

We Test. We Don't Guess.

A Patient's Guide to Functional Medicine Lab Testing
and Why Going Beyond Standard Bloodwork Changes
Everything

Elemental Natural Medicine

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"Your labs are normal." — Four words that send thousands of suffering patients home without answers every single day.

Introduction: The Problem With "Normal"

You've been exhausted for months. Your hair is thinning. You've gained weight despite barely changing your diet. Your brain feels like it's running through mud. You went to your doctor, had bloodwork done, and were told everything looks fine.

This is one of the most common — and most frustrating — experiences in modern medicine. And it points to a fundamental flaw in how conventional lab testing is designed and interpreted.

Conventional lab reference ranges are built on **population statistics** — they reflect the average range found in large groups of people, many of whom are not optimally healthy. A result that falls within that range simply means you're not an outlier. It does not mean your body is functioning at its best.

At **Elemental Natural Medicine**, we use a fundamentally different model: **Functional Medicine Lab Analysis**. We assess over 70+ biomarkers, use optimal health-based reference ranges, and look for patterns of subclinical dysfunction — the early warning signs that conventional medicine misses until disease has already taken hold.

The Elemental Promise

We test. We don't guess.

Our comprehensive functional lab panels are designed to give you — and us — a complete, high-resolution picture of what is actually happening inside your body. From thyroid function and hormones to gut health, toxin burden, genetic markers, and cardiovascular risk, we leave no stone unturned.

The result? A personalized, data-driven roadmap to your best health — not a generic protocol designed for the average patient.

Conventional vs. Functional Lab Testing

Understanding why functional medicine labs are different requires understanding how conventional reference ranges are created — and why that approach is insufficient for identifying optimal health.

CONVENTIONAL TESTING	FUNCTIONAL TESTING (Elemental Natural Medicine)
Uses broad statistical reference ranges based on general population averages	Uses optimal, health-based ranges reflecting what science shows for peak function
Flags only results outside the "normal" range	Identifies trends, borderline values, and subclinical dysfunction
Focuses on diagnosing existing disease	Focuses on preventing disease before it develops
Typically 10–20 markers in a standard panel	70+ biomarkers across multiple body systems
Thyroid: TSH only (in most cases)	Full 9-marker thyroid panel including antibodies, T3, T4, reverse T3
Rarely checks insulin, homocysteine, or inflammatory markers	Routinely assesses insulin resistance, cardiovascular risk, and inflammation
Little or no nutritional assessment	Comprehensive vitamin, mineral, and nutrient status evaluation
No gut health, hormone, or toxin testing unless symptomatic	Gut health, hormones, toxin burden, and genetics assessed as part of root cause analysis
Results delivered with little explanation	One-on-one results review with Dr. Lane and a personalized treatment plan

■ Elemental Insight

A TSH of 3.8 falls "within range" in conventional medicine but is associated with significant hypothyroid symptoms in functional medicine, which targets TSH between 1.0 and 2.0 for optimal function. The same result — two completely different conclusions.

The Elemental Functional Blood Panel: 70+ Biomarkers

Our comprehensive functional blood panel goes far beyond what a standard annual physical provides. Below is an overview of the major categories and some of the key markers we assess, along with what each tells us about your health — and **why it matters**.

Fasting Insulin

Conventional Range	Functional Optimal
2–25 mIU/L (rarely tested)	2–6 mIU/L

What It Reveals: Insulin resistance — a major driver of weight gain, PCOS, diabetes, brain fog, and cardiovascular disease — is invisible on a glucose test alone. Fasting insulin reveals the problem 10–15 years before diabetes develops.

Why It Matters: High fasting insulin is the #1 correctable driver of abdominal weight gain, hormonal imbalance, and metabolic disease. Most people with insulin resistance have a completely normal fasting glucose.

