PRIMARY CARE

Food allergy testing

A first-to-market food allergy profile with component reflex testing and interpretive reporting.

labcorp

Food allergies are on the rise in the U.S.

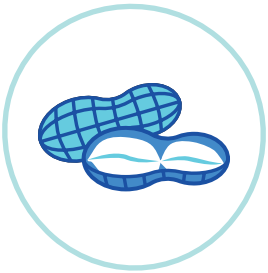
Each year, 200,000 people in the U.S. require emergency medical care for allergic reactions to food.[1]

What are the "Big Nine" food allergens?

Any type of food can cause an allergic reaction. However, there are nine major food allergens that are responsible for 90% of food allergy reactions in the U.S.[1] The "Big Nine" includes:

Milk

Eggs

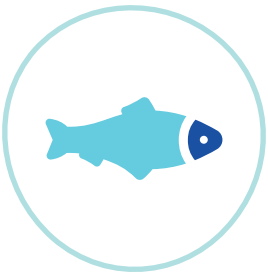


Peanuts

Tree nuts

Wheat

Soybean



Fish

Crustacean shellfish

Sesame

Over 1.1 million people in the U.S. have a sesame allergy.[4]

Over the last two decades, sesame food allergy cases have risen more than any other food allergy.[2] Since reactions to sesame can be severe (even fatal), it has now been added to the list of major food allergens in the U.S.[3]

Navigating a difficult diagnosis

Food allergies typically present with a wide range of overlapping symptoms that can make it difficult to differentiate between a food allergy (IgE-mediated) and food intolerance (non-IgE-mediated).[5] This can lead to incorrect diagnoses and over-reporting of food allergies.

Typical overlapping symptoms

- **Urticaria (hives)**
- **Eczema**
- **GI distress (vomiting, abdominal pain, bloating, diarrhea)**
- **Respiratory distress (asthma)**
- **Oral allergy syndrome (OAS)**
- **Food pollen allergy syndrome (FPAS)**
- **Angioedema**
- **Anaphylaxis**

To help distinguish and identify the source of allergy, Labcorp utilizes ImmunoCAP™ Specific IgE (sIgE) testing. When combined with clinical history of an adverse food reaction and a physical exam, food allergy testing can help aid in a differential diagnosis.

Improved specificity for a more accurate assessment

Labcorp's optimized sIgE food allergy profile with component reflex testing makes allergy testing easier with one convenient to order profile that tests sensitivity to the "Big Nine" clinically significant food allergens and assesses the potential for systemic reactions. It includes component reflex testing to help determine clinically significant sensitization versus cross-reactivity.

With Labcorp's ImmunoCAP allergen component reflex testing, you can:

- Gain a broader understanding of a patient's allergic sensitization and precise diagnosis to support a comprehensive management plan
- Assess the risk for systemic reactions versus a milder or more localized response
- Provide your patient a more cost-effective, convenient food allergy assessment. Automatic reflex testing is only run when a whole allergen tests positive to milk, egg, peanut, tree nuts, sesame and/or wheat components without the need for an additional blood draw

New, optimized food allergy profiles

These comprehensive, clinically significant profiles includes all the “Big Nine” food groups and interpretive reports to help guide management decisions.

Test Name	Test No.	Method	Specimen Requirements
Allergen Profile, Food IgE with Component Reflexes*	**608005**	Thermo Fisher ImmunoCAP™ Specific IgE	4.0 mL serum (room temperature)

Milk	Crustacean Shellfish: Scallop, Shrimp	Wheat: Wheat, ω 5-Gliadin (tri-19)
Egg White	Tree Nuts: Almond, Brazil Nut, Cashew Nut, Hazelnut (Filbert), Walnut	Soybean
Fish: Codfish, Salmon, Tuna	Peanut (whole)	Sesame: Sesame Seed

