

METABOLIC TESTING

We are proud to use [Metametrix Laboratories](#) in our search for your answers. None of these tests are intended to diagnose, treat or cure disease they are for informative and educational purposes only.

Test Type	Test Name	Test Description	Symptoms/Conditions
Urine, Saliva and Blood Serum	ION-Profile	The ION Profile is the most complete nutritional and metabolic testing program available - it measures more than 100 components, integrating them into a complete picture of your individual biochemistry as it relates to: energy, endurance, cardiovascular function, antioxidant function, liver detoxification, inflammatory problems, including joints and skin, mental emotional focus and digestive disorders.	Eczema, Fibromyalgia, Chronic Fatigue Syndrome, ADD & ADHD, Cholesterol issues, Gastrointestinal Issues, Leaky Gut Syndrome, Depression, Drug Addiction etc.
Urine	Organic Acid Profile	Many chronic health problems can be difficult to diagnose, especially if they involve nonspecific symptoms such as fatigue, foggy thinking, malaise, gastrointestinal upset, joint aches, or sleep cycle disturbances. Organic Acid Testing does not diagnose disease; it helps to give insight into the causes of them. This profile assesses metabolic dysfunctions.	Fatty acid metabolism, neurotransmitter metabolism, carbohydrate metabolism, oxidative damage, energy production, detoxification status, B-complex sufficiency, Intestinal dysbiosis due to bacteria and yeast, Inflammatory reactions, Methylation co-factors.
Blood Spot (TM)	IgG Food Antibodies	It is estimated that 60% of the population suffer from reactions to foods that can cause or complicate health problems. First we have IgE - Immediate food reactions (Allergies). These reactions are normally quite severe and can cause potentially fatal "anaphylactic" reactions like after eating peanuts or shellfish. Second	Recurrent ear infections, itchy eyes, runny nose, sinus problems, headaches, migraines and sore throats, mood swings, anxiety, depression, food cravings, poor concentration, fatigue, hyperactivity, asthma, irregular heartbeats, muscle pains, arthritis, diarrhea, constipation, gas, bloating, ulcers, cramps, water retention, inability to

		we have IgG - Delayed food reactions. These reactions are more difficult to notice since they occur much later. They can be seen as hidden allergies of sorts.	lose weight with diets or exercise, hives, rashes and sweating.
Blood Spot (TM)	Fatty Acids	Fatty Acids are contained in all dietary fats and oils. Several types of fatty acids make up every cell in your body. Some are not made by the body, they are called Essential Fatty Acids. They are most often referred to as Omega 3 and 6 Fatty Acids. Because fatty acids are essential parts of cells and are used in cell communication, deficiencies or imbalances can effect your life in numerous ways.	<ul style="list-style-type: none"> · Childhood development depends on them · Low energy · Sexual function disorders · Depression · ADD & ADHD · Weight loss issues
Blood Spot (TM)	Amino Acids	They are known as the building blocks of proteins. They play a critical role in our physiology. Several amino acids are considered essential since our bodies cannot make them. Amino Acids have more diverse function than any other nutrient group. They are a factor in every chemical process that affects the physical, mental and emotional function.	<p>Measurement ratio of amino acids can provide valuable information about the overall status of your essential amino acid availability. They are the building blocks to neurochemicals thus they play a role in:</p> <ul style="list-style-type: none"> · Depression · Sleep issues · Fibromyalgia · CFS · Lethargy · Mood Issues · Anger · Motivation
Saliva	Stress	Chronic stress is a major underlying cause of many chronic illnesses, high levels of cortisol and low levels of the hormone DHEA can be damaging to the brain and other tissues. Cortisol elevation also impacts immune responses, such as secretory IgA and AGA. AGA is elevated in people with gliadin intolerance and celiac disease.	Accelerated aging, Cardiovascular function, Celiac disease, CFS, Diabetes Type 2, Hypoglycemia, Hypertension, Insomnia, Obesity, Thyroid dysfunction, Focal Dystonia (Yips).
Urine	Estronex	Researchers at the Rockefeller University have found that the body metabolizes estrogens into several different forms that can impact cancer development. One	<ul style="list-style-type: none"> · Prolonged use of oral contraceptives · Synthetic hormone replacement · Family history of breast cancer · Obesity or sedentary lifestyle