Homocysteine

Conventional Range	Functional Optimal
< 15 µmol/L	< 7 µmol/L

What It Reveals: Homocysteine is an inflammatory amino acid that damages arterial walls, creating microscopic injuries where plaque accumulates. Elevated levels are a powerful independent predictor of heart attack, stroke, and dementia.

Why It Matters: Even levels in the 9–14 range — technically 'normal' — are associated with significantly elevated cardiovascular and cognitive risk. Easily addressed with targeted B-vitamin therapy (B6, B12, methylfolate).

Ferritin

Conventional Range	Functional Optimal
12–300 ng/mL (women); 12–400 ng/mL (men)	70–100 ng/mL (women); 100–150 ng/mL (men)

What It Reveals: Ferritin is the body's iron storage protein. Too low: fatigue, hair loss, restless legs, impaired cognition. Too high: oxidative stress, inflammation, liver damage, and increased cardiovascular risk.

Why It Matters: Ferritin below 70 ng/mL is one of the most common and reversible causes of hair loss in women — yet the conventional range allows ferritin as low as 12, which is associated with severe depletion.

High-Sensitivity CRP (hsCRP)

Conventional Range	Functional Optimal
< 3.0 mg/L	< 0.5 mg/L

What It Reveals: hsCRP is the body's most sensitive general marker of systemic inflammation. Chronic low-grade inflammation drives every major chronic disease: heart disease, diabetes, cancer, autoimmunity, and neurodegeneration.

Why It Matters: A level of 2.5 mg/L is technically 'normal' but represents significant ongoing inflammation. We target below 0.5 mg/L as a marker of true anti-inflammatory health.

Vitamin D (25-OH)

Conventional Range	Functional Optimal
30–100 ng/mL	50–80 ng/mL

What It Reveals: Vitamin D is a master regulator of the immune system, hormone production, calcium metabolism, mood, and gene expression. Deficiency is epidemic — estimated to affect over 40% of U.S. adults.

Why It Matters: Levels below 40 ng/mL — even within the 'normal' range — are associated with increased autoimmune disease risk, reduced immune resilience, hormone disruption, and depression.

Free T3 (Thyroid)

Conventional Range	Functional Optimal
2.3–4.2 pg/mL	3.2–4.2 pg/mL

What It Reveals: Free T3 is the active thyroid hormone that enters cells and drives metabolism. Most conventional panels check only TSH, completely missing whether T4 is being converted to active T3.

Why It Matters: A patient can have a normal TSH and T4 but very low Free T3 — producing all the symptoms of hypothyroidism while being told their thyroid is fine. This is one of the most common missed diagnoses in medicine.

HOMA-IR (Insulin Resistance Score)

Conventional Range	Functional Optimal
Rarely calculated	< 1.5 (optimal)

What It Reveals: HOMA-IR is calculated from fasting insulin and fasting glucose. It quantifies the degree of insulin resistance — giving a single, actionable number that predicts metabolic disease risk.

Why It Matters: Most doctors do not order fasting insulin and therefore cannot calculate HOMA-IR. We use this score to identify insulin resistance at its earliest, most reversible stage.

Fibrinogen

Conventional Range	Functional Optimal
200–400 mg/dL	< 300 mg/dL

What It Reveals: Fibrinogen is a clotting protein. When elevated, it makes blood thicker and more prone to dangerous clots, while also reflecting ongoing systemic inflammation and elevated cardiovascular risk.

Why It Matters: Often overlooked in standard panels, elevated fibrinogen is a strong, independent predictor of heart attack and stroke — often detectable years before a cardiac event.

■ Elemental Insight

These are just 8 of the 70+ biomarkers we assess. The full panel includes CBC with differential, comprehensive metabolic panel, lipid subfractions, full hormone panel, adrenal markers, autoimmune screening, and more — all interpreted through an optimal health lens.

Thyroid Testing: The Most Misread Panel in Medicine

Thyroid dysfunction is one of the most prevalent yet most underdiagnosed conditions in the United States. Estimates suggest that up to 60% of people with thyroid disease are unaware of it. The primary reason? Most doctors test only one marker: TSH.

