ALCAT | Available for over 25 years

The Alcat Test is a lab based immune stimulation test in which a patient's WBC's are challenged with various substances including foods, additives, colorings, chemicals, medicinal herbs, functional foods, molds and pharmaceutical compounds. The patient's unique set of responses help to identify substances that may trigger potentially harmful immune system reactions.

The Alcat Test objectively classifies a patient's response to each test substance as reactive, borderline or non-reactive. Based on these classifications, a cus-tomized elimination/rotation diet may be designed to effectively eliminate the specific triggers of chronic immune system activation. By reducing this ongoing burden - and in particular, by reversing the sustained and destructive inflammation it produces - normal body functions and immune system balance can be improved.



nents of the specific and nonspecific immune system. Alcat Testing detects all blood leukocytes and records their distribution based on size. Reactivity is measured by analyzing changes in their number and volume. Please see below for more information regarding the test and it's benefits. There is also a list of foods that your blood is tested against.

Please keep in mind, we do offer Care Credit to help with the out of pocket expense. Please click the link below if you would like to apply or you may submit your application through our office.

APPLY CARE CREDIT

Should you have any questions, please feel free to contact our office and we will be happy to discuss your concerns.



ALCAT & Other Food and Chemical Sensitivity Tests

Understanding food allergy, food sensitivity and the Alcat Test

by Dr. Patricia Shelton, MD, RYT

For centuries, most people ate whatever everyone around them was eating. If everyone else ate bread, they also ate bread; few people attempted to alter their diets in order to solve health problems. In the past few decades, the idea of altering the diet in order to create the conditions for optimal health began to enter the mainstream. One early change was the emergence of low-fat foods; many people began to avoid foods with high levels of saturated fat, or to consume low-fat versions of their favorite foods. (Many are now questioning whether low-fat was the right choice, but at least people were thinking about the relationship of health to diet.) Organic foods became more and more popular through the next few decades, as people began to recognize the impact of conventionally used chemicals such as pesticides on human health. The idea that what we eat has a huge impact on our health began to be widely accepted.

More recently, the idea of personalizing the diet to avoid foods that create inflammation has been entering the mainstream. Some physicians, nutritionists and other health practitioners advocate the avoidance of all commonly allergenic foods by virtually everyone; wheat, dairy (cow's milk), soy, peanuts, and eggs are among those most commonly selected for avoidance. However, there is a cost to avoiding particular foods in the diet; it may become difficult to obtain necessary nutrients if too many foods are avoided, and eating a variety of foods is widely recognized as a health-promoting practice. Additionally, some people may be reactive to foods other than those on the "most-common" list. Therefore, many people seek to find out which foods they are reactive to, so that they can avoid those foods without overly restricting the diet. Although some people attempt to accomplish this through eliminating large numbers of foods and then re-introducing them while monitoring for symptoms, this can be unwieldy given that we eat hundreds of foods.

Inflammation and Chronic Disease

Chronic diseases, such as heart disease, cancer, and diabetes, are by far the leading cause of death and disability among the populations of developed countries. While these were not traditionally thought to be inflammatory diseases, much recent research has focused on the role of inflammation in these diseases. For example, many studies have linked increases in the biomarkers of inflammation to the risk of heart attack and stroke, to an increased risk of developing cancer, and to a poorer prognosis in those who have been diagnosed with cancer. This has been done in many different types of cancer, including prostate, colorectal, and breast cancers.

The scientific literature that links inflammation to the chronic diseases most feared by the people of developed countries is large and growing. Because of this, many people would like to reduce the levels of inflammation in their bodies. Some common issues include irritable bowel syndrome (IBS) and other digestive symptoms, skin conditions such as eczema and urticaria (hives), migraine headaches, and chronic fatigue, though

there are many others. These, too, often have an inflammatory component, and so people who have these conditions would do well to reduce the levels of inflammation in their bodies. But given that there are a huge number of substances to which we are exposed daily, it can be overwhelming to decide where to start. Well, there's one thing we put directly into our bodies multiple times per day: food.

Understanding Food-Mediated Inflammation

When it comes to understanding the impact of various foods on the immune system, it's easy to get confused by the scientific terminology. Before looking at what the Alcat test actually measures, it would be helpful to start with a basic look at this field.

