



Allergies: Dubious Diagnosis and Treatment

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Many dubious practitioners claim that food allergies may be responsible for virtually any symptom a person can have. In support of this claim—which is false—they administer various tests purported to identify offending foods. Claims of this type may seem credible because about 25% of people think they are allergic to foods. However, scientific studies have found that only about 6% of children and 1-2% of adults actually have a food allergy, and most people with food allergies are allergic to less than four foods [1].

Cytotoxic Testing

The most notorious such test was [cytotoxic testing](#), which was promoted during the early 1980s by storefront clinics, laboratories, nutrition consultants, chiropractors, and medical doctors. Advocates claimed it could determine sensitivity to food, which they blamed for asthma, arthritis, constipation, diarrhea, hypertension, obesity, stomach disorders, and many other conditions. However, controlled studies never demonstrated reliability, and some studies found it highly unreliable [2-5]. For example, one study found that white cells from allergic patients reacted no differently when exposed to substances known to produce symptoms than when exposed to substances to which the patients were not sensitive [6]. Government regulatory actions [7-10] and unfavorable publicity have almost driven cytotoxic testing from the health marketplace. But a few practitioners still perform it, and many use similar "food sensitivity" tests.

ELISA/ACT Testing

Another test claimed to locate "hidden allergies" is the ELISA/ACT, developed by Russell Jaffe, M.D., Ph.D., and performed by Serammune Physicians Lab (SPL), of Reston, Virginia, which Jaffe directs. According to an SPL brochure:

When we think of allergies, we immediately think of an allergy whose symptoms occur within minutes of ingesting a food or chemical. The symptoms include hives and itching. . . .

"Hidden" or "delayed" allergies are more difficult to identify because the onset of symptoms is delayed from 2 hours to 5 days and the symptoms range from physical pain to unexplained fatigue. Scientific estimates are that as much as 60% of all illness is due to hidden allergies [11].

The brochure states that any of the following may indicate the presence of hidden allergies: chronic headaches, migraines, difficulty sleeping, dizziness, runny or stuffy nose, postnasal drip, ringing in the ears, earaches, blurred vision, irregular or rapid heartbeat, asthma, nausea and vomiting, constipation, diarrhea, irritable bowel syndrome, hives, skin rashes (psoriasis, eczema), muscle aches, joint pain, arthritis, nervous tension, fatigue, depression, mental dullness, and difficulty in getting your work done.

The ELISA/ACT is performed by culturing the patient's lymphocytes and seeing how they react to up to 300 foods, minerals, preservatives, and other environmental substances. After the test is completed, the practitioner (typically a chiropractor) recommends dietary modification and supplements. SPL maintains a referral list of practitioners who perform the test and suppliers who can provide "special combinations of the suggested supplements to reduce the number of 'pills' you may have to take." In 1994, the complete (300-item) profile plus interpretation cost \$695.

Although the ELISA/ACT test can assess the levels of certain immune responses, these are not necessarily related to allergy and have nothing whatsoever to do with a person's need for supplements. Moreover, many of the symptoms listed in SPL's brochure are unrelated to allergy and are not appropriately treated with supplement products. [Note: This test should not be confused with the ELISA test, which is a standard test for certain infectious diseases.]

Other Dubious Tests

In addition to cytotoxic testing and ELISA/ACT, the following procedures are not valid for managing food allergies:

- ALCAT testing, which is said to measure how blood cells react to foods "under conditions designed to mimic what happens when the foods are consumed in real life." [12]
- [NuTron testing](#), which supposedly measures the "reactivity" of white blood cells to food and other substances, is used design a diet that eliminates foods that cause white cell "activation." Proponents claim that the diet can improve overweight and many other conditions "caused by the release of inflammatory chemicals from the activated white cells."
- The LEAP Program, in which the Mediator Release Test (MRT) is used to identify "delayed food allergies" and treatment involves dietary manipulation and possibly supplements and/or herbs.
- [Provocative testing](#), in which substances are injected under the skin in increasing doses until symptoms are reported
- Sublingual testing, in which suspected foods are placed under the tongue
- Neutralization, in which progressively smaller doses of substances are administered until the patient no longer reacts
- Other food immune complex and IgG tests, which assess immune reactions that are common but not necessarily related to allergy
- Desensitization, in which progressively larger doses of a food are injected. While desensitization may work for hay fever and other allergies related to inhaled substances, it is worthless for foods and can be dangerous.
- [Applied kinesiology](#), in which the patient's arm strength is tested after test substances are placed in the patient's mouth or hand.
- [Nambudripad's Allergy Elimination Technique \(NAET\)](#), based on the notion that allergies are caused by "energy blockage" that can be diagnosed with muscle-testing and permanently cured with acupressure and/or acupuncture treatments.
- [Electrodermal skin testing](#), in which a computerized galvanometer is used to detect supposed "energy imbalances." In 1999, the British Advertising Standards Authority reviewed a pamphlet which alleged that a Bio Resonance Therapy device could help people suffering from headaches, overweight, tiredness, bloating, irritable bowel syndrome, skin rashes, arthritis, and premenstrual tension. In May 1999, after reviewing a manual and other information about the device, the Authority concluded that the claims were unsubstantiated [13].
- Neurological Stress Reduction Therapy (NRST) purports to use a BAX 3000 device to assess and treat allergies and many other conditions with a "light and sound energy relaxation technique" that supposedly identifies problematic substances and conditions the body not to react negatively to them.

Proper Testing

The correct way to assess a suspected food allergy or intolerance is to begin with a careful record of food intake and symptoms over a period of several weeks. Symptoms such as swollen lips or eyes, hives, or skin rash may be allergy-related, particularly if they occur within a few minutes (up to two hours) after eating. Diarrhea may be related to a food intolerance. Vague symptoms such as dizziness, weakness, or fatigue are unlikely to be food-related. The history-taking procedure should note the suspected foods, the amounts consumed, the length of time between ingestion and symptoms, whether there is a consistent pattern of symptoms after the food is consumed, and several other factors. Although nearly any food can cause an allergic reaction, a few foods account for about 90% of reactions. Among adults these foods are peanuts, nuts, fish, and shellfish. Among children, they are egg, milk, peanuts, soy, and wheat [14].

If significant symptoms occur, the next step should be to see whether avoiding suspected foods for several weeks prevents possible allergy-related symptoms from recurring. If so, the suspected foods could be reintroduced one at a time to see whether symptoms can be reproduced. However, if the symptoms include hives, vomiting, swollen throat, wheezing, or other difficulty in breathing, continued self-testing could be dangerous, so an allergist should be consulted.

Proper medical evaluation—done best by an allergist—will include careful review of your history and skin testing with food extracts (using a prick or puncture technique) to see whether an allergic mechanism is involved in your symptoms. In cases where skin testing might be dangerous, a radioactive allergy sensitivity test (RAST) may be appropriate. The RAST is a laboratory test in which the technician mixes a sample of the patient's blood with various food extracts to see whether antibodies to food proteins are present in the blood. It is not as reliable as skin testing and is more expensive. A negative prick or RAST test indicates a low probability of allergy to the test substance. Positive tests, however, have much less predictive value [1].

The only sure way to diagnose an allergy to a suspected food, food coloring, or other additive is challenge testing in which the patient ingests either the suspected food or a placebo [14]. This may be appropriate if the patient's history suggests a food allergy but the skin or RAST tests are negative. Because dangerous reactions can occur, challenge testing should be done in a hospital or office that is specially equipped for that purpose.

For Additional Information

- [Aetna Policy Coverage Policy Bulletin 0038. Allergy Testing and Allergy Immunotherapy](#)

- [BlueCross BlueShield of Tennessee Medical Policy Manual](#)
- [British Advertising Standards Authority Criticizes Ads for YorkTest Laboratories FoodScan Test](#)
- [EACCI Task Force Report on IgG4 Testing against Foods](#)
- [Food Allergies for Dummies](#)
- [Institute of Food Technologists Scientific Status Summary on Food Allergies and Other Sensitivities](#)
- [The Regence Group \(Blue Cross/Blue Shield\)](#): Noncovered "investigational" methods
- [University of Iowa Virtual Hospital](#): Food allergy basics

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10. [Cytotoxic testing for allergic diseases. FDA Compliance Policy Guide 7124.27](#), March 19, 1985, revised March 1995.
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12. The ALCAT test: A simple blood test for food and chemical sensitivities (Flyer). Hollywood, FL: AMTL Corporation, 1995.
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This article was revised on May 31, 2011.