

Physiological and Nutritional Consultation, Testing, and Treatment

Separate from the direct testing and observation measures, a physiological consultation in an interview format with the parents, primary caregivers, or clients is part of the assessment process. To aid in creating the most optimal body health to support the growth and development of the brain, Jacob's Ladder partners with a registered dietitian with years of experience and teaching at the university level (Patricia Simonds, MS, RDN, LD).²⁴ The nutritional and physiological assessment strives to provide education and analysis on the individual's current state and a treatment plan for moving forward, in conjunction with therapeutic interventions and the IWBCM™ Evaluation process. Information is gathered on various areas related to health and wellness, beginning with diet, as food consumed daily constitutes the available fuel that can be assimilated and utilized by the body. If proper sustenance and nutrients are not supplemented with quality nutrition, the body is deprived of the macro and micronutrients it needs to function and thrive.

Furthermore, the individual's current regimen of medications and supplements, including the frequency and dosage, is reviewed as these additions to the body can affect the body's systems and the brain. Individuals with an impacted brain may present challenges with feeding, environmental allergies, food allergies and sensitivities, and skin conditions. Other vital components such as time outdoors, physical activity level, amount of sleep, quality of sleep, and physiological history are also discussed.

Additionally, the nutritional and physiological consult includes calculations for dietary reference intake (DRI) with recommendations for daily amounts of protein, fiber, and water, body mass index (BMI) in conjunction with a comparative growth chart to ensure normative growth and development, and blood work or relevant lab tests as recommended, such as food allergy/sensitivity, environmental pathogen exposure, organic acid, and gastrointestinal testing. Along with the topics from the interview, the results of the recommended tests are used to create a customized nutrition and health plan that aligns with the neurological needs outlined by the IWBCM™ Evaluation.

Jacob's Ladder utilizes the following laboratory analyses, in partnership with a registered dietitian, to assess the health of the microbiome:

GI-MAP

The Gastrointestinal Microbial Assay Plus (GI-MAP) measures gastrointestinal microbiota DNA from a single stool sample using quantitative polymerase chain reaction (qPCR) technology. The test looks at disturbances in the microbiome that may contribute to patient symptoms, including pathogens, parasites, opportunistic bacteria, potential auto-immune triggers, yeast/fungi, viruses, and a glimpse at the digestive ability through the intestinal health markers.³³

Organic Acids Test (OAT)

One of the most important uses of the urine organic acids test is as an indicator of dysbiosis, an abnormal overgrowth of yeast and bacteria in the intestinal tract. Abnormally high levels of these microorganisms can cause or worsen behavior disorders, hyperactivity, movement disorders, fatigue, and immune function. Great Plains Organic Acids Test also includes markers for vitamin and mineral levels, oxidative stress, neurotransmitter levels, and markers for oxalates.³⁵

NutrEval

NutrEval is the most comprehensive functional and nutritional assessment available. It is designed to help practitioners identify the root causes of dysfunction and provide a systems-based approach to help patients overcome chronic conditions and live healthier lives.

The NutrEval report offers:

- Nutrient recommendations for key vitamins, minerals, amino acids, fatty acids, and digestive support
- Functional pillars with a built-in scoring system to guide therapy around needs for methylation support, toxic exposures, mitochondrial dysfunction, fatty acid imbalances, and oxidative stress
- Interpretation-At-A-Glance pages for patient education
- Dynamic biochemical pathway charts for a clearer understanding³⁴

For more information about the GI-MAP, Organic Acids Test, or NutrEval, please see references 33-35.

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