**Health Panel Laboratory Profile**

*Dr. Brouse personally created a comprehensive blood and urine health panel that gives details about the body systems. He also recommends specialized tests based off of a one-on-one phone consult.*

Our standard screening laboratory test (health panel) is composed of the following tests:

<table>
<thead>
<tr>
<th>Complete Blood Count (CBC) with differential</th>
<th>Urine analysis</th>
<th>NMR Lipo Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>(White blood cells, red blood cells, hemoglobin, hematocrit, mean corpuscular hemoglobin, mean corpuscular hemoglobin concentration, mean corpuscular volume, red blood cell distribution width, sedimentation rate, polymorphonucleocytes, lymphocytes, monocytes, eosinophils)</td>
<td>(color, appearance, specific gravity, bilirubin, ketones, glucose, protein, hemoglobin, pH, nitrate, leukocyte esterase, red blood cells, white blood cells, epithelial cells, bacteria)</td>
<td>(LDL particle number, total cholesterol, LDL cholesterol, HDL cholesterol, cholesterol HDL ratio, triglycerides, insulin resistance)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blood metabolites</th>
<th>Thyroid panel</th>
<th>Serum minerals</th>
</tr>
</thead>
<tbody>
<tr>
<td>(total bilirubin, direct bilirubin, uric acid, blood urea nitrogen, %Total CO2)</td>
<td>(Thyroxine[T4], T3 Uptake, TSH, Free Thyroxine Index)</td>
<td>(calcium, magnesium, phosphorus)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Serum Electrolytes</th>
<th>Liver enzymes</th>
<th>Serum enzymes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(creatine, eGFR, sodium, potassium, chloride)</td>
<td>(GTT, GOT [AST], GPT [ALT])</td>
<td>(lactate dehydrogenase [LDH], alkaline phosphotase)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blood sugar regulation</th>
<th>Serum protein</th>
<th>* Vitamin D, 25-Hydroxy (Calcidol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Glucose, Hemoglobin A1C)</td>
<td>(Total Protein, Albumin, Globulin)</td>
<td>the standard test used to identify Vitamin D dietary or absorption deficiencies or toxicities.</td>
</tr>
</tbody>
</table>

The Health Panel is one of the important components of the Metsys® report

* Vitamin D is not currently part of our Health Panel, we do however recommend getting your Vitamin D levels checked. When adding Vitamin D to our Health Panel you will receive it at a discount price. What are the health risks of Vitamin D deficiency? Vitamin D is a major factor in the pathology of several types of cancer, heart disease, stroke, hypertension, autoimmune diseases, diabetes, depression, chronic pain, osteoarthritis, osteoporosis, muscle weakness/wasting, birth defects, periodontal disease, and more.

**Tumor Marker Tests**

<table>
<thead>
<tr>
<th>PSA</th>
<th>CA19.9</th>
<th>CA 27.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies primitive cancer cells in the prostate.</td>
<td>Identifies primitive cancer cells in the pancreas.</td>
<td>Identifies primitive cancer cells in the breast. (1% of all breast cancer occurs in men!)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CA125</th>
<th>CEA, RIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies primitive cancer cells in the ovaries.</td>
<td>Identifies primitive cancer cells in the digestive tract.</td>
</tr>
</tbody>
</table>

**Additional Tests**

**Homocysteine** - This blood test will indicate a risk factor for the development of cardiovascular disease, including heart disease, stroke, peripheral vascular disease, and thrombembolic disease. Vitamin deficiency, advanced age, hypothyroidism, impaired kidney function, asthma, toxic reactions, and systemic lupus erythematosus are also associated with irregular Homocysteine values. Over time, your Homocysteine values will help monitor your total health program

**Cholinesterase** - This enzyme is necessary for proper nerve function. Cholinesterase inhibition is associated with a variety of acute symptoms such as nausea, vomiting, blurred vision, stomach cramps, and rapid heart rate.
**Specialty Tests Performed**

**ALCAT Comprehensive**
The ALCAT Test is a highly sensitive, objective test for assessing which foods, chemicals and herbs you may be intolerant to. The ALCAT Test identifies food, chemical and herbal sensitivities where the symptom onset is longer (several hours to days) and varied (typical in chronic conditions). These types of sensitivities or intolerances affect almost 80% of the population.