		<p>form 2-hydroxyestrone (2-OHE1), tends to inhibit cancer growth, another 16-a-hydroxyestrone (16-a-OHE1), actually encourages tumour development. A women's biochemical individuality determines how much of each form is produced. Studies have shown that measuring the ratio of these two forms of estrogen provides an important indication of your risk for future development of breast cancer. This study also shows how this risk can be modified.</p>	<ul style="list-style-type: none"> · Consumption of two or more alcoholic beverages per day
Urine	Bone Resorption Assay	<p>Bone is very active tissue. It is undergoing constant "remodeling", which is a process of formation and resorption (breakdown). Osteoporosis, a loss of bone density, occurs when the resorption rate is greater than the rate of formation of new bone. Since bone formation is difficult to measure, it is important to determine if you are among the men and women with rapid bone breakdown.</p> <p>A series of bone scans can be very expensive and can only indicate changes in your bones over a six to twelve month period. They cannot show current bone activity. This test measures special markers that reflect your current remodeling activity.</p>	<ul style="list-style-type: none"> · Men and women over 50 · Peri-menopausal women · Hysterectomies · Excessive exercise · Family history of osteoporosis · Pregnant or nursing · Thin, petite, small frame women · Anti-ulcer medication · Sedentary lifestyles · Excessive soft drinks, soda and coffee · Smokers and alcohol abusers · Men and women who are lactose intolerant · All people using steroids
Urine/Saliva	Detoxification Capacity Test	<p>Detoxification encompasses mechanisms that enhance tolerance, induce mobilization, increase metabolic conversion rates, and induce excretions of toxins. The human liver contains six different types of cells that are organized into microscopic arrays called lobules. Each cell can perform hundreds of different biochemical reactions. In addition the biochemical activity of each</p>	<ul style="list-style-type: none"> · Fatigue · CFS · Chronic low level exposure of toxic metals · Headaches/Migraines · Aging · Depression

		cell depends on its interaction with other cells and with extracellular matrix. Testing for detoxification capacity can reveal the status of specific functions of these cells.	
Urine/Hair	Toxic elements	Multiple impacts of toxins on nutrient status can create deficiency states. Toxins are chemical agents that produce adverse responses in living things. Human health is impacted by both environmental exposure and endogenous production of toxins. Thus over time it is possible to build up a toxic load that can make you ill.	<ul style="list-style-type: none"> · Aging · Failure to thrive · Weight loss issues · Anger/Aggression · Focus · ADD/ADHD
Urine	Porphyrins Profile	Porphyrins measured in urine serve as biomarkers of toxic effects on the heme biosynthetic pathway. Heme is an essential for the proper function of many proteins for oxygen transport, energy production and detoxification. Patterns of specific porphyrin elevations in urine may serve as functional markers to specific toxins, including toxic metals such as Mercury. This profile measures 7 porphyrins, total porphyrins and 3 ratios to help you differentiate heavy metal toxicity.	<p>Causes and conditions related to porphyria include:</p> <p>Genetic disorders: Heredity hyperbilirubinemias, heredity tyrosinemia, bronze baby syndrome, erythrohepatic protoporphyria</p> <p>Metabolic disturbances: Diabetes, myocardial infarctions, hematologic diseases, issues with iron metabolism</p> <p>Diseases: Infectious disease, liver disease, malignancies</p> <p>Other conditions: Pregnancy, carbohydrate fasting</p>
Stool	GI Effects TM Stool	This latest innovation uses DNA analysis to increase the accuracy of test results and identify 100% of microbiota present. GI Effects TM, offers significant improvement over older culture methods for stool analysis testing, including increased accuracy and sensitivity, reduced turnaround time, a single sample collection and an overall better value. The increased accuracy and sensitivity are gained from DNA analysis as well.	<ul style="list-style-type: none"> · Gastrointestinal issues · Bloating · Gas · Weightloss resistance - "fat bugs" · Medication and antibiotic resistance · Good and bad bacteria imbalance · Gut dysbiosis

		<p>PCR can detect pathogens in as few as 5 cells per gram - a 5000 fold increase in sensitivity over old stool technology. This combined with the ability to identify anaerobes, the majority of microbiota composed in the human gut, allows unprecedented views of gastrointestinal operation.</p>	
Blood Drop	Blood Type Test	<p>This test is done onsite and is not time consuming. It tells you what Blood Type you are: A,B,O or AB. This is very relevant in relation to Blood Type Diets and how the lectins in blood react to certain Blood Types through foods. This in combination with the IgG Food Reaction test provides critical information on foods that react in each individual.</p>	<ul style="list-style-type: none"> · Bloating · Immune system suppression · Gas · WBC count elevation · Malabsorption · Trunkal weight gain · Behavioral issues