



Which Patients Need the Vibrant Organic Acids Test?

Organic acids testing can accurately identify conditions associated with genetic disorders, nutrient deficiencies, intestinal dysbiosis, and toxicity from diet and prescription drugs.

Conditions and Symptoms Which May Benefit From Organic Acids Testing Include:

- Mental and/or developmental delays
- Fatigue and weakness
- Depression and/or anxiety
- Dizziness
- Mood swings
- Difficulty concentrating
- Nausea
- Sleep problems
- Slowed reaction time
- Poor memory
- Headache

- Hyperactivity
- Digestive problems
- Abdominal pain, diarrhea, bloating
- Hypo- or hyperglycemia
- Unexplained weight gain/loss
- Muscle weakness
- Dermatitis
- □ Immune deficiency
- Anemia
- □ Hearing, speech, or visual impairment





Facts About Organic Acids

- Organic acids panels test for the organic acids in urine that are byproducts of daily cellular metabolism
- Based on known metabolic pathways and enzyme-cofactor requirements, these organic acid markers can provide great insights in discovering underlying causes of chronic symptoms
- Organic acids testing can aid advanced providers in the detection of imbalances, toxicity, and inflammation in chronically or acutely ill patients with complex illnesses
- Alongside other diagnostic testing, organic acids profiles complete the clinical picture of root causes and guide practitioners in developing the most individual and effective interventions







Clinical Connections



The Vibrant Organic Acids panel uses the most advanced mass spectrometry technology to assess 75 metabolic markers in urine



The panel includes 11 subpanels and provides accurate evaluation of intestinal microbial overgrowth, detoxification, mitochondrial markers, neurotransmitter metabolism, glutathione status, fatty acid metabolism, and inborn errors of metabolism



A complete package of the Vibrant Organic Acids Panel and Vibrant Micronutrients will provide an overall picture of the patient's whole nutrition foundation and aid the provider in intervention choices



Organic acids can be combined with the Vibrant Fungal Antibodies panel, the Vibrant Gut Zoomer 3.0, and the Vibrant Environmental Toxins profile to get a more specific insight into the individual's root causes of inflammation



What Does the Vibrant Organic Acids Panel Include?

INTESTINAL MICROBIAL OVERGROWTH Yeast and Fungal Markers: **Bacterial Markers:** Clostridia Bacterial Markers: Citramalic Acid Hippuric Acid 4-Hydroxyphenylacetic Acid 5-Hydroxymethyl-furoic Acid 2-Hydroxyphenylacetic Acid **HPHPA** 3-Oxoglutaric Acid 4-Hydroxybenzoic Acid 4-Cresol Furan-2,5-dicarboxylic Acid 4-Hydroxyhippuric Acid 3-Indoleacetic Acid Furancarbonylglycine **DHPPA** Tartaric Acid Arabinose Carboxycitric Acid Tricarballylic Acid **INDICATORS OF DETOXIFICATION** Glutathione: Ammonia Excess: Aspartame, Salicylates, or GI bacteria: Pyroglutamic Acid Orotic Acid 2-Hydroxyhippuric Acid 2-Hydroxybutyric Acid **MITOCHONDRIAL MARKERS AMINO ACID METABOLITES Amino Acid Metabolites:** Krebs Cycle Metabolites: 2-Hydroxyisovaleric Acid 3-Methyl-2-oxovaleric Acid Succinic Acid 3-Methylglutaric Acid 2-Hydroxyisocaproic Acid Fumaric Acid 3-Methylglutaconic Acid 2-Oxoisocaproic Acid Malic Acid 3-Hydroxyglutaric Acid 2-Oxo-4-methiolbutyric Acid 2-Oxoglutaric Acid Mandelic Acid Aconitic Acid Phenyllactic Acid Citric Acid Phenylpyruvic Acid Homogentisic Acid 4-Hydroxyphenyllactic Acid N-Acetylaspartic Acid Malonic Acid **OXALATE METABOLITES** KETONE AND FATTY ACID Glyceric Acid **NUTRITIONAL MARKERS OXIDATION** Glycolic Acid Oxalic Acid 3-Hydroxybutyric Acid N-Acetylcysteine Acid **GLYCOLYTIC CYCLE METABOLITES** Methylcitric Acid Acetoacetic Acid Methymalonic Acid (Vit B12) Lactic Acid 4-Hydroxybutyric Acid Adipic Acid Pyridoxic Acid (Vit B6) Pyruvic Acid Suberic Acid Pantothenic Acid (Vit B5) PYRIMIDINE METABOLITES Glutaric Acid (Vit B2) Sebacic Acid Ethylmalonic Acid Absorbic Acid (Vit C) Uracil Methylsuccinic Acid **Thymine MINERAL METABOLITES** Phosphoric Acid

Regulatory Statement