

Management of IgE-Mediated **FOOD ALLERGIES**



Peanut



Dairy



Tree Nuts



Crustacean Shellfish



Fin Fish



Eggs



Wheat



Soy

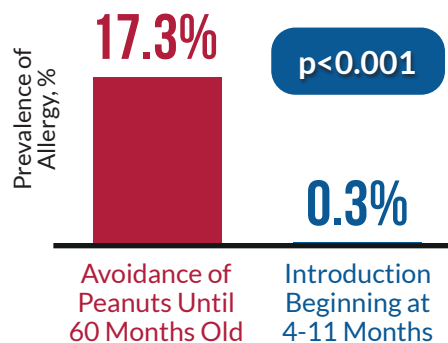


Sesame

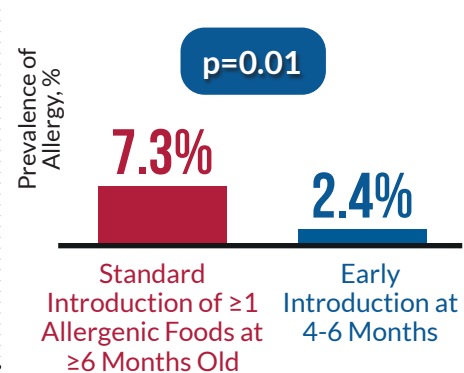
Recent years have marked a paradigm shift in the approach to food allergy management, moving from strict avoidance toward proactive prevention. Early introduction of allergenic foods during infancy, particularly peanuts and eggs, has been shown to significantly reduce the risk of developing food allergies. The emergence of novel therapeutics—including oral immunotherapy (OIT) and anti-IgE monoclonal antibodies (mAb)—offers new strategies for desensitization and long-term tolerance.

Evidence Supporting Early Allergen Introduction

Prevalence of Peanut Allergy
Learning Early About Peanut (LEAP) Study



Prevalence of Allergy to ≥ 1 Food(s)
Enquiring About Tolerance (EAT) Study



Recommended Process of Introducing Allergens

Low-Risk Infant

Age 6 Months
Introduce allergenic foods at HOME.

At-Risk or High-Risk Infant

Age 4-6 Months (but no earlier)
Introduce allergenic foods at HOME.

If family is hesitant, offer introduction in clinic.

Once introduced, ensure regular, ongoing ingestion of age-appropriate serving sizes (≥ 1 times per week) to maintain tolerance.

If Primary Prevention Fails:

- Refer to allergist for evaluation.
- Recommend avoidance of allergenic food and prescribe epinephrine.

In the United States,

90%

of all food allergies are caused by

9

food allergens.

Navigating an Allergic Reaction

Mild Reactions

Mild allergic reactions typically involve **one body system** and may present with: localized hives or skin redness, mild nasal congestion/sneezing or mild stomach discomfort without vomiting. Management includes:

- ♦ **Antihistamines** (cetirizine recommended over diphenhydramine) can be used to relieve symptoms of **mild reactions only**.
- ♦ **Monitor closely for any signs of progression to anaphylaxis** (see below for more information).

Recognizing Anaphylaxis

Anaphylaxis is an acute, life-threatening systemic hypersensitivity reaction. Prompt recognition and early administration of epinephrine are critical. Teach patients and caregivers to identify symptoms that may involve **multiple body systems**:

- ♦ **Respiratory:** Wheezing, shortness of breath, throat tightness.
- ♦ **Dermatologic:** Hives, flushing, swelling (especially of lips, tongue, face).
- ♦ **Gastrointestinal (GI):** Vomiting, cramping, diarrhea.
- ♦ **Cardiovascular:** Dizziness, fainting, hypotension.

Reinforce that **symptoms may appear rapidly** after exposure and can progress quickly.

Counseling Tips

- ♦ **Demonstrate correct epinephrine use** and confirm patient/caregiver return demonstration.