Why TSH Alone Is Not Enough

TSH (Thyroid Stimulating Hormone) is produced by the pituitary gland to signal the thyroid to produce hormones. Checking TSH alone is like checking a thermostat setting without looking at the actual room temperature — or what's heating the room.

A TSH within the conventional range (0.5–4.5 mIU/L) does not tell you: whether your thyroid is actually producing enough T4; whether T4 is being converted into active T3 (the metabolically active hormone); whether you have Hashimoto's autoimmune thyroid disease; or whether your cells are actually responding to the thyroid signal.

The Elemental 9-Marker Thyroid Panel

Marker	Description	Conventional Range	Optimal Range	Clinical Significance
TSH	Pituitary signal to thyroid	0.5–4.5 mIU/L	1.0–2.0 mIU/L	Higher TSH within range often signals the pituitary is working overtime to compensate for an underperforming thyroid.
Free T4	Inactive thyroid hormone (storage form)	0.8–1.8 ng/dL	1.1–1.8 ng/dL	Must be adequately produced and then converted to T3. Low T4 = insufficient thyroid output.
Free T3	Active thyroid hormone (metabolic form)	2.3–4.2 pg/mL	3.2–4.2 pg/mL	The hormone that actually enters cells and drives metabolism. Often low despite normal TSH/T4.
Reverse T3	Inactive T3 blocker	< 25 ng/dL	< 15 ng/dL	High reverse T3 blocks T3 receptors, causing functional hypothyroidism even with normal T3 levels. Driven by chronic stress and inflammation.

Total T4	Overall T4 pool	4.5–12.5 µg/dL	6.5–10 µg/dL	Context for free T4 interpretation.
Total T3	Overall T3 pool	80–200 ng/dL	100–180 ng/dL	Context for free T3 interpretation.
TPO Antibodies	Thyroid peroxidase antibodies	< 34 IU/mL	< 15 IU/mL (lower is better)	Elevated in Hashimoto's thyroiditis. Even slightly elevated antibodies indicate ongoing autoimmune attack on the thyroid — completely missed without testing.
TG Antibodies	Thyroglobulin antibodies	< 4.0 IU/mL	< 2.0 IU/mL	Second antibody marker for Hashimoto's. Can be elevated when TPO antibodies are normal.
T3 Uptake	Thyroid hormone binding assessment	Standard range	Contextual	Helps evaluate binding protein status and calculate free hormone indices.

Hashimoto's: The Hidden Epidemic

Hashimoto's thyroiditis is an autoimmune condition and the most common cause of hypothyroidism. It can be active for years or decades before TSH becomes abnormal — during which time patients experience fatigue, brain fog, hair loss, weight gain, and depression while being told their thyroid is 'normal.'

Testing for TPO and TG antibodies is the only way to identify Hashimoto's early. At Elemental Natural Medicine, we routinely screen for thyroid autoimmunity — and have a comprehensive protocol for reducing antibody levels through dietary intervention, gut healing, and targeted supplementation.

Hormone Testing: A Comprehensive Deep Dive

Hormones are chemical messengers that govern virtually every function in your body — metabolism, reproduction, mood, sleep, immune function, and more. Standard care rarely includes a comprehensive hormone evaluation unless you are experiencing obvious reproductive problems or are in menopause.

At Elemental Natural Medicine, we offer **comprehensive hormone panels** using blood, salivary, and/or urine (DUTCH) testing depending on your specific needs. This allows us to see not just hormone levels, but how your body is **producing, transporting, and metabolizing** those hormones.

