

LAB TESTING INFO

**Mucosal Barrier Screen
Test Kit #304**



DIGESTIVE DISORDERS & GUT REPAIR

You are what you ABSORB!

You can have the greatest diet of all time, but if your digestive system is not up to snuff, forget about it!!!

More than 60 million Americans suffer from some type of digestive disorder. Signs and symptoms include:

- Excessive belching & gas
- Constipation & Diarrhea
- Depression & Anxiety
- Brain fog
- Abdominal pain & bloating
- Heartburn/Acid Reflux
- Sweet cravings (especially at night)
- Night sweats

We are equipped with several test kits to help us find the root cause of your digestive issues.

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Overview

The Intestinal Barrier Function Screen uses a single saliva sample to assess the level of secretory immunoglobulin A (sIgA) and the levels of free IgA and IgM to combined dietary proteins (wheat/gliadin, corn, soy, cow's milk, egg); aerobic bacteria (*Escherichia coli* and *E. enterococcus*); anaerobic bacteria (*Bacteroides fragilis* and *Clostridium perfringens*); *Candida albicans* yeast.

Background

The lining of the gastrointestinal tract, from the mouth to the anus, is covered by a mucosal barrier, which provides our first line immune defense against pathogens and a mechanism for proper processing of food antigens. The mucosal barrier contains specific immune defenses including mucosal antibodies. A healthy mucosal barrier defense contains sufficient antibodies and responds to normally encountered antigens and deals with them appropriately. All of the dietary proteins, yeasts, and bacteria used in this test are normally found in the human body or diet. IgA is the predominant antibody quantitatively in the mucosal immune system.

Physiology

This test measures total sIgA production which helps determine whether there is an appropriate mucosal immune response.

Secretory IgA Level

This is an important indicator of the strength of mucosal immunity and can help to establish the validity of other Ig values.

If total sIgA is elevated an infection exists and further testing is recommended to determine its type.

If total sIgA is low it can indicate compromised mucosal immunity, however, it is a measurement at a point in time; it needs to be looked at over time and correlated with cortisol rhythm and lifestyle.

IgA and IgM to antigens in the Dietary Protein, Yeast, Aerobic & Anaerobic Bacteria Compartments

The immune system should have “normal” recognition of these antigens and process them appropriately.

If all reported results are < ref range , then the mucosal barrier is totally shut down, regardless of the level of sIgA. This means that there is effectively no mucosal immune response to antigens that present and also indicates severe intestinal permeability “leaky gut”.

Assessing the levels of antibodies to foods is important in determining the cause of possible chronic gastrointestinal inflammation. Such inflammation can be accompanied by symptoms, or it can be subclinical. If immune markers to dietary proteins are elevated, it is important to do further testing to determine which food the mucosal immune system is reacting to.

If IgA is elevated in the yeast compartment it means that *Candida* is attempting to invade the intestinal mucosa.

Determining the levels and ratio of bacterial groups to each other helps assess digestive and absorptive function. The ratios of the levels of the same specific immune marker for aerobic and anaerobic bacteria (i.e. IgA aerobic/IgA anaerobic) should be about one to one. If these ratios are >2 or <0.5, then a dysbiotic condition exists. Specific infections should be ruled in or ruled out. However, dysbiosis can result from a course of antibiotic therapy without proper efforts to recolonize the gut.

If one or more of the antibodies in each compartment (dietary proteins, yeast, aerobic bacteria and anaerobic bacteria) is elevated then the gut is leaky and proteins (antigens) are entering the general circulation.

Your First-Line Immune Defense

The mucosal barrier—your first-line immune defense—refers to all of the mucous membranes that comprise the primary interface between the external environment and

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the internal environment of the body. This mucosal barrier lets beneficial things into your general circulation and keeps harmful ones out.

To clarify this, an analogy can be made between the earth's ozone layer and your body's mucosal barriers. The ozone layer lets the right amount of sunlight through, sustaining life on earth; your mucosal barriers allow nutrients through, sustaining your health. The ozone layer prevents harmful radiation from getting through; the mucosal barriers prevent infectious agents and allergens from invading your body. But just as our planet has a damaged ozone layer, many of us have damaged mucosal barriers. Consequently, we are not protected from harmful substances such as parasites, viruses, and bacteria.

