

# Addendum guidelines for the prevention of peanut allergy in the United States: Report of the National Institute of Allergy and Infectious Diseases–sponsored expert panel

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**Background:** Food allergy is an important public health problem because it affects children and adults, can be severe and even life-threatening, and may be increasing in prevalence. Beginning in 2008, the National Institute of Allergy and Infectious Diseases, working with other organizations and advocacy groups, led the development of the first clinical guidelines for the diagnosis and management of food allergy. A recent landmark clinical trial and other emerging data suggest that peanut allergy can be prevented through introduction of peanut-containing foods beginning in infancy. **Objectives:** Prompted by these findings, along with 25 professional organizations, federal agencies, and patient advocacy groups, the National Institute of Allergy and Infectious Diseases facilitated development of addendum guidelines to specifically address the prevention of peanut allergy. **Results:** The addendum provides 3 separate guidelines for infants at various risk levels for the development of peanut allergy and is intended for use by a wide variety of health care providers. Topics addressed include the definition of risk

categories, appropriate use of testing (specific IgE measurement, skin prick tests, and oral food challenges), and the timing and approaches for introduction of peanut-containing foods in the health care provider's office or at home. The addendum guidelines provide the background, rationale, and strength of evidence for each recommendation.

**Conclusions:** Guidelines have been developed for early introduction of peanut-containing foods into the diets of infants at various risk levels for peanut allergy. (*J Allergy Clin Immunol* 2017;139:29-44.)

**Key words:** Food, peanut, allergy, prevention, guidelines

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Peanut allergy is a growing public health problem. In 1999, peanut allergy was estimated to affect 0.4% of children and 0.7% of adults in the United States,<sup>1</sup> and by 2010, peanut allergy prevalence had increased to approximately 2% among children

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**Abbreviations used**

CC:	Coordinating Committee
EP:	Expert Panel
GRADE:	Grading of Recommendations Assessment, Development and Evaluation
LEAP:	Learning Early about Peanut Allergy
NIAID:	National Institute of Allergy and Infectious Diseases
OFC:	Oral food challenge
sIgE:	Specific IgE
SPT:	Skin prick test

in a national survey,<sup>2</sup> with similar results reported in a regional cohort.<sup>3</sup> Peanut allergy is the leading cause of death related to food-induced anaphylaxis in the United States,<sup>4,5</sup> and although overall mortality is low, the fear of life-threatening anaphylactic reactions contributes significantly to the medical and psychosocial burden of disease. In the majority of patients, peanut allergy begins early in life and persists as a lifelong problem. Therefore, cost-effective measures to prevent peanut allergy would have a high effect in terms of improving public health, reducing personal suffering, and decreasing health care use and costs.

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The "Guidelines for the diagnosis and management of food allergy in the United States"<sup>6</sup> were published in December 2010 by an Expert Panel and a Coordinating Committee convened by the National Institute of Allergy and Infectious Diseases (NIAID). These guidelines did not offer strategies for the prevention of food allergy and particularly peanut allergy because of a lack of definitive studies at the time. The guidelines indicated that "insufficient evidence exists for delaying introduction of solid foods, including potentially allergenic foods, beyond 4 to 6 months of age, even in infants at risk of developing allergic disease." This statement differed from previous clinical practice guidelines in the United Kingdom<sup>7</sup> and United States,<sup>8</sup> which recommended the exclusion of allergenic foods from the diets of infants at high risk for allergy and is consistent with more recent recommendations regarding primary allergy prevention.<sup>9-12</sup>

In February 2015, the *New England Journal of Medicine* published the results of the Learning Early about Peanut Allergy (LEAP) trial.<sup>13</sup> This trial was based on a prior observation<sup>14</sup> that the prevalence of peanut allergy was 10-fold higher among Jewish children in the United Kingdom compared with Israeli children of similar ancestry. In Israel, peanut-containing foods are usually introduced in the diet when infants are approximately

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