Female Hormone Panel

Female Hormones We Assess

Estradiol (E2)

What it reflects: Primary estrogen — controls menstrual cycle, bone density, mood, and libido

Why it matters: Uterine lining support, brain function, skin health, and cardiovascular protection

Progesterone

What it reflects: Balances estrogen, supports sleep and mood; produced after ovulation

Why it matters: Low progesterone is the most common cause of PMS, irregular cycles, anxiety, and early miscarriage

Testosterone (Total & Free)

What it reflects: Often overlooked in women — essential for libido, muscle tone, energy, and confidence

Why it matters: Low testosterone in women causes fatigue, low libido, and depression; high levels drive PCOS and acne

DHEA-S

What it reflects: Adrenal androgen — precursor to sex hormones; declines sharply with age and stress

Why it matters: Marker of adrenal reserve and overall hormone 'bandwidth'; supports immune function and vitality

LH & FSH

What it reflects: Pituitary hormones controlling ovulation and ovarian function

Why it matters: Ratio helps diagnose PCOS; elevated FSH indicates diminished ovarian reserve

SHBG (Sex Hormone Binding Globulin)

What it reflects: Protein that binds and inactivates sex hormones

Why it matters: High SHBG (driven by estrogen or thyroid issues) reduces free active hormones; low SHBG increases androgen activity

Cortisol (4-Point Salivary)

What it reflects: Diurnal cortisol rhythm: morning peak, gradual decline

Why it matters: A single blood cortisol is meaningless — we need the 24-hour rhythm to identify adrenal dysregulation and HPA axis dysfunction

AMH (Anti-Mullerian Hormone)

What it reflects: Ovarian reserve — reflects remaining egg supply

Why it matters: Essential for fertility assessment; levels begin declining years before conventional markers show change

Male Hormone Panel

Male Hormones We Assess

Total & Free Testosterone

What it reflects: Total testosterone is the full pool; free is what's biologically active

Why it matters: Men can have 'normal' total testosterone but very low free testosterone — causing all symptoms of low T while being dismissed

SHBG

What it reflects: Binds and inactivates testosterone

Why it matters: High SHBG dramatically reduces free testosterone. Often elevated with insulin resistance, liver dysfunction, or thyroid issues

Estradiol (E2)

What it reflects: Men produce and need estrogen — but too much causes problems

Why it matters: Elevated estradiol in men: weight gain (especially chest), mood issues, reduced libido, and infertility

LH & FSH

What it reflects: Pituitary signals controlling testosterone and sperm production

Why it matters: Differentiates primary testicular failure from secondary (pituitary) hypogonadism

DHEA-S

What it reflects: Adrenal androgen precursor

Why it matters: Declines with age and chronic stress; supports testosterone production and immune function

PSA (Prostate Specific Antigen)

What it reflects: Prostate health marker

Why it matters: Tracked over time as part of men's preventive health — trend matters as much as absolute value

Cortisol (Salivary 4-Point)

What it reflects: Adrenal stress response rhythm

Why it matters: Chronically elevated cortisol suppresses testosterone production — the #1 reason for low testosterone in stressed men

■ Elemental Insight

We also offer the DUTCH Complete (Dried Urine Test for Comprehensive Hormones) — the most advanced hormone panel available. It measures estrogen metabolites, adrenal hormones, melatonin, and oxidative stress markers in a single test that provides a complete picture of hormone production AND clearance.

Gut Health Testing: The Foundation of Everything

Research over the past two decades has established the gut microbiome as one of the most influential systems in human health. The gut influences immunity, hormone metabolism, neurotransmitter production, inflammation, and nutrient absorption. Gut testing is one of the most powerful tools in functional medicine.

Comprehensive Stool Analysis (GI-MAP / GI Effects)

Standard stool tests check for only a handful of obvious pathogens. Our comprehensive stool analysis uses advanced DNA-based technology (qPCR) to assess the entire gut ecosystem.

Microbiome Diversity & Composition

Identifies the balance of beneficial, commensal, and potentially pathogenic bacteria. Low diversity is strongly associated with obesity, autoimmune disease, depression, and metabolic dysfunction.