*If milk IgE ≥ 0.35 kU/L, reflex tests α-lactalbumin IgE, β-lactoglobulin IgE, and casein IgE. If egg white IgE ≥ 0.35 kU/L, reflex tests ovalbumin and ovomucoid IgE. If IgE to sesame, walnut, hazelnut (filbert), cashew nut, brazil nut, and/or peanut (whole) is ≥ 0.10 kU/L, reflex tests as follows: Sesame: Ses I 1 IgE/ Brazil nut: Ber e 1 IgE / Cashew nut: Ana o 3 IgE / Hazelnut (filbert): Cor a 1, Cor a 8 , Cor a 9, and Cor a 14 IgE / peanut (whole): Ara h 1, Ara h 2, Ara h 3, Ara h 6, Ara h 8, and Ara h 9 IgE / Walnut: Jug r 1 and Jug r 3. If Wheat IgE ≥ 0.10 kU/L, one or more of the following components may be tested: Gliadin, Tri a 14 (wheat nsLTP), Phl p 12 (Timothy grass profilin) and/or Cross-reactive Carbohydrate Determinant (CCD). If reflex testing is performed, additional charges/CPT codes may apply.

Specially designed allergy profile for young children

Includes the “Big Nine” food groups, respiratory and food component testing to help assess allergen sensitivity in children.

Test Name	Test No.	Method	Specimen Requirements
Allergen Profile, IgE, Pediatric with Component Reflexes**	**608035**	Thermo Fisher ImmunoCAP™ Specific IgE	4.0 mL serum (room temperature)

Food

Milk

Egg White

Fish: Codfish, Salmon, Tuna

Crustacean Shellfish: Scallop, Shrimp

Tree Nuts: Brazil Nut, Cashew Nut, Hazelnut (Filbert), Walnut

Peanut (whole)

Wheat: Wheat, ω 5-Gliadin (tri-19)

Soybean

Sesame: Sesame Seed

Grass/Tree

Timothy Grass

Cedar, Mountain

Molds

Alternaria alternata

Candida albicans

Animal /Dust

Cat dander

Dog dander

Dermatohagoides pteronyssinus

Mouse urine

Cockroach, German

Other

Immunoglobulin E, total

**If Cat dander IgE ≥0.35 kU/L, reflex tests Fel d 1, Fel d 2 and Fel d 4 IgE. If Dog dander IgE ≥0.35 kU/L, reflex tests Can f 1, Can f 2, Can f 3, Can f 5 IgE. If milk IgE ≥0.35 kU/L, reflex tests α-lactalbumin, β-lactoglobulin and casein IgE will be added. If egg white IgE ≥0.35 kU/L, reflex tests ovalbumin and ovomucoid IgE. If IgE to sesame, walnut, hazelnut (filbert), cashew nut, brazil nut, and/or peanut (whole) is ≥ 0.10 kU/L, reflex: Sesame: Ses I 1 IgE/ Brazil nut: Ber e 1 IgE / Cashew nut: Ana o 3 IgE / Hazelnut (filbert): Cor a 1, Cor a 8, Cor a 9 and Cor a 14 IgE / Peanut (whole): Ara h 1, Ara h 2, Ara h 3, Ara h 6, Ara h 8 and Ara h 9 IgE / Walnut: Jug r 1 and Jug r 3 IgE. If Wheat IgE ≥ 0.10 kU/L, one or more of the following components may be tested: Gliadin, Tri a 14 (wheat nsLTP), Phl p 12 (Timothy grass profilin) and/or Cross-reactive Carbohydrate Determinant (CCD). If reflex testing is performed, additional charges/CPT codes may apply.

References:

1. Facts and Statistics. Food Allergy Resources & Education. Accessed November 1, 2023. https://www.foodallergy.org/resources/facts-and-statistics.
2. Sesame: The Fastest Growing Allergy Threat. American Camp Association. Accessed November 1, 2023. https://www.acacamps.org/article/camping-magazine/sesame-fastest-growing-allergy-threat. May 1, 2020.
3. The Food Allergy Safety, Treatment, Education, and Research Act of 2021. FoodSafety.gov. Accessed November 2, 2023. https://www.foodsafety.gov/blog/food-allergy-safety-treatment-education-and-research-act-2021.
4. Warren CM, Chadha AS, Sicherer SH, et al. Prevalence and severity of sesame allergy in the United States. *JAMA Netw Open.* 2019;2(8):e199144. doi:10.1001/jamanetworkopen.2019.9144.
5. Kurowski K, Boxer RW. Food allergies: detection and management. *Am Fam Physician*. 2008 Jun 15;77(12):1678-86. PMID: 18619076.

Visit the online **Test Menu** at **www.labcorp.com** for additional test options and full test information, including CPT codes and specimen collection instructions.

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