No disease or symptom needs to be present to warrant protecting the mucosal barrier of the intestines; keeping it healthy helps to keep us strong and disease-resistant. Strengthening the gut lining is applicable to relieving and avoiding the impacts of asthma, arthritis, food allergies, ulcers, Crohn's, ulcerative colitis, celiac disease, autoimmune diseases, alcoholism, chronic fatigue, joint pain, migraines, diarrhea, parasitic infections, dysbiosis, candidiasis, multiple sclerosis, and diabetes, all of which can have their origin in harmful substances penetrating through the intestines.

Clinical Use

The evaluation of the intestinal mucosa as a selective filter can be regarded as an essential tool in assessing overall health status. The Intestinal Barrier Function Screen (BHD #304) can be used as an immunological indicator of intestinal mucosal integrity and an index of gastrointestinal physiology. This test is especially effective for differential diagnosis in complex and refractory cases. It can assist in both directing further testing and tailoring therapeutic protocols more precisely. It also is sufficiently comprehensive to be used either in initial screening or as follow-up.

Conditions Assessed

Conditions that may be assessed include an abnormal ratio of aerobic-to-anaerobic bacteria, pathogen or yeast overgrowth, intestinal mucosal immune dysfunction, systemic immune deficiency, autoimmunity, food allergy, gluten enteropathy, malabsorption, and "leaky gut."

Logical Sequence of Testing

The logical sequence of using this test as an initial or a follow-up test is determined by a variety of individual considerations, including the patient's chief complaint, the array of signs and symptoms, the chronicity of the condition, the tests previously taken, and the judgment of the practitioner.

Require Material From Client

Medium: Three saliva collections on same day in single vial. Seven Intake forms that must be filled out to fully understand your current health. Lab Fee: \$250

Notes

Lab fees and cost of supplements are not included in our consulting rates. They are paid separate, and directly to the laboratory.

For many of our clients, addressing only the diet and lifestyle factors can be enough to achieve our objectives. However, some clients must go deeper beneath the surface, making functional lab testing necessary.

*We do **NOT** diagnose or treat disease. Our focus is on **PREVENTION**. We Identify and repair malfunctions in a system and bring you back to **OPTIMAL** health. Our goal is to restore **YOUR** body back into balance and harmony the way it was **DESIGNED** to be.

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Factors affecting mucosal immune system resulting in intestinal barrier dysfunction, autoimmunity and nervous system abnormalities

Dietary Proteins & Peptides



Antibodies



Drugs & Xenobiotics



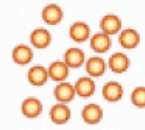
Physical Stress



Infections



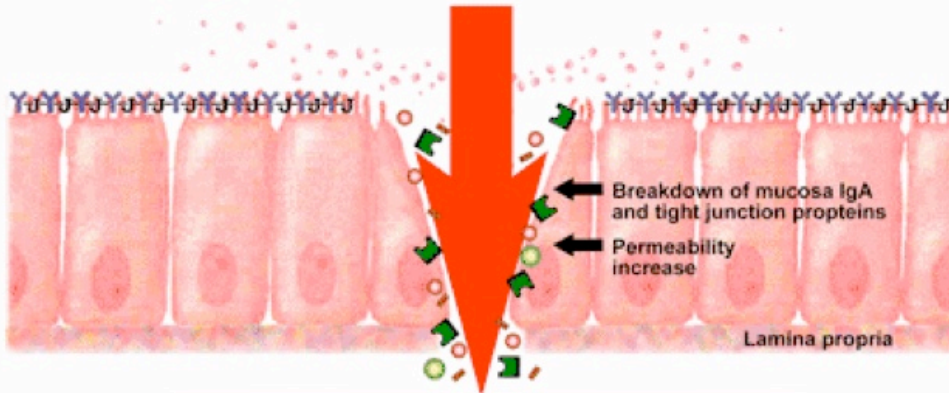
Cytokines



Neurotransmitters



Enzymes



INTESTINAL BARRIER DYSFUNCTION

FOOD ALLERGY & INTOLERANCE

IMMUNE SYSTEM ABNORMALITIES

AUTOIMMUNITY

INFLUENCE ON THE BLOOD-BRAIN BARRIER AND NEUROAUTOIMMUNITY