Early Peanut Introduction and Prevention of Peanut Allergy in High-Risk Infants: Consensus Communication

Key Points for Practice
• Products containing peanuts should be introduced at four to 11 months of age in infants at high risk for allergic disease who live in countries with a prevalence of peanut allergies.
• Consultation with an allergist or expert in managing allergies may be beneficial in infants who have an atopic disease early in life or egg allergies in the first four to six months.

From the AFP Editors

In westernized countries, 1% to 3% of children have a peanut allergy, with almost 100,000 new cases each year in the United States and United Kingdom. This consensus communication focuses on new data that support introducing peanuts early in infants, and it aims to assist with decisions about introduction; it can be used for guidance while formal guidelines are being developed. The consensus communication is from a variety of organizations, including the American Academy of Allergy, Asthma & Immunology; American Academy of Pediatrics; American College of Allergy, Asthma & Immunology; Australasian Society of Clinical Immunology and Allergy; Canadian Society of Allergy and Clinical Immunology; European Academy of Allergy and Clinical Immunology; Israel Association of Allergy and Clinical Immunology; Japanese Society for Allergology; Society for Pediatric Dermatology; and World Allergy Organization.

Although previous guidelines suggest that there is no need to wait to introduce peanuts until after four to six months of age, they also did not specifically recommend introducing peanuts in high-risk infants between four and six months of age, and certain guidelines state that some high-risk infants should have consultation with an expert before introduction. Recent data suggest that early introduction is safe and effective in selected patients.

LEAP Trial
The LEAP (learning early about peanut allergy) trial, which is the first prospective randomized study regarding early peanut introduction, evaluated 640 infants at high risk living in the United Kingdom. Infants were considered high risk if they did not have a history of egg tolerance, but did have a wheal diameter of at least 6 mm on a skin prick test when exposed to raw hen’s egg white; had a wheal diameter of at least 3 mm when exposed to pasteurized hen’s egg white, as well as associated allergy symptoms; had severe eczema requiring topical corticosteroids or calcineurin inhibitors that lasted at least 12 of 30 days twice in infants younger than six months or 12 of 30 days twice in the past six months in children older than six months; or scored at least a 40 on the modified SCORAD (scoring atopic dermatitis) evaluation.

The study included infants four to 11 months of age who were randomized to avoid products containing peanuts until five years of age or to eat products containing peanuts at least three times per week. Approximately 17% of infants not consuming peanuts had a peanut allergy by five years of age compared with about 3% of infants consuming peanuts (absolute risk reduction = 14%; number needed to treat = 7.1; relative risk reduction = 80%). The risks associated with introducing peanuts early in life was low, with only seven children in the group that consumed peanuts having reactions during the baseline food challenge, indicating that introducing peanuts early is a safe and reasonable approach. It should be noted that infants with a lower risk were not evaluated in the LEAP trial; therefore, data on early peanut introduction in general or low-risk populations are lacking.
**Interim Guidance**

In infants at high risk who live in countries with a prevalence of peanut allergies, products containing peanuts should be introduced at four to 11 months of age; waiting any longer can result in an increased risk of allergy. Infants in the LEAP trial who were in the peanut consumption group ate a median of 7.7 g of peanut protein each week in first two years; examples of foods consumed include smooth peanut butter mixed with milk or fruit, Bamba snacks, peanut soup, and ground peanuts mixed with other foods. The LEAP trial did not assess consumption of a different amount of peanut protein, length of treatment needed, or possible risks of discontinuing or intermittently eating peanut products.

Consultation with an allergist or expert in managing allergies may be beneficial in infants who have an atopic disease early in life or egg allergies in the first four to six months; these specialists can assist with diagnosis and determine how appropriate early peanut introduction would be. Skin prick testing, an observed peanut challenge, or both may be evaluation options in this population.

**Guideline source:** American Academy of Allergy, Asthma & Immunology; American Academy of Pediatrics; American College of Allergy, Asthma & Immunology; Australasian Society of Clinical Immunology and Allergy; Canadian Society of Allergy and Clinical Immunology; European Academy of Allergy and Clinical Immunology; Israel Association of Allergy and Clinical Immunology; Japanese Society for Allergology; Society for Pediatric Dermatology; and World Allergy Organization.

**Evidence rating system used?** No

**Literature search described?** No

**Guideline developed by participants without relevant financial ties to industry?** Not reported

**Published source:** *J Allergy Clin Immunol.* August 2015;136(2):258-261

**Available at:** http://www.jacionline.org/article/S0091-6749(15)00785-X/fulltext

LISA HAUk, AFP Senior Associate Editor