Food intolerance/sensitivities do not involve the specific immune system, but the innate immune system. Food intolerances/sensitivities cause chronic inflammatory process. Food intolerances/sensitivities, unlike IgE allergies, do not require exposure to a food to “prime” them. Intolerances manifest a wide variety of symptoms. Some may be gastrointestinal, fatigue, headaches, and “brain fog” -- feeling muddled in thought, migraines, arthritis, etc. Intolerances, however, do not cause immediate allergy symptoms. Some intolerances/sensitivities are reactions to chemicals added to foods for flavoring, coloring or preserving. Sometimes people who have food intolerances/sensitivities allergen is enough to trigger a reaction, therefore, people with IgE food allergies must avoid the foods they are allergic to completely.

**Platinum Comprehensive Profile**
320 items are tested
- 200 Foods
- 50 Functional Foods & Medicinal Herbs
- 20 Food Additives/Colorings
- 10 Environmental Chemicals
- 21 Molds
- 20 Antibiotics/Anti-Inflammatory Agents

**ASI Brochure**

**Adrenal Stress Index (ASI)**
The ASI is ordered mainly for individuals who suffer from: chronic stress and related health problems; Lack of vitality and energy; Muscle and joint pain; Hypoglycemia; Migraine headaches; Osteoporosis; Sleep disturbances; Poor memory; Alcohol intolerance; Irritability; Low sex drive; Low body temperature; Poor cognitive function.

The ASI can explain excessive feelings of tiredness and an inability to cope; Help your physician understand how to eliminate craving for excessive calories and to help you build and maintain muscle mass; Reveal the strength of your immune system; Help you to reduce chronic stress by avoiding food allergens; Help you to balance blood sugar by following a balance diet.

**ASI Brochure**

**Gastrointestinal Health Panel (GI)**
The GI Panel is appropriate for individuals with chronic and vague GI symptoms including frequent bloating, gas, cramping and constipation; frequent travel within US and/or overseas; frequent eating outside the home. People who get exposed to feces through sexual contact; food handlers; institutionalized individuals; uniformed services; dormitory residents; children who go to daycare centers. **GI Panel Brochure**

**Trace Mineral Analysis (TMA)**
The TMA is a hair analysis that is an essential way to determine toxic mineral status. Elevated toxic minerals are a more significant problem than most people realize. The Surgeon General has stated that lead levels are above the federally acceptable limit in one in nine school aged children. Elevated lead can cause learning and growth problems as well as joint aches and pains. **TMA Brochure**

**Environmental Pollutants Profile (EP)**
Environmental chemicals are toxic compounds present in our air, water, food and many consumer products that we use every day. Because environmental levels are usually low, the effects on our health can be slow to develop. Many toxic chemicals found in our environment are known or suspected to cause serious health problems from long-term exposure, such as cancer and reproductive or birth defects.

**Who Might Be Exposed to Toxics?**
- Painters
- Gasoline station attendants
- Copy machine attendants
- Construction workers
- Parking lot attendants
- Home & Insutdustrial cleaners
- Furniture re-finishers
- Freeway commuters
- Metal workers
- Office workers

Common everyday pollutants may have enormous implications on your health affecting your immune, nervous & reproductive systems. **EP Brochure**

**Menopause (Peri or Post)** At menopause, various parts undergo change and can produce one or more of the Nervous system: insomnia, nervousness or irritability, headaches, mood changes, depression. Metabolic changes: skin aging or cosmetic changes, osteoporosis, altered fat and carbohydrate metabolism, atherosclerosis. **PeriM-PHP Brochure**

