

Why the Mitochondria Method Lab Panel Is Essential for Your Health Optimization

Your mitochondria are the **powerhouses of your cells**, responsible for producing energy, regulating metabolism, and maintaining overall health. When mitochondrial function declines, **fatigue, inflammation, metabolic dysfunction, cardiovascular disease, neurodegeneration, and even cancer risk increase**. The **Mitochondria Method 2 Lab Panel** is designed to **assess and optimize mitochondrial function**, uncovering the root causes of dysfunction and providing a roadmap for **lifelong vitality, resilience, and disease prevention**.

Before your 45-minute consultation (\$300, purchased separately at <https://mitochondriamethod.com>), you will complete this essential lab panel. **These tests establish a functional medicine baseline**, allowing us to tailor recommendations to optimize your energy production, lower inflammation, balance metabolism, and support long-term health.

This panel is **critical** for all clients—whether you're focused on **cancer prevention, cardiovascular health, metabolic balance, cognitive longevity, or overall well-being**. If you have a history of cancer or are undergoing treatment, these labs are **foundational** for my **integrative oncology approach**, helping to enhance mitochondrial function and improve outcomes.

Why This Lab Panel?

Unlike conventional lab panels, the **Mitochondria Method 2 Panel** goes beyond basic screenings, providing deep insights into **mitochondrial health, energy metabolism, cardiovascular risk, inflammation, and hormonal balance**. Mitochondrial dysfunction is at the root of many chronic diseases, and optimizing mitochondrial health is the key to **preventing and reversing disease, improving energy, and enhancing longevity**.

The Six Core Tests & Their Mitochondrial Connection

1. Glucose (Boston Heart Diagnostics) - \$5.00

Why it matters:

Glucose is one of the primary fuel sources for mitochondria. However, **chronically elevated glucose and insulin resistance damage mitochondria**, leading to metabolic dysfunction, inflammation, and oxidative stress. High blood sugar contributes to **diabetes, cardiovascular disease, cognitive decline, and cancer growth**. ✓ **What we assess:** Fasting glucose levels for early detection of **insulin resistance, metabolic syndrome, and energy dysregulation**.

✓ **Who benefits:** Everyone. Optimizing glucose metabolism is essential for mitochondrial efficiency, reducing inflammation, and preventing chronic diseases like diabetes, cardiovascular disease, cognitive decline, and cancer.

2. Lipoprotein(a) (Lp(a)) – Boston Heart Diagnostics - \$14.00

Why it matters:

Lp(a) is a highly **atherogenic lipoprotein** that increases the risk of heart attack, stroke, and atherosclerosis. It **directly damages mitochondrial membranes**, impairing energy production and increasing oxidative stress. ✓ **What we assess:** Lp(a) levels to determine **personalized strategies for heart health and longevity**.

✓ **Who benefits:** Everyone. Cardiovascular health is directly linked to mitochondrial function, making this test crucial for assessing heart disease risk, metabolic health, inflammation, and overall longevity.

3. GI-Advanced Profile (US BioTek – Includes Zonulin & H. pylori) - \$369.00

Why it matters:

Your gut and mitochondria are intimately connected. A **leaky gut and dysbiosis drive systemic inflammation**, which damages mitochondrial function and accelerates aging. Pathogens like **H. pylori increase oxidative stress, reduce nutrient absorption, and impair cellular energy production**. ✓ **What we assess:**

- **Zonulin levels** (marker of gut permeability; "leaky gut" is linked to autoimmune conditions, metabolic issues, and inflammation).
 - **H. pylori** (a bacterial infection that contributes to ulcers, stomach cancer risk, and digestive dysfunction).
✓ **Who benefits:** Everyone. A healthy gut is essential for mitochondrial function, nutrient absorption, immune resilience, and reducing systemic inflammation, making this test beneficial for all individuals regardless of symptoms.
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4. Metabolomix+ (Genova Diagnostics + Bloodspot Fatty Acids Add-On) - \$364.00 + \$35.00 Add-On

Why it matters:

This is the most **comprehensive functional nutrition and mitochondrial health assessment available**. This test evaluates:

- **Mitochondrial function** (essential for energy production and longevity).
- **Nutrient deficiencies** (B vitamins, CoQ10, magnesium, omega-3s, and amino acids essential for cellular repair).
- **Oxidative stress markers** (high oxidative stress damages mitochondria and accelerates aging, cancer progression, and cognitive decline).

- **Detoxification capacity** (mitochondria play a major role in toxin clearance; impaired detox pathways worsen oxidative stress and disease risk). ✓ **Who benefits:** Everyone. This comprehensive test identifies key nutrient deficiencies, oxidative stress, and metabolic imbalances that affect energy production, cognitive function, and overall disease prevention.
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5. CardioMetabolic Profile (ZRT Laboratory) - \$88.00

Biomarkers Included:

- Fasting Insulin
- HDL (High-Density Lipoprotein)
- HbA1c (Hemoglobin A1c)
- LDL (Low-Density Lipoprotein)
- Total Cholesterol
- Triglycerides
- VLDL (Very Low-Density Lipoprotein)
- hs-CRP (High-Sensitivity C-Reactive Protein)

Why it matters: Cardiovascular and metabolic diseases are **mitochondrial diseases**. Poor lipid balance, high insulin levels, and inflammation increase mitochondrial damage, reducing energy production and accelerating aging. **Optimizing metabolic health protects mitochondria, improves longevity, and lowers disease risk.** ✓ **Who benefits:** Everyone. Cardiometabolic health is foundational to mitochondrial efficiency, energy metabolism, and disease prevention, making this test vital for optimizing longevity and well-being.

6. DUTCH Complete Hormone Panel (Precision Analytical – Dried Urine Test) - \$300.00

Why it matters:

Mitochondria **regulate hormone production**, including cortisol, estrogen, testosterone, and melatonin. Hormonal imbalances create **chronic stress on mitochondria**, impairing energy production, metabolism, and immune function. ✓ **What we assess:**

- **Cortisol patterns** (chronic stress destroys mitochondria, fueling fatigue and inflammation).
- **Estrogen metabolites** (hormonal balance reduces cancer risk and protects mitochondria).
- **Melatonin & Sleep Regulation** (sleep is essential for mitochondrial repair and longevity). ✓ **Who benefits:** Everyone. Hormones regulate mitochondrial function, energy levels, metabolism, and overall health, making this test essential for achieving optimal vitality and disease prevention.

Pricing & At-Home Testing Convenience

Total estimated cost: \$1,140.00 (subject to change, accurate as of 3/10/25).

Breakdown of Costs:

- Glucose: \$5.00
- Lipoprotein(a): \$14.00
- GI-Advanced Profile: \$369.00
- Metabolomix+: \$364.00
- Metabolomix+ Bloodspot Add-On: \$35.00
- CardioMetabolic Profile: \$88.00
- DUTCH Complete Hormone Panel: \$300.00

Simple At-Home Testing & Results Coordination

 Test kits are shipped to you with step-by-step instructions.  Return samples in prepaid mailers.  Results take 2-4 weeks.  Purchase tests through Rupa Health; results entered into EMR for you and me to review.

Next Steps: Schedule Your Consultation

 Once all results are back, book your 45-minute consultation here:
 <https://mitochondriamethod.com>

Optimizing mitochondrial health is the key to longevity, disease prevention, and peak performance. Let's build your personalized roadmap to lasting health! 

START HERE: Email Dr Lawenda if you want to do these labs and the lab review consultation:

admin@ioeprogram.com

- **You will receive a lab requisition emailed to you from Rupa Health)**