



Candida and its Effects

What is *Candida* and How to Test for it: Organic Acids and IgG Food Allergy Tests

What is *Candida*?

Candida albicans is a yeast that occurs naturally in the gastrointestinal tract, mouth, throat and genitals. In those with a healthy immune system, yeast is tolerated and causes little harm. However, if conditions in the body disrupt balance, beneficial bacteria can be overwhelmed and *Candida* can overgrow or change into an invasive form.

Large colonies of *Candida* can produce a buildup of toxins in the body. If it takes an invasive form, *Candida* produces threadlike hyphae that work through the gut wall leaving microscopic holes, causing "leaky gut" syndrome. Sometimes, *Candida* can enter the bloodstream resulting in systematic candidiasis, which can become life-threatening to cancer and AIDS patients.

Many clinicians have observed that *Candida* overgrowth contributes to chronic illnesses such as fibromyalgia, migraines, irritable bowel syndrome, and more. Symptoms vary and can affect all areas of the body and, in some circumstances, even incapacitate the individual.

The use of oral antibiotics, hormones, or steroids are the most common triggers of all GI imbalances that can cause *Candida* overgrowth. High sugar and starch diets also encourage *Candida* growth. Diabetics are at particularly high risk.

New research has revealed a relationship between health of the gastrointestinal tract and overall health. Microbial imbalance can worsen behavior disorders, hyperactivity or

aggression, and cause fatigue. Evidence is mounting that dysbiosis impairs the immune system and contributes to food allergies, digestive disorders, nutritional deficiencies, and cognitive function.

Testing for *Candida* Overgrowth

The Great Plains Laboratory (GPL) recommends the following tests to assess *Candida* antibody levels and *Candida* growth:

IgG Food Allergy Test

The Great Plains Laboratory recently added *Candida* to our IgG Food Allergy Test. High levels of IgG antibodies to *Candida* have been found in patients who reported many symptoms of yeast overgrowth.

In addition to *Candida* antibody levels, this test measures IgG antibodies to 93 different foods. While IgG antibodies are not associated with "classic allergy" symptoms, these antibodies can contribute to food sensitivities. When problem foods are identified and eliminated from the patient's diet, symptoms like irritable bowel syndrome, autism, AD(H)D, etc. can improve, according to numerous clinical studies.

The IgG Food Allergy Test with *Candida* is available as a serum or dried blood spot (DBS) collection for patients and practitioners. The DBS specimen can be collected at home and shipped to our laboratory for analysis.



Organic Acids Test

The Organic Acids Test (OAT) provides a metabolic "snapshot" based on the products the body discards through the urine. These small, discarded organic acid molecules are byproducts of human cellular activity, the digestion of foods, and the metabolism of gastrointestinal flora. At certain levels, organic acids in urine may be indicators of toxicity or "markers" of the function of metabolic pathways. Levels of yeast or gastrointestinal bacteria metabolites are compared to normal levels of human metabolites, providing an assessment of yeast and bacterial activity.

Additions to the new and improved OAT has increased the number of tested compounds to 74. The new compounds detected may result from variations in vitamin and hormone metabolism, cellular energy production, intestinal wall integrity, neurotransmission, and muscle function.



Testing for *Candida*



Specimen Requirements

IgG Food Allergy Test

Serum: 1 mL serum in a gold-topped SST or in a royal blue-topped no additive tube.

Dried Blood Spot: Five full circles of dried blood on the protein saver card required.

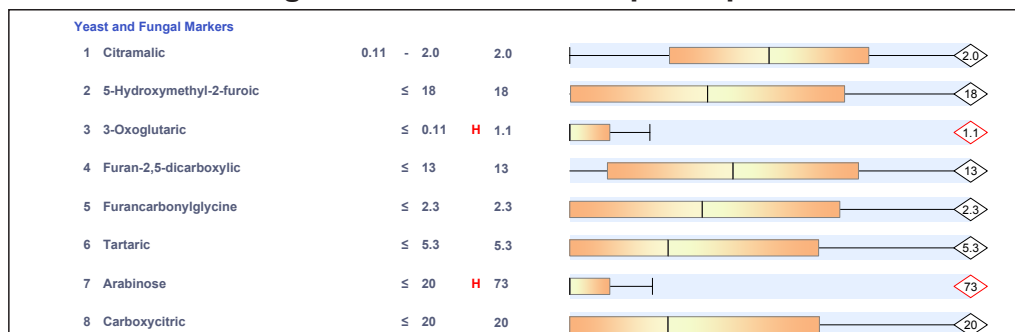
Organic Acids Test

10 mL first morning urine before food or drink is suggested. Patient should avoid apples, grapes (including raisins), pears, cranberries and their juices 24 hours prior to specimen collection.

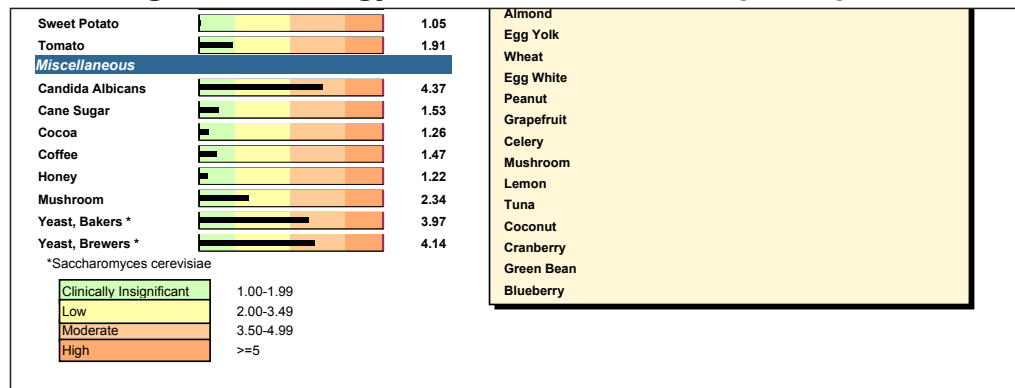
Testing Procedure

1. Contact GPL via phone, fax, e-mail, or on our website to order a test kit.
2. Fill out the Test Requisition Form, have this form signed by a medical practitioner.
3. Indicate the payment method or insurance information on the Test Requisition Form.
4. Follow the instructions to collect the sample.
5. Send the sample with the paperwork in the pre-paid express overnight envelope included in the test kit (shipping cost is included in the price for U.S. clients).
6. The results will be mailed with a detailed explanation to the patient and medical practitioner in approximately one to three weeks after receiving your sample, unless the practitioner has specified otherwise.
7. A free phone consultation with our nutritional consultant is available to practitioners and patients upon request.

Organic Acids Test - Sample Report



IgG Food Allergy Test w/ Candida - Sample Report



Recommended for the following disorders:

- AD(H)D
- AIDS
- Alzheimer's Disease
- Arthritis
- Autism Spectrum Disorders
- Chronic Fatigue Syndrome
- Colitis & Crohn's Disease
- Depression
- Diarrhea/Constipation
- Down Syndrome
- Fibromyalgia
- Movement Disorders
- Multiple Sclerosis
- OCD
- Psychoses
- Schizophrenia
- Tic Disorder
- Tourette Syndrome



Testing for Candida