

Understanding Vitalan Stool Diagnostics

Vitalan Stool Diagnostics are progressive and up-to date for the year 2007 as well as different from our competitors by *completeness, therapy recommendations and confidence in our precision.*

Vitalan offers both panels and single parameters.

The reason for *panels* is the complexity of the intestinal ecology, the homeostasis between the multiple parts influencing and depending on each other. It is looking at the whole picture at once to obtain the best and most useful information.

The reason for *single parameters* is to offer both problem solutions for some patients with isolated individual complaints and for follow-up of previous testing.

Your *advantages* by Vitalan Lab Reports are: *Background-Information* about the *significance* of deviations of individual parameters, the *relevance* of changes in the relationships between various parameters, the Summary or *Conclusion* (Lab Diagnosis) and *Individual Therapy Recommendations* – the real *Problem Solution* especially for the severely ill patient and those who have been treated without success by other means without the benefit of Vitalan testing.

Intestinal Health Panel

Stool Diagnostics for the Intestinal Health Panel includes the *most important parameters* allowing an insight into the intestinal ecology involving: the intestinal microflora, the results and effectiveness of the patient's nutrition and digestion, the local body defense mechanisms and the integrity of gut mucosa. This panel focuses on the *most common abdominal complaints* like gas, bloating, pain, constipation, diarrhea and gives information about the most common causes of these complaints, like disorders of gut flora (dysbiosis, lack of beneficial and/or overgrowth of harming bacteria and yeast), unbalanced diet (e.g. too much fat and/or less fiber), digestive disorders (insufficient bile and/or pancreatic enzymes) and weakness of local body defense.

Stool Flora including Yeast and Bacteria

Vitalan routinely cultivates *Beneficial Bacteria* (anaerobes like Bacteroides, Bifidobacteria, Lactobacilli and aerobes like E. coli, Enterococci), as well as potentially *Harmful Bacteria* (e.g. anaerobes like Clostridia for Putrefaction and aerobes like Hemolytic E.coli for Inflammation) and *Yeast* (e.g. Candida, Geotrichum). All these are *counted exactly* by Colony-Forming-Units per Gram of Stool. The relationships between various flora and digestive markers and their relative balance/imbalance to each other are evaluated. Eubiosis – Dysbiosis, Fermentation – Putrefaction and Mycosis agents are noted.

Digestive Residues

Vitalan analyzes Digestive Residues like *Fat, Protein, "Sugar" (Carbohydrates), Fiber and Water.* This exact determination in Grams Percent (per 100 Grams Stool) shows the adequacy of Nutrition and gives valuable information about the Balance of Nutrition, completeness of Digestion and adequacy of Absorption of Foodstuffs. Vitalan's advanced testing in this area of stool analysis provides a total overview of diet and the body's ability to digest and assimilate.

Digestive Function

Vitalan determines Digestive adequacy by scrutiny of substances like *Bile Acids* (for Fat Emulsification and Digestion) and *Pancreatic Elastase* (for Pancreas Exocrine function and overall Digestive capability). Results show Completeness or Weakness of Digestion as a cause of Steatorrhea (stool with high fat content), of Azotorrhea (high protein content), of Saccharrhea (high "sugar" content), of Amylorrhea (high fiber content), of Diarrhea (high water content) and/or of Constipation (low water content).

Local Body Defense

Vitalan analyzes the *Secretory Immunoglobuline A* as indicator for the Local Body Defense in the Gut Mucosa. Values show Resistance capability or Weakness of this important part of the immune system as a cause or predisposition of overgrowth of Harmful Bacteria and/or Yeast as well as Recurrent Infections.

Occult Blood

Vitalan analyzes the not visible blood, to find out bleeding from ulcers, inflammation or carcinoma.

Evaluation

All these Findings, individual or combined, can be the cause of severe Abdominal Complaints. To get rid the body of these and reinstate a beneficial environment in the gut, the Vitalan Report shows *Individually Therapy Recommendations.* These are holistic (meaning body, mind and spirit considered together) and naturopathic (offering gentle nature cure and plant drugs), focussing on cause determination and elimination of cause instead of symptomatic treatment.

Intestinal Health & Inflammation Panel

This Panel *includes* the Intestinal Health Panel and more intensive and specific testing for acute and chronic inflammation to establish sophisticated causes of abdominal complaints like food intolerance and allergy, exhaustion, weakness and chronic diarrhea.

