



Riley Hospital for Children
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Riley Speaks

Helping Parents Understand Peanut Allergies



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According to a recent study in the July issue of *Pediatrics*,¹ the prevalence and severity of food allergies are greater than previously thought. The large nationwide survey found that 8 percent of children have some sort of food allergy. One of the food allergies most feared by parents is a child's reaction to peanuts. With the information below, you can help clear up common misconceptions about peanut allergies and effectively support your patients and their families.

Sensitization vs. allergy

A true peanut allergy includes both a positive allergy test and a history of reaction to peanuts. A positive test result alone doesn't mean a child is allergic, especially if he or she already is consuming peanuts without a reaction. Peanut-allergic children will have symptoms *and* evidence of a positive allergy test (skin prick test or specific IgE to peanuts determined by a blood test). The sensitized child is one with a positive test and no clinical correlate.

Often, a patient may test positive for peanuts as part of a broader panel of food allergy tests often used for a non-related food allergy issue—even though he or she may regularly eat peanuts or peanut products. There is no reason that these patients should discontinue eating peanuts. In fact, doing so would actually decrease their tolerance to peanut. To avoid false positives and potentially confusing results, consider ordering only the specific allergen tests of interest rather than the broader panels.

Peanut allergy misdiagnoses

A recent study of 100 peanut sensitized children found that the prevalence of clinical

peanut allergy within the group was only 22 percent.² Peanut component testing was able to predict who would have a clinical reaction to peanut. While specific peanut proteins are responsible for allergic reactions to peanut, there are other proteins of the plant kingdom, such as birch pollen, which could cross-react. Peanut component testing may determine who has the sensitization and who within this group of children is at risk of an allergic reaction. Current tests only reveal that antibody (IgE) is being made, but don't specifically identify the protein. New molecular tests can more specifically pinpoint the protein. This is component testing.

Severity of reactions

While peanut allergies are often associated with life-threatening emergencies, statistics appear to show something different. The Gupta study found severe reactions to peanut in just over half (52%) of the reports of peanut allergy. While it is important for parents of children with a true peanut allergy to be cautious and careful about the food products their children consume, it may help alleviate some of their anxiety to know that consuming peanuts or peanut products may not necessarily result in a life-threatening emergency, based on the results of this study.

More information

Updated guidelines were published in the December 2010 issue of the *Journal of Allergy and Clinical Immunology* (JACI) called **Guidelines for the Diagnosis and Management of Food Allergy in the United States: Summary of the NIAID-sponsored Expert Panel Report.**

¹ Gupta RS, Springston EE, Warrier MR, Smith B, Kumar R, Pongracic J, Holl JL. The Prevalence, Severity, and Distribution of Childhood Food Allergy in the United States. *Pediatrics* 2011; 128(1): e9-e17.

² Nicolaou N, Poorafshar M, Murray C, Simpson A, Winell H, Kerry G, Harlin A, Woodcock A, Ahlstedt S, and Custovic A. Allergy or tolerance in children sensitized to peanut: Prevalence and differentiation using component-resolved diagnostics. *J. Allergy Clin Immunol* 2010;125:191-7.

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