



Rocky Mountain Analytical
Changing lives, one test at a time

Food Sensitivity

Information for Patients

Food Allergy or Food Sensitivity?

In a food reaction, the immune system reacts by releasing cells called antibodies. Foods that cause antibodies to be released are called antigens or allergens. Two types of antibodies commonly produced in response to foods are IgE (immunoglobulin E) and IgG (immunoglobulin G). Food allergies and food sensitivities differ by the type of antibody produced and the speed of the reaction. Food allergy is an immediate reaction caused by the production of IgE antibodies, while food sensitivity is a delayed reaction caused by the production of IgG antibodies to specific foods.

Food Allergy IgE Reactions - Immediate

IgE reactions generally occur within minutes of eating a reactive food and can, on rare occasions, be life-threatening (e.g. peanut allergies). Skin eruptions (hives, eczema), breathing and digestive problems are also common IgE reactions. After first time exposure to an allergen, the body remembers what the allergen looks like and keeps a supply of IgE ready for immediate release if it sees that allergen again. Referral to a specialist is recommended in the case of serious food allergies (ie: difficulty breathing, anaphylaxis).

Food Sensitivity IgG Reactions - Delayed

IgG reactions take hours or days to develop, making it difficult to determine the food cause without testing. In an IgG reaction, the IgG antibodies attach themselves to the allergen and create an antibody-allergen complex. These complexes are normally removed by special cells called macrophages. However, if they are present in large numbers and the allergen is still being consumed, the macrophages are unable to remove all the complexes. The allergen-antibody complexes accumulate and are deposited in body tissues. Once in tissue, these complexes release inflammation causing chemicals, which can contribute to a variety of diseases and health conditions.

Delayed food reactions are IgG antibody reactions (food sensitivities) that occur hours to days after a food is consumed. The inflammatory chemicals released with antibody-antigen complexes may have the following effects:

Systemic

Fever, fatigue, chills, sweating and feeling weak.

Skin

Itching, redness, swelling, and rashes (including eczema).

Brain

Mood and memory disturbances and behavioural problems.

Lungs

Bronchitis and asthma symptoms.

Musculoskeletal

Joint pain, muscle stiffness and swelling.

Digestive tract

Nausea & vomiting, diarrhea, abdominal pain, and bloating.

Conditions associated with Food Sensitivities

Digestive disorders: Conditions like irritable bowel syndrome (IBS) and Crohn's disease have been linked to IgG food reactions. Research has shown that elimination of IgG reactive foods can alleviate IBS symptoms.

Migraines: A 2007 research study found that 43/65 patients with migraine headaches had complete remission of headaches after one month of eliminating reactive foods. Another study in 2010 found a significant reduction in the number of headache days and migraine attacks with elimination of reactive foods.

Mood/attention deficit disorders: Deposition of antibody-allergen complexes in nervous system tissues may contribute to hyperactivity, depression, anxiety, inability to concentrate and other mood disorders. There is some evidence that eliminating IgG food allergens improves attentiveness in children.

Weight gain: Antibody-allergen complexes in tissue cause inflammation, which leads to fluid retention and weight gain. To fight inflammation, the body releases a chemical called ghrelin, which also happens to be an appetite stimulant. Thus, IgG food reactions can cause weight gain in two ways: fluid retention and increased appetite.

Why Test Food Sensitivities?

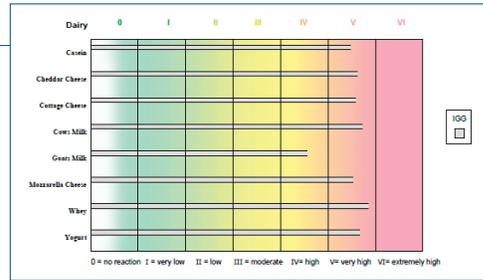
- Because hours or days can pass between the time a reactive food is consumed and the occurrence of a reaction occurs, testing is virtually the only way to determine which foods are responsible for the reaction.
- IgG reactions frequently occur to commonly consumed foods such as dairy, wheat, eggs, yeast, pork and soy.

Information is for educational purposes only. It is not meant as medical advice and any treatment decisions should be made with the knowledge or consent of your healthcare professional.

Food Reactions

Test Results

A sample graph of IgG results appears at right. The graph clearly shows reactions to each food: the longer the bar, the greater the reaction. Bars that appear in the red shaded areas are foods that are considered highly reactive. Thus, it is easy to see at a glance which foods are problematic for you. Knowing the foods to which you react is an important first step to achieving better health.



Eliminating Reactive Foods

Having a food sensitivity test is a first step towards improving your health. Once you receive your results, your healthcare professional will help you formulate a plan to eliminate the problem foods from your diet. Most people see improvement of symptoms within a few weeks of eliminating the reactive foods. However, it is important to understand that removing reactive foods from the diet can sometimes result in withdrawal symptoms like headaches, tiredness, irritability and hunger.

Good health has a lot to do with maintaining balance; the right balance of work and play, the right balance of nutrients in the diet, and the right kinds of foods.

Undiagnosed food sensitivities may contribute to symptoms and biochemical changes that may contribute to illness.

Rocky Mountain Analytical is committed to offering tests that identify food reactions and other imbalances - so they can be corrected before disease develops!

Why Test?

How "Leaky Gut" Contributes to Food Reactions

Leaky gut syndrome is caused by inflammation in the gut lining. Inflammation can be caused by food allergies, stress, certain drugs, and alcohol. An inflamed gut lining causes food particles to leak through into the abdomen. The presence of food particles in the abdominal cavity causes the body to produce immunoglobulins to attack them, because it thinks the food particles are invaders. Therefore, a test report that shows multiple food reactions to foods regularly eaten may be an indication of *leaky gut*. If so, your healthcare professional may suggest treatments for your digestive system in addition to dietary changes.

Rocky Mountain Analytical was founded in 2002 with a mission to offer tests that focus on early identification and prevention of disease.

Rocky Mountain Analytical is an accredited medical laboratory located in Calgary, Alberta. Accreditation means tests performed by Rocky Mountain Analytical are regularly reviewed for quality, accuracy and reproducibility by the College of Physicians & Surgeons of Alberta.

Ask your healthcare professional whether a test is right for you.

About Us

Unexpected Results

- If you have not eaten a particular food for many months, you are unlikely to still have many antibodies to that food. In that case, a lack of reaction is most probably due to lack of exposure and does not necessarily mean the food is non-reactive.
- Sometimes reactions appear for foods seldom or never eaten. For example: a child reacting to coffee. This is usually due to cross-sensitivity with a related food, or may result from inadvertent exposure to that food (hidden ingredient in packaged food item or sauce).
- Non-immune food reactions: Food reactions can also arise from a lack of digestive enzymes or stomach acid, chemicals naturally present in food and artificial additives. For example: lactose intolerance is due to lactase enzyme deficiency; histamine is found in wine, cheese, spinach and tomatoes; and MSG is an additive that can produce symptoms in some people. These are not immune reactions, and therefore will not result in antibody production.
- Food reactions can also arise from previous negative experiences with a specific food (e.g. food poisoning). It is possible to have a physical reaction to subsequent exposures to that food.



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