in those allergic to peanuts.
- The aroma of peanuts cannot cause allergic reactions.
- New research shows that oral immunotherapy may be effective in treating those with peanut allergy.

Sources for More Information:

American Academy of Allergy, Asthma & Immunology (AAAAI): [www.aaaai.org](http://www.aaaai.org)
Food Allergy Research & Education (FARE): [www.foodallergy.org](http://www.foodallergy.org)
Food Allergy Research and Resource Program (FARRP): [www.farrp.org](http://www.farrp.org)
National Institute of Allergy and Infectious Diseases (NIAID): [www.niaid.nih.gov](http://www.niaid.nih.gov)
National Peanut Board: [www.nationalpeanutboard.org](http://www.nationalpeanutboard.org)
The Peanut Institute: [www.peanut-institute.org](http://www.peanut-institute.org)
American Peanut Council: [www.peanutsusa.com](http://www.peanutsusa.com)
Anaphylaxis Canada: [www.foodallergycanada.ca](http://www.foodallergycanada.ca)

References

4. Frazier AL, Camargo CA, Jr., Malspeis S, Willett WC, Young MC. Prospective study of peripregnancy consumption of peanuts or tree nuts by mothers and the risk of peanut or tree nut allergy in their offspring. JAMA Pediatr 2014;168(2):156-62.