Opportunistic Pathogens

Identifies overgrowth of bacteria, fungi (including *Candida* species), and parasites that produce toxins, disrupt digestion, and drive systemic inflammation.

***H. pylori* (with virulence factors)**

H. pylori is present in over 50% of the world population. When virulent strains are identified, they explain chronic gastritis, GERD, ulcers, and nutrient deficiencies (especially B12 and iron).

Intestinal Permeability Markers

Zonulin and calprotectin indicate whether the gut barrier is compromised — the mechanism behind 'leaky gut,' which allows bacterial toxins into the bloodstream and triggers systemic inflammation and autoimmunity.

Digestive Enzyme Output (Elastase)

Identifies pancreatic enzyme insufficiency — a common, underdiagnosed cause of malabsorption, nutritional deficiencies, and chronic bloating.

Short-Chain Fatty Acid Production

SCFAs (butyrate, propionate, acetate) produced by beneficial bacteria support gut wall integrity, reduce inflammation, and improve insulin sensitivity.

Inflammatory Markers (Calprotectin, SIgA)

Calprotectin identifies active intestinal inflammation. Secretory IgA (SIgA) reflects gut immune function — low SIgA signals immune compromise; high SIgA indicates active immune stress.

Occult Blood

Screens for occult gastrointestinal bleeding — an important early warning sign.

Food Sensitivity Testing (IgG & IgA)

Unlike food allergies (IgE-mediated, immediate reactions), food sensitivities are mediated by IgG and IgA antibodies and produce delayed inflammatory reactions — occurring hours to days after consumption. This makes them notoriously difficult to identify through elimination alone.

Our food sensitivity panels test 96–200+ foods, providing a clear map of which foods are driving chronic inflammation in your specific body. Common triggers include: gluten, dairy, eggs, soy, corn, nightshades, and various nuts and seeds — but the pattern is unique to each individual.

SIBO Testing (Small Intestinal Bacterial Overgrowth)

SIBO occurs when bacteria normally confined to the large intestine colonize the small intestine, fermenting carbohydrates and producing hydrogen and methane gas. It affects an estimated 6–15% of healthy adults and a much higher proportion of those with IBS, fibromyalgia, rosacea, or thyroid conditions.

We offer breath testing for hydrogen and methane SIBO — a non-invasive test that can be done at home and shipped to our clinic. SIBO is a highly treatable condition once identified.

Inflammation, Cardiovascular & Metabolic Markers

Cardiovascular disease remains the #1 killer in the United States, yet the standard lipid panel (total cholesterol, LDL, HDL, triglycerides) misses the majority of heart attack risk. Nearly half of all heart attack victims have normal cholesterol. Functional medicine cardiovascular assessment goes far deeper.

Advanced Cardiovascular Panel

LDL Particle Number & Size

Small, dense LDL particles are far more atherogenic than large, buoyant LDL. Standard LDL cholesterol does not distinguish between these types — particle testing does.

Lp(a) — Lipoprotein(a)

A genetically driven cardiovascular risk factor elevated in ~20% of the population. Lp(a) is associated with 3–4x increased heart attack risk and is completely missed on standard lipid panels.

ApoB / ApoA1 Ratio

The most accurate measure of atherogenic particle burden. Better at predicting cardiovascular risk than LDL cholesterol in multiple large studies.

Homocysteine

Inflammatory amino acid damaging arterial walls. Strongly associated with heart attack, stroke, and Alzheimer's disease. Normalized with B6, B12, and methylfolate.

Fibrinogen

Clotting protein that increases blood viscosity and cardiovascular risk when elevated. Also a marker of systemic inflammation.

hsCRP

High-sensitivity CRP detects inflammation at levels far below what standard CRP tests can measure. A powerful independent predictor of cardiovascular events.

Oxidized LDL

LDL becomes dangerous when oxidized by free radicals. Oxidized LDL is directly incorporated into arterial plaques — standard LDL does not reflect oxidation status.