The immune system's main component is the white blood cells (WBCs, also known as leukocytes). They spend much of their time circulating in the blood, searching for and destroying foreign invaders such as bacteria. There are a number of different types of leukocytes, each specialized for a particular function; they work together, like the instruments in a symphony. The immune system has two main arms: the adaptive immune system, which "remembers" previously encountered antigens (foreign proteins) to mount an effective response, and the innate immune system, which is present at birth and is less discriminating with respect to what it attacks.

The adaptive immune system consists of the leukocytes called lymphocytes, of which there are several types. One of the types of lymphocytes produces a group of proteins called immunoglobulins ("Ig"s), also known as antibodies, and others respond to antibodies that have bound to the protein they recognize. While only a small percentage of leukocytes are lymphocytes, these cells are extremely important to the immune system, as they allow the targeted destruction of particular invaders and possess the capacity to "remember" previously encountered proteins in order to mount a quick and effective defense. Vaccines work by stimulating the adaptive immune system, while the HIV virus causes AIDS by destroying lymphocytes. In some people, the adaptive immune system becomes inappropriately sensitized to the patient's own tissues; this is called autoimmunity, and leads to a variety of diseases.

The other arm of the immune system is the innate immune system. The cells of this arm of the immune system are far more numerous, and as a group are called granulocytes. A subtype of granulocytes known as neutrophils constitute well over half of the total leukocytes in the immune system. They perform the functions of cleaning up cellular debris and waste, and destroying invaders. When neutrophils are activated, they secrete a number of extremely toxic substances, in order to kill whatever type of invader they have encountered. These substances are thought to be a major reason that inflammation causes chronic disease. They are toxic not only to bacterial cells, but to human cells as well; when secreted in large amounts, they can lead to symptoms as well as to chronic diseases. The term "food allergy" refers to the production of immunoglobulins in response to the consumption of particular foods. One commonly used test for food allergies measures the levels of antibodies in the blood that respond to potential food allergens. The patient's blood is exposed to hundreds of different food proteins, and the test looks for binding of the patient's immunoglobulins to these proteins. If the patient has antibodies against a food, it indicates that the immune system is treating that food as though it were an invading microbe, and is attacking it as such. A patient who has a food allergy will generally "feel sick" soon after consuming the allergenic food. Sometimes, the food allergy is so severe that the patient's airway can become blocked by the inflammation triggered by the food; for most patients, consumption of the food is not fatal, but does cause unpleasant symptoms that may affect the patient's quality of life.

For some people, eating a particular food leads to dysfunction in the body, but does not directly lead to the secretion of immunoglobulins; rather, the inflammation occurs through the innate immune system. In this case, rather than a food allergy, the patient would be said to have a "food intolerance." Food intolerance can be much more difficult to diagnose than food allergy, in part because the patient may not experience symptoms soon after consuming the food, but rather hours or days later. When the patient's blood is exposed to allergens, no binding of immunoglobulins would be detected, and so traditional food allergy tests do not detect food intolerance. Instead, it's necessary to look for other markers of immune system activation in order to detect food intolerance in the laboratory.

The Alcat Test

The Alcat test is a blood test that was developed in order to look for food intolerance. This test looks at the entire population of leukocytes present in the blood. Recall that only a small percentage of leukocytes are lymphocytes that produce antibodies; a typical food allergy test would look only at this small population of cells. The Alcat test, however, includes all of the patient's leukocytes.

When a neutrophil (or other granulocyte) encounters an antigen that activates it, it releases the toxic substances it has stored inside its granules. As these are released, the cell changes size, becoming significantly smaller. Sometimes, the cell is lysed (broken open) by this event. (Pus or thick mucus is made up primarily of neutrophils that have completed their mission and then died.) The Alcat test compares the size and number of leukocytes present in the patient's blood at baseline with the size and number of leukocytes after the blood has been exposed to a particular antigen. If the antigen caused a significant degree of activation of leukocytes, there will be detectable decreases in the number of cells and the average size of each cell. The test classifies each antigen as "non-reactive," meaning that no change in these measurements was detected; "reactive," meaning that a large change was detected; or "borderline," meaning that a small change was detected. This classification can then be used by the patient in deciding which foods to consume. The recommendation is to consume only non-reactive foods for a period of time, rotating in the borderline foods; eventually, the patient can try gradually re-introducing reactive foods, as the immune system may no

longer be sensitive to these foods after a period of "rest" from them. Some foods may need to be avoided permanently.

