Walnut, cashew, and Brazil nut allergen component testing

Detect sensitizations to the whole nut to create personalized management plans for your patients.
Allergen component testing

Measurement of specific IgE by blood test that provides objective assessment of sensitization to the whole nut protein is the first step in discovering the likelihood of a systemic reaction and the necessary precautions that may be prescribed.

Positive whole walnut with negative Jug r1 and Jug r3 results may be explained by sensitization to:
- Other walnut storage proteins
- Pollen proteins like profilin or PR-10 proteins
- CCD (cross-reacting carbohydrate determinants)

Walnut

One of the most common causes of allergic reactions to tree nuts.¹,²

- Estimated prevalence of walnut allergy in the general population is up to 0.7%.²
- Potentially life-threatening, increasing in prevalence and rarely outgrown.²,³

Associated with **systemic reactions**²
- Storage protein (2s albumin)³,⁴
- Heat and digestion stable⁴
- Highly abundant in walnut

Associated with **local and systemic reactions**²
- Lipid transfer protein (LTP)¹,⁴
- Heat and digestion stable

Knowing which protein your patient is sensitized to can help you develop a management plan.

Positive whole walnut with negative Jug r1 and Jug r3 results may be explained by sensitization to:
- Other walnut storage proteins
- Pollen proteins like profilin or PR-10 proteins
- CCD (cross-reacting carbohydrate determinants)
Cashew nut

Allergy on the rise with increased consumption in snack foods, Asian foods, baked goods, nut butters and pestos.\(^8,9\)

- Sensitized patients have a risk of experiencing severe allergic reactions; the risk has been reported to be even higher than for peanut allergic patients (74\% vs. 30\%).\(^7\)
- Potentially life-threatening, can start early in life and is rarely outgrown.\(^1,9\)

Associated with **systemic reactions**\(^8\):
- Storage protein (2s albumin)\(^8\)
- Heat and digestion stable\(^1,4\)
- Highly abundant in cashew nut

Positive 2608 with negative Ana o3 results may be explained by sensitization to\(^6\):
- Other cashew nut storage proteins or lipid transfer protein (LTP)
- Pollen proteins like profilin or PR-10 proteins
- CCD (cross-reacting carbohydrate determinants)

Brazil nut

Hidden allergen often found in cookies, insect repellent and beauty products.\(^12\)

- Extensive cross-reactivity within the family can be expected.\(^13\)
- Generally persists and is potentially life-threatening.\(^14\)

Associated with **systemic reactions**\(^15\):
- Storage protein (2s albumin)\(^12\)
- Resistant to digestion by pepsin, and a major allergen\(^12\)
- Very stable to gastric digestion\(^12\)
- Major allergen in Brazil nut\(^12\)

Positive 2818 with negative Ber e1 results may be explained by sensitization to\(^6\):
- Other Brazil nut storage proteins or lipid transfer protein (LTP)
- Pollen proteins like profilin or PR-10 proteins
- CCD (cross-reacting carbohydrate determinants)
### Brazil Nut w/Reflexes
- Brazil nut, f18; IgE with reflex to component
  - Test Code: 94464

### Cashew Nut w/Reflexes
- Cashew nut, f202; IgE with reflex to component
  - Test Code: 94465

### Childhood Allergy Profile
- D. pteronyssinus (House mite), (NTC-2721) d1; D. farinae (House mite), (NTC-2722) d2; Cat dander, (NTC-2601) e1; Dog dander, (NTC-2605) e5; Egg white, (NTC-2801) f1; Milk, (NTC-2802) f2; Codfish, (NTC-2803) f3; Wheat, (NTC-2804) f4; Peanut, (NTC-2813) f13; Soybean, (NTC-2814) f14; Shrimp, (NTC-2824) f24; Walnut, f256; Cockroach, (NTC-2736) i6; Cladosporium herbarum, (NTC-2702) m2; Alternaria alternata, (NTC-2706) m6; Total IgE
  - Test Code: 10659

### Childhood Allergy Profile w/Reflexes
- Contains all components of the Childhood Allergy Profile (NTC-10659) with reflex to the following components, Egg Component Panel, (NTC-91372); Ovomucoid, (NTC-3046) f233; Ovalbumin, (NTC-2719) f232; Milk Component Panel, (NTC-91403); Casein, (NTC-2853) f78; Alpha-lactalbumin, (NTC-2852) f77; Peanut Component Panel, (NTC-91681); Ara h1, f422; Ara h2, f423; Ara h3, f424; Ara h8, f352; Ara h9
  - Test Code: 91683

### Food Allergy Profile
- Milk, (NTC-2802) f2; IgE Egg white, (NTC-2801) f1; IgE Peanut, (NTC-2813) f13; IgE Walnut, f256; IgE Corn, (NTC-2808) f8; IgE Wheat, (NTC-2804) f4; IgE Soybean, (NTC-2814) f14; IgE Codfish, (NTC-2803) f3; IgE Clam, (NTC-8929) f207; IgE Shrimp, (NTC-2824) f24; Total IgE
  - Test Code: 38767

### Food Allergy Profile w/Reflexes
- Contains all components of the Food Allergy Profile (NTC-10715) with reflex to the following components, with reflex to Egg Component Panel, (NTC-91372); Ovomucoid, (NTC-3046) f233; Ovalbumin, (NTC-2719) f232; Milk Component Panel, (NTC-91403); Casein, (NTC-2853) f78; Alpha-lactalbumin, (NTC-2852) f77; Peanut Component Panel, (NTC-91681); Ara h1, f422; Ara h2, f423; Ara h3, f424; Ara h8, f352; Ara h9
  - Test Code: 91682

### Nut Mix Group 18
- IgE allergy testing for: Almond, (NTC-2820) f20; Cashew nut, f202; Coconut, (NTC-2836) f36; Hazelnut, (NTC-2817) f17; Peanut, (NTC-2813) f13; Pecan, (NTC-2864) f201; Sesame seed, (NTC-2810) f10
  - Test Code: 7918

### Nut Panel
- Macadamia nut, (NTC-38475); Pecan, (NTC-2864); Brazil nut; Walnut; Cashew nut; Pistachio, (NTC-2726); Hazelnut, (NTC-2817); Almond, (NTC-2820); Peanut, (NTC-2813)
  - Test Code: 94462

### Nut Panel w/Reflexes
- Macadamia nut, (NTC-38475); Pecan, (NTC-2864); Brazil nut; Walnut; Cashew nut; Pistachio, (NTC-2726); Hazelnut, (NTC-2817); Almond, (NTC-2820); Peanut, (NTC-2813)
  - Test Code: 94463

### Walnut w/Reflexes
- Walnut, f256; IgE with reflex to component panel
  - Test Code: 94467

### Brazil nut
- Test Code: 2818

### Cashew nut
- Test Code: 2608

### Walnut
- Test Code: 3489

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Multiple test codes are available. Refer to the Quest Diagnostics Directory of Services or the online Test Center (QuestDiagnostics.com/testcenter) for test information.

NTC = National test code
Diagnose by the **numbers**.

**Assess risks**
for systemic reactions and cross-reactivity.

**Address anxiety**
with individualized management plans.

**Enable confidence**
in dietary and lifestyle choices.
For more information about walnut, cashew, and Brazil nut component testing, contact your local sales representative.

References
6. www.phadia.com