Uric Acid

Elevated uric acid is associated with hypertension, insulin resistance, gout, and kidney disease. Often driven by dietary factors and metabolic dysfunction.

Metabolic & Blood Sugar Panel

- **Fasting Glucose:** Baseline blood sugar. But normal fasting glucose does not rule out insulin resistance.
- **Fasting Insulin:** The earliest marker of insulin resistance — elevated before glucose rises. Essential for assessing metabolic health.
- **HbA1c (Glycated Hemoglobin):** Reflects average blood sugar over the past 3 months. We target below 5.4% for optimal health (conventional 'prediabetes' threshold is 5.7%).
- **HOMA-IR:** Calculated score quantifying insulin resistance. We target below 1.5; values above 2.0 indicate significant resistance.
- **Triglycerides:** A direct measure of dietary carbohydrate and sugar intake and insulin sensitivity. We target below 80 mg/dL (conventional upper limit is 150 mg/dL).
- **Fasting Triglyceride:HDL Ratio:** One of the most powerful predictors of insulin resistance and cardiovascular risk. A ratio above 3.0 is a major red flag.

Nutrients, Toxins & Genetic Markers

Comprehensive Nutrient Assessment

Nutritional deficiencies are more common than most people realize — and they rarely cause obvious symptoms until the deficiency is severe. Subclinical deficiencies silently impair energy production, immune function, hormone synthesis, neurological function, and cellular repair.

We assess a comprehensive micronutrient panel including:

Vitamin D (25-OH)	50–80 ng/mL	Immune regulation, hormone production, bone health, mood, cancer prevention
Vitamin B12 (Methylmalonic Acid + Serum)	> 600 pg/mL	Neurological function, DNA synthesis, methylation, energy, red blood cell production
Folate (as 5-MTHF)	Optimal serum + RBC folate	DNA methylation, cardiovascular health, fertility, neural tube development
Magnesium (RBC)	5.5–6.5 mg/dL	300+ enzymatic reactions including ATP production, insulin signaling, and muscle/nerve function
Zinc (Plasma)	90–135 µg/dL	Immune function, hormone production, wound healing, thyroid conversion, skin health
Iodine (Spot Urine)	Optimal > 150 µg/L	Thyroid hormone synthesis, breast health, cognitive development
Iron Studies (Full Panel)	Multiple markers	Ferritin, serum iron, TIBC, transferrin saturation — full iron picture rather than single marker
Omega-3 Index	> 8%	Reflects dietary omega-3 intake and tissue incorporation; predicts cardiovascular and brain health
CoQ10	Optimal functional range	Mitochondrial energy production, antioxidant protection; depleted by statins and aging
Vitamin A, E, K2	Tissue-specific optimal ranges	Fat-soluble vitamins supporting immune function, bone health, and cellular signaling

Heavy Metal & Environmental Toxin Testing

Environmental toxins are an underappreciated driver of chronic disease, hormonal disruption, neurological symptoms, and immune dysfunction. We offer both blood and urine-based toxin panels.

- **Heavy Metals (Blood & Urine):** Lead, mercury, arsenic, cadmium, and aluminum. Even sub-toxic levels disrupt hormone receptors, enzyme function, mitochondrial activity, and thyroid conversion.
- **Non-Metal Toxins (GPL-TOX):** Screens for over 170 environmental chemicals including glyphosate, BPA, phthalates, organophosphates, and volatile solvents — chemicals found in food, water, plastics, and personal care products.
- **Mycotoxins (Mold Toxins):** Urine mycotoxin testing identifies exposure to mold-produced toxins that trigger fatigue, brain fog, respiratory symptoms, and immune disruption. Often the hidden driver in patients who "don't respond" to other treatments.
- **Glyphosate (Urine):** The world's most widely used herbicide. Disrupts the gut microbiome, impairs detoxification enzymes, and has been classified as a probable human carcinogen.

Genetic & Methylation Markers

Genetics does not equal destiny — but knowing your genetic predispositions allows for precisely targeted nutritional and lifestyle interventions. At Elemental Natural Medicine, we believe in using **epigenetic medicine**: understanding your genetic code so we can modify its expression through diet, environment, and lifestyle.

- **MTHFR Polymorphisms (C677T & A1298C):** Present in up to 40–60% of the population. MTHFR variants reduce the body's ability to convert folate into its active form (5-MTHF), impairing methylation — a critical process for DNA repair, neurotransmitter synthesis, detoxification, and cardiovascular health.
- **COMT (Catechol-O-Methyltransferase):** Influences estrogen metabolism and neurotransmitter breakdown. COMT variants affect mood regulation, stress tolerance, and estrogen-related cancer risk.
- **APOE Genotype:** Influences cholesterol metabolism and Alzheimer's risk. APOE4 carriers benefit from specific dietary and lifestyle interventions to reduce risk.
- **VDR (Vitamin D Receptor):** Affects how well vitamin D is utilized at the cellular level — some individuals need far higher supplementation despite adequate blood levels.
- **CBS (Cystathionine Beta Synthase):** Affects sulfur metabolism and homocysteine processing — relevant for cardiovascular risk and detoxification capacity.

How We Read Your Results Differently

Getting the right tests is only half the equation. The other half is how those results are interpreted. At Elemental Natural Medicine, lab interpretation is not a simple pass/fail exercise — it is a sophisticated clinical skill that combines optimal ranges, pattern recognition, and whole-person context.

Optimal Ranges vs. Conventional Reference Ranges

Conventional reference ranges are established by testing large populations and defining the middle 95% as 'normal.' This means 5% of a healthy population will always appear 'abnormal,' and many people with genuine dysfunction will fall within the 'normal' range.

Functional medicine uses optimal ranges derived from research on what lab values are associated with the lowest disease risk and the best long-term health outcomes — not simply the absence of flagged results.

TSH	0.5–4.5 mIU/L	1.0–2.0 mIU/L	Levels above 2.5 are associated with hypothyroid symptoms and elevated cardiac risk
Fasting Insulin	2–25 mIU/L	2–6 mIU/L	Levels above 8 indicate early insulin resistance — a decade before blood sugar rises
Ferritin (Women)	12–150 ng/mL	70–100 ng/mL	Levels below 70 cause fatigue and hair loss despite being 'normal'
Vitamin D	30–100 ng/mL	50–80 ng/mL	Immune and hormonal benefits require levels above 50 ng/mL
HbA1c	< 5.7% (prediabetes)	< 5.4%	Risk begins rising well below the 5.7% conventional threshold
hsCRP	< 3.0 mg/L	< 0.5 mg/L	Any elevation reflects ongoing inflammation with cumulative health consequences
Triglycerides	< 150 mg/dL	< 80 mg/dL	Above 100 reflects insulin resistance and carbohydrate excess
Homocysteine	< 15 µmol/L	< 7 µmol/L	Cardiovascular and cognitive risk begins rising above 8 µmol/L

Pattern Recognition: The Whole is Greater Than the Sum

One of the most powerful aspects of functional lab interpretation is recognizing patterns across multiple markers that, individually, might all appear borderline — but together paint a clear clinical picture.

Example pattern — Subclinical Hypothyroidism with Insulin Resistance:

- TSH: 3.2 (within range, but above functional optimal of 2.0)
- Free T3: 2.8 (within range, but below functional optimal of 3.2)
- Fasting Insulin: 12 (within range, but above functional optimal of 6)
- Triglycerides: 140 (within range, but above functional optimal of 80)
- hsCRP: 1.8 (within range, but above functional optimal of 0.5)
- Ferritin: 22 (within range, but below functional optimal of 70)

Each of these results individually would be dismissed as 'normal.' Together, they describe a patient with **significant metabolic and thyroid dysfunction** driving fatigue, weight gain, hair loss, and brain