Understanding IgE Reactions

Immunoglobulin E (IgE) antibodies trigger histamine release and mast cell activation, which is the typical, classic allergy. Most people recognize hives and rashes, redness and swelling, or allergic rhinitis as allergic reactions. Human responses to both food and inhalant protein antigens vary widely in intensity, even to the point of dangerous anaphylaxis. IgE is usually present in very small amounts, but risk of severe reactions is assumed to increase along with increasing amounts of IgE. Genetics appear to influence the tendency to have allergies. Exposure to microbes, various foods, and environmental allergens may all provoke an IgE response as well.

Serum IgE tests measure levels of IgE antibodies in the blood. When IgE antibodies bind to specific receptors on mast cells and other white blood cells, an allergic reaction occurs. High levels of IgE antibodies indicate that the patient is likely to experience physiological effects from ingesting foods or inhaling environmental allergens to which they are sensitive.

The Importance of IgE Testing

Eliminating IgE-positive foods and reducing exposure to inhalant allergens may help alleviate many symptoms and disorders triggered by food and environmental sources. The Great Plains Laboratory, Inc. (GPL) offers both basic and advanced serum panels for specific IgE antibodies to a wide range of allergens.

The two IgE Allergy Advanced panels test for 93 foods and 69 inhalants, increasing the probability of identifying numerous allergy triggers. The IgE Inhalant Allergy Advanced panel includes markers for Candida and amoxicillin. Many people are sensitive to penicillins (amoxicillin) and exposure to fungi (such as Candida) can lead to persistent, sometimes vague symptoms.

Test results show which foods and inhalants are associated with elevated IgE antibodies that may cause reactions. These results help guide health practitioners in customizing therapies for their patients.

Although IgE allergies are most often associated with immediate and easily discernible reactions, not all IgE responses are so identifiable. Antibody testing is an important adjunct to patient symptom reporting in identifying triggers.

Recommended for Patients With

- AD(H)D
- Acne, Eczema, Rashes
- Anxiety
- Autism Spectrum Disorders
- Candidiasis
- Chronic Fatigue
- Chronic Infections
- Depression
- Fibromyalgia
- Irritable Bowel Syndrome
- Leaky Gut Syndrome
- Migraines
- Movement Disorders
- Multiple Sclerosis
- OCD
- Rheumatoid Arthritis
- Seizures
- Tic Disorders / Tourette’s Syndrome
**Complete List of Allergens in the IgE Allergy Tests**

A full list of panel test analytes can be found at: www.greatplainslaboratory.com/home/eng/food_allergy_ige.asp

**IgE Food Allergy Basic** (25 foods)  *Analytes in bold are in the IgE Food Allergy Advanced (93)

**IgE Food Allergy Advanced** (93 foods)  Almond, Apple, Apricot, Asparagus, Avocado, Banana, Barley, Beef, Beet, Blueberry, Broccoli, Buckwheat, Cabbage, Cane Sugar, Carrot, Casein, Cashews, Celery, Cheese, Chicken, Coconut, Cod Fish, Cocoa, Coffee, Corn, Crab, Cranberry, Eggplant, Egg White, Egg Yolk, Flax, Garbanzo Bean, Garlic, Gluten, Goat’s Milk Cheese, Grape, Grapefruit, Green Bean, Green Pepper, Halibut, Hazelnut, Honey, Kidney Bean, Lamb, Lemon, Lentil, Lettuce, Lima Bean, Lobster, Mango, Milk, Millet, Mushroom, Oat, Onion, Orange, Papaya, Peach, Peanut, Pear, Pecan, Pineapple, Pinto Bean, Pistachio, Plum, Pork, Potato, Pumpkin, Radish, Raisin, Rice, Rye, Salmon, Sardine, Sesame, Shrimp, Soybean, Spinach, Strawberry, Sunflower, Sweet Potato, Tomato, Turkey, Tuna, Walnut, Watermelon, Wheat, Whey, Yogurt, Yeast (Bakers), Yeast (Brewers), Zucchini

**IgE Inhalant Allergy Basic** (36 inhalants)  *Analytes in bold are in the IgE Inhalant Allergy Advanced (69)

**IgE Inhalant Allergy Advanced** (69 inhalants)  Acacia, Alder (Smooth), Alternaria, Amoxicillin, Ash (White), Aspergillus, Bahia Grass, Bermuda Grass, Bluegrass (Kentucky), Box Elder (Maple), Brome Grass, Candida, Cat, Cedar (Mountain), Cladosporium, Cocklebur, Cockroach, Corn ( Cultivated), Cottonwood Tree, Cypress (Bald), Dockweed (Yellow), Dog Elm (American and Fall Blooming), Ferret, Fescue (Meadow), Gerbil, Goldenrod, Hickory (White), Dust Mite (D. pteronyssinus), Iodine Bush, Johnson Grass, Lamb’s Quarters, Maple (Red), Marsh Elder (Rough), Mexican Tea, Mite (D. Farinae), Mouse, Mulberry (Red and White), Nettle, Oak (Live, White, and Red), Oats, ( Cultivated), Oat Grass Tall, Pecan Tree, Penicillium, Pigweed (Spiny and Rough), Plantain (English), Poplar (White), Privet, Rabbit, Ragweed (Giant and Short), Rye (Cultivated), Rye Grass (Perennial), Salt Cedar, Salt Grass, Sheep Sorrel, Sweet Gum, Sycamore, Timothy Grass, Tree of Heaven, Walnut (Black), Western Water Hemp, Wheat (Cultivated), Willow (Black)

**Sample Report**

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