- ♦ Emphasize the need for a **written emergency action plan**.
- ♦ **Discuss allergen avoidance** and communication with schools or caregivers.

When to Use Epinephrine

Educate patients and caregivers to **administer epinephrine immediately** if:

- ♦ The patient shows signs of respiratory distress or hypotension.
- ♦ Two or more systems are involved (e.g., skin plus GI symptoms).
- ♦ A known allergen is ingested **and** early symptoms are present.

When to Call 911

Patients and caregivers are usually advised to call 911 after administering epinephrine, especially if symptoms persist or the reaction occurs outside the home; however, if symptoms fully resolve and emergency medical care is readily accessible, calling 911 may not be necessary—this decision should be part of shared decision-making between the patient/caregiver and health care provider.

Reassure patients and caregivers that epinephrine is safe and emphasize that delaying administration increases risk of severe symptoms, prolonged reactions or death.

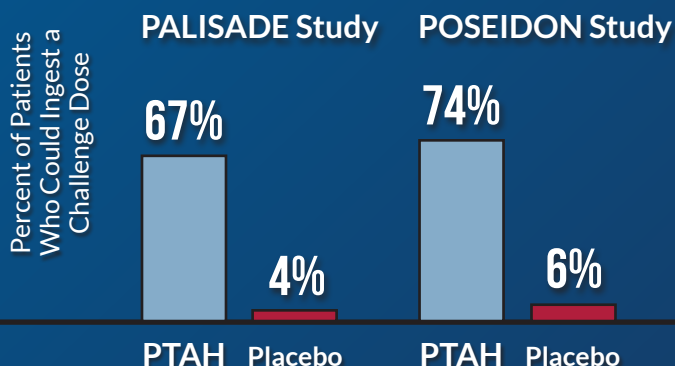
A nasal formulation of epinephrine is now FDA-approved for patients ages 4 and older who weigh at least 15 kg (33 lbs).



FDA-Approved Therapeutics for Allergy Prevention

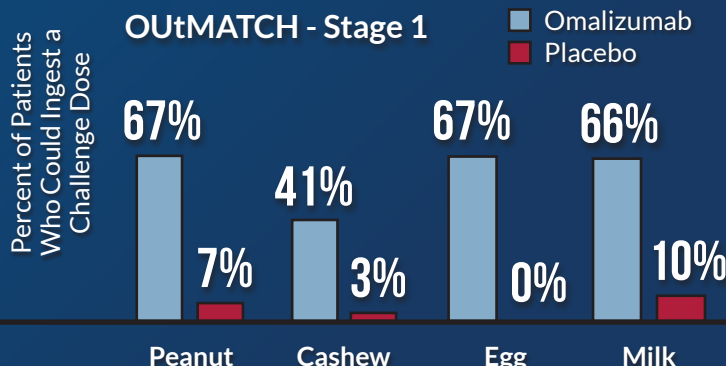
OIT: Arachis Hypogea (Peanut Allergen Powder, PTAH)

Concept: Incremental allergen exposure to desensitize the immune system. Increased risk for allergic reaction.



mAb: Omalizumab

Concept: Targeted therapeutics aimed at allergic/inflammatory drivers, not the allergen itself.



Sources: Chan ES, et al. Allergy, Asthma & Clinical Immunology. 2024;20(S3):71; Du Toit G, et al. NEJM Evidence. 2023;2(11); Du Toit G, et al. NEJM. 2015;372(9):803-813; Golden DBK, et al. Annals of Allergy, Asthma & Immunology. 2024;132(2):124-176; Iglesia EGA, et al. JAMA. 2024;331(6):510; The PALISADE Group of Clinical Investigators. NEJM. 2018;379(21):1991-2001; Perkin MR, et al. NEJM. 2016;374(18):1733-1743; Pflipsen MC, Vega Colon KM. Am Fam Physician. 2020;102(6):355-362.