

Digestive Wellness

Digestive illnesses are epidemic in the United States. Treating them is a multi-billion dollar industry and it accounts for near 70 percent of all doctor visits. Medications for GI disorders are among the top pharmaceutical bestsellers.

The digestive system is now considered our “second brain.” It is home to most of our immune system. It has its own nervous system that can continue to function independent of our central nervous system. It communicates with every cell in our body. It houses at least 10 times more microbes than we have cells in our body. These microbes have 100 times more DNA than all the cells in our body. They exchange information with our DNA. They make vitamins, metabolize toxins and hormones, and fight infection. These microbes are now called “the other Organ.”

The connection between the GI tract and the rest of the body is now well established. A healthy gut depends on healthy balance of good bacteria. Composition of gut bacteria depends on the kind of food we feed them. Processed junk food, genetically modified foods, pesticides, antibiotics and even stress may contribute to a buildup of bad bacteria and gastric illnesses. On the other hand, input of real food without chemicals and genetic modification promotes a healthy gut and healthy body. Imbalance in gut ecology and function can promote various illnesses throughout the body, as different as asthma, skin disorders, autoimmunity, and even obesity and mental dysfunction.

In order to identify the root causes of many gut-related illnesses, several laboratory techniques are used. They include the following:

An array of breath tests is utilized to identify the presence of pathogens in either stomach or small intestine. Breath tests can also be used for identification of carbohydrate intolerance such as fructose intolerance. These tests are either done at local labs or are administered at home by the patients using specialized kits.

Food sensitivity tests are blood tests that show delayed immune reactions to food particles. Samples are drawn in town in one of the local labs and are shipped to selected out-of-state specialized labs.

To identify parasitic and microbial infection in the large intestine, stool samples are collected by patients and shipped for analysis to labs specializing in new proteomic technology that allows for far more accurate identification of pathogens based on specific proteins they produce. This new technology, called MALDI-TOF MS, allows even identification of anaerobic bacteria that are extremely hard to grow in laboratory settings.

An extended celiac panel also is used either through local labs or out-of-state labs to identify presence of various anti-bodies in the blood of celiac patients. Organic Acids panel is sometimes ordered to identify microbial organic acids excreted in the urine of patients. This is the most accurate way to identify presence of candida albican in the body.

Urine mycotoxin analysis is sometime used in the case of patients who have been exposed to toxic mold and complain about GI consequences of such exposures. The urine mycotoxin lab is also used in the context of other non-GI disorders that might be linked to toxic mold exposure.

Nutritional status of patients can be assessed using a number of modalities such as Organic Acids panel, Red Blood Cell values of specific nutrients, Whole Blood analysis, Fatty Acid and Amino Acid testing, and gut permeability testing.

Histamine Intolerance and Mast Cell Activation are evaluated by testing blood levels of Diamine Oxidase as well as using an elimination diet.

Functional medicine is data-oriented and evidenced-based medicine. In order to correctly diagnose GI pathologies, we are contracted with a number of laboratories that includes Doctor's Data, Genova Lab, Cyrex Lab, Real Time Lab, Dun Woody Lab, Great Plains Lab, Common Wealth Lab, and Quick Silver Lab.