**Male -** Historically, age-related male hormone changes have not been considered problematic because fertility in men persists until an advanced age. Careful evaluation in males, however, shows progressive age-related changes, including: decreased muscle mass and strength, decreased vigor or low energy, decreased libido, insomnia, nervousness and depression, and hair loss. These changes usually begin in a man’s forties and fifties and point toward hormone imbalances and deficiencies which may be considered the male equivalent of menopause, which is called andropause. **MHP Brochure**

**Female -** The female cycle has three physiologic phases:
1. The follicular phase starts with the onset of menstrual blood flow and is of variable length. This phase is normally characterized by both low estrogen and progesterone output. 2. The ovulatory phase is 1 to 3 days long, and the human ovum (egg) is released in this phase. This phases is preceded by high estrogen and LH levels. 3. The luteal phases is rather constant in length, 12-14 days, and ends with menses. In contrast to
the follicular phase, the luteal phase is characterized by high progesterone concentrations and a moderate increase in estrogens.

Applications for the FHP are to detect luteal phase deficit, hormone imbalances and PMS, and to customize hormone therapy. Some other applications are functional infertility, menstrual problems originating in the brain, early pregnancy problems, such as spontaneous miscarriage, cycle irregularities, following the use of birth control pills, dysmenorrhea, the painful and heavy periods, early menopause, migraine headaches, cystic ovarian disease, early osteoporosis, influence of (diet, exercise) and other lifestyle factors on the cycle. FHP Brochure

**Estronex 2:16**

Researchers have found that the body metabolizes estrogen into several different forms that can impact cancer development. A person's "biochemical individuality" determines how much of each form is produced. Studies have shown that measuring the ratios of these important forms of estrogen provides an important indication of future risk for development of breast cancer and other estrogen-sensitive cancers. Studies show that this risk can be modified! Estronex Info

**AA-EPA**

This test measures the ratio of Arachidonic Acid (AA) to Omega-3's (EPA) in your blood which is an inflammatory symptoms are evident. AA/EPA Brochure

**Genomic Profiles**

These profiles assess the baseline expression of the genetic tendency to specific health conditions:

<table>
<thead>
<tr>
<th>CardioGenomic Profile</th>
<th>ImmunoGenomic Profile</th>
<th>DetoxiGenomic Profile</th>
<th>NeuroGenomic Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies the genetic risk for methylation defects, hypercoagulation, hypertension, cholesterol, imbalance, inflammation, and cardiovascular disease.</td>
<td>Identifies genetic risk for defects in immune defense and up-regulated inflammatory response.</td>
<td>Identifies genetic risk for detoxification defects that may contribute to chemical sensitivities, abnormal toxin metabolism, and oxidative stress.</td>
<td>Identifies genomic indicators of weak detoxification capacity and possible adverse drug reactions. This test can help determine if susceptibility to heavy metals or high oxidative stress might be contributing to learning or behavioral disorders.</td>
</tr>
</tbody>
</table>

**Pre or Post Iodine**

Specific tissues in the body utilize iodide and iodine. Adequate iodine status is essential for the production of normal significantly over the past thirty years. Iodide, the reduced form of iodine, is highly concentrated in the thyroid gland where it is incorporated into thyroid hormones. Thyroid hormones regulate growth and metabolic rate, body heat and energy production, and neuronal and sexual development. Iodine is concentrated in the breasts where it is associated with protection against fibrocystic breast disease and cancer. Sub-clinical iodine/iodide deficiency has been associated with impaired mental function and loss of energy due to hypothyroidism. Pre/Post Iodine Info

**MicroNutrient**

Vitamin, mineral and antioxidant deficiencies have been shown to suppress the function of the immune system which can contribute to degenerative processes such as arthritis, cancer, cardiovascular disease and diabetes. You may be deficient in some vitamins, minerals, antioxidants and/or other essential micronutrients and not even know it. MicroNutrient Brochure