Understanding the science behind the Alcat test is useful. However, what you really want to know is whether the Alcat test can help you heal from your chronic ailments. There have been several scientific studies of the Alcat test that indicate its potential utility in helping a patient heal disease through the avoidance of foods causing inflammation.

Two studies conducted in the United Kingdom in the 1980s indicated that the Alcat test could be useful to patients in real-world situations. In both of these studies, patients were recruited who had chronic health conditions that hadn't been adequately treated by conventional medicine. They recorded their symptoms at baseline, and then received an Alcat test. For two weeks, they completely avoided any food to which they reacted on the test. Then, for the next six weeks, test foods were rotated into the diet; some were foods that the patients had been reactive to, and others were foods to which patients had been non-reactive. This was a placebo-controlled study, meaning that neither the patients nor their doctors were aware of whether the foods being added to the diet were reactive or non-reactive on the patient's Alcat.

Some of the patients dropped out of the study because they simply could not tolerate bringing particular foods back into the diet; their symptoms were too bad. 90% of such patients had reacted on the Alcat to the food they couldn't tolerate. Of those who remained in the study, a majority had improvement in their symptoms when they followed the diet indicated by the Alcat. Symptoms as diverse as migraine, eczema, and hay fever were each improved by 70% or more. There was a significant correlation between the foods to which patients were reactive on the test, and the foods that worsened their symptoms when consumed (over 80%; given the number of factors in a person's life that could affect symptoms, such as stress, exercise, sleep, and others, a 100% correlation would not be expected).

Studies following this one and continuing up to the present day have indicated that many patients experience improvements in their symptoms by using the results of the Alcat to choose their diets. Over half of patients with irritable bowel syndrome (IBS) experienced improvement; given that conventional medicine has very little to offer these patients, this is a significant number. Other studies have shown significant improvements in migraine, skin conditions such as eczema, gastrointestinal conditions, allergic rhinitis (hay fever), chronic fatigue. In these studies, at least 50% of patients reported improvement in their health conditions after following the Alcat-recommended diet.

Currently, Yale School of Medicine is conducting research to further understanding of the complex pathways underlying the Alcat Test.

Platinum Comprehensive - 200 Food Panel

Acorn Squash	Almond	Amaranth	Anchovy	Apple	Apricot
Artichoke	Asparagus	Avocado	Baker's Yeast	Banana	Barley
Basil	Bay Leaf	Beef	Bell Pepper Mix (green	red	yellow and orange peppers)
Blackberry	Black Beans	Black Currant	Black Pepper	Black-Eyed Pea	Blueberry
Bok Choy	Brazil Nut	Brewer's Yeast	Broccoli	Brussels Sprout	Buckwheat
Buffalo	Butternut Squash	Cabbage	Candida Albicans	Cane Sugar	Canola Oil
Cantaloupe	Caraway	Cardamom	Carob	Carrot	Casein
Cashew	Catfish	Cauliflower	Cayenne Pepper	Celery	Chamomile
Cherry	Chicken	Chicken Liver	Chickpea	Chili Pepper	Cinnamon
Clam	Clove	Cocoa	Coconut	Codfish	Coffee
Coriander	Corn	Cottonseed	Cow's Milk	Crab	Cranberry
Cucumber	Cumin	Date	Dill	Duck	Egg White
Egg Yolk	Eggplant	Endive	Fava Bean	Fennel	Fig
Flaxseed	Flounder	Fructose	Garlic	Ginger	Gluten/Gliadin
Goat's Milk	Grape	Grapefruit	Green Pea	Haddock	Halibut
Hazelnut	Honey	Honeydew Melon	Hops	Iceberg Lettuce	Jalapeno Pepper
Kale	Kelp	Kidney Bean	Kiwi	Lamb	Leaf Lettuce
Lemon	Leek	Lentil Bean	Licorice	Lima Bean	Lime
Lobster	Macadamia Nut	Mackerel	Mahi Mahi	Malt	Mango
Maple Sugar	Millet	Mung Bean	Mushroom	Mussel	Mustard Seed
Navy Bean	Nectarine	Nutmeg	Oat	Okra	Olive
Onion	Orange	Oregano	Oyster	Papaya	Paprika
Parsley	Parsnip	Peach	Peanut	Pear	Pecan

Peppermint	Pineapple	Pine Nut	Pinto Bean	Pistachio	Plum
Pomegrana te	Pork	Portobello Mushroom	Psyllium	Pumpkin	Quinoa
Radish	Raspberry	Red Beet/Beet Sugar	Rice (Brown/White)	Romaine Lettuce	Rosemary
Rye	Safflower	Saffron	Sage	Salmon	Sardine/Herring
Scallions	Scallop	Sea Bass	Sesame	Shrimp	Snapper
Sole	Sorghum	Soybean	Spelt	Spinach	Squid
Strawberry	String Bean	Sunflower	Sweet Potato	Swiss Chard	Swordfish
Tapioca	Теа	Thyme	Tilapia	Tomato	Trout
Tuna	Turkey	Turmeric	Turnip	Vanilla	Veal
Venison	Walnut	Watercress	Watermelon	Wheat	Whey
White Potato	Wild Rice	Yellow Squash	Zucchini		



COMPREHENSIVE FOOD PANELS



Platinum Comprehensive: \$985 □ 320 items

- □ 200 Food Panel
- □ 50 Functional Foods and Medicinal Herbs
- 20 Food Additives/Colorings
- □ 10 Environmental Chemicals
- □ 21 Molds
- □ 20 Antibiotics/Anti-Inflammatory Agents



Comprehensive Wellness 1: \$885

- □ 200 Food Panel
- 20 Food Additives/Colorings
- □ 10 Environmental Chemicals
- □ 21 Molds



Comprehensive Wellness 2: \$785

- 200 Food Panel
- 20 Food Additives/Colorings



Comprehensive Wellness 3: \$685

- 200 items
- 150 Food Panel
- 20 Food Additives/Colorings
- □ 10 Environmental Chemicals
- □ 21 Molds



- Comprehensive Wellness 4: \$585
- □ 150 Food Panel
- 20 Food Additives/Colorings



Comprehensive Wellness 5: \$525

- 150 items
- □ 100 Food Panel
- 20 Food Additives/Colorings
- □ 10 Environmental Chemicals
- □ 21 Molds



Comprehensive Wellness 6: \$425

- □ 100 Food Panel
- □ 20 Food_Additives/Colorings

Food Panels Only: \$300- \$595

ALCAT FAQ



How long will it take to receive my ALCAT Test Results?

Dr. Perkins will receive your results within 7-10 business days. You will be called in once we receive your results for a 20 minute Q & A session, at that time Dr. Perkins will go over all your results with you.

Is this a food allergy test?

The ALCAT Test is NOT a food allergy test. It is designed to test for intolerances, which have a delayed reaction.

Is the ALCAT Test covered by insurance?

ALCAT testing is not a covered Chiropractic benefit with any insurance company.

Is this a blood test?

Yes

Is fasting required before taking the ALCAT Test?

No

What do the asterisks on the ALCAT Test results mean?

An asterisk represents your mild intolerances.

What do the blue boxes on the ALCAT Test results mean?

The blue boxes include items that should be removed from the diet due to reactions with other items.

I know I have an allergy to a food. Why is it on my acceptable food list/Green Column?

This is due to the fact that the ALCAT Test detects sensitivities/intolerances and NOT allergies.

How much support is available after testing, with my Healthcare Provider or ALCAT lab?

Each test done through Dr. Perkins has access to a 20 minute post test review. In addition, each test result comes with a 52 page booklet titled Understanding Your Alcat Test Results.

Where do I have my sample drawn?

The nurse will meet you here at the office (Perkins Chiropractic). We must set up an appointment with her 3-4 days prior to having the blood drawn.

What happens if I cancel my test?

There is a \$50 processing/shipping fee for all cancelled tests.

What happens if I do not select a panel on the requisition form?

If no panel is selected, the Platinum Comprehensive will be run and billed as a default panel.