Histamine

A naturally occurring substance released by the immune system after being exposed to an allergen, Histamine is also released from injured cells and acts as a vasodilator. Elevations in Histamine indicate one or more of the following: Food Intolerance (caused by Food Additives like MSG, coloring agents and preservatives), Food Allergy (more in depth testing for a variety of food allergies can be performed through the blood), Drug Side Effects, Inflammation, Stress and Alcohol Drinking.

Serotonine

A naturally occurring substance released by the “gut brain” as a neurotransmitter, named as “well-being hormone”. Low levels are discussed to occur in depressive patients, high levels are discussed to occur in food allergic patients (e.g. late onset) known to eat harming foodstuff because of first developing of “well-being” before of symptoms.

Defensine

Endogenous peptides with antibiotic activity, produced by gut epithel. They protect the mucosa from being penetrated by gut germs, specially gram-negative bacteria. Progressive stool diagnostics respects the balance between sIgA and Defensine. Low levels of both parameters indicates weakness of local body defense, high levels of both indicates overreactions while different levels indicates possible compensations. Fine observation is needed for specific and successful therapy.

Hemoglobin

Hemoglobin is a component of blood useful in establishing bleeding from Ulcers, Polyps and/or diffuse Inflammation. It's 100 Times more sensitive than “Occult Blood” and is not influenced by type of food intake. Every instance of Hemoglobin elevation (bleeding) needs to be investigated further to determine exact cause using Ultrasound or Endoscopy, etc.

Single Parameters

***Helicobacter pylori* Antigen**

This main cause of Gastritis, Heartburn and Stomach Cancer, occurs in every other Person – approximately 50% worldwide, in Germany it is believed that 30% of population are affected. This antigen test can assist in differentiating Stomach Complaints from other causes (like Acidification following Alcohol, Coffee, Cigarettes and Stress), determination of H.p.-Antigen in Stool is more reliable and economical than Gastroscopy or Breath-Test.

***Antigliadine* Antibodies**

Antigliadin Antibodies shows Hypersensitivity to Gliadin or Gluten, a part of Wheat (in the extreme it is called Celiac Disease). Because we all eat Wheat, our Body often reacts against this and develops Inflammation of Gut Mucosa. This test determines wheat sensitivity in the gut.

M2PK Pyruvate-Kinase Type 2

This new and revolutionary parameter is highly sensitive and specific for colon cancer (and partly for inflammation). This test is used as part of a Screening and part of a General Health Check/Physical Exam (One Time Yearly starting with Age of 40 for both Woman and Men). It is also a means of assisting in the identification of the source of Gut Bleeding.

***Enteropathogenic* Bacteria**

Salmonella, Campylobacter, Shigella, Yersinia are the most popular pathogenic bacteria causing diarrhea. Often specific stool flora analysis shows possible pathogenic germs like Klebsiella, Proteus, Citrobacter, Enterobacter and hemolytic E. coli as cause of gut inflammation.

***Enteropathogenic* Viruses**

Rota-, Adeno- and specially Noro-Virus (former Norwalk) are the most popular pathogenic viruses causing diarrhea.

***Enteropathogenic* Parasites**

Parasite infestations are rising. Using the Gold Standard Method MIFC, Vitalan identifies parasites in around 20% of patients - mostly Protozoa (One Cell Parasites like Blastocystis, Entamoeba, Giardia Lamblia) and rarely Worms. Parasites live in cycles and they are excreted only periodically. To increase the Finding Rate, collect One Stool Sample during Complaints and/or Two or Three Samples during 1 week.

Short Chain Fatty Acids

SCFA are the product of bacterial fermentation in the large intestine having importance for maintainence of balance between the different bacteria of gut flora (eubiosis) as well as for nutrition of mucosal cells. This balance shows also the homeostasis of intestinal ecology formed by chymus (nutrition and digestion), gut flora, gut mucus (mucopolysaccharides), mucous epithel (integrity) and compounds of specific and non-specific local defence. Diminished and dysbalanced SCFA suggest poor supply for epithel cells with disturbances of permeability and local defence.

Customer Value is guaranteed by: *Fast Turnaround, Reliability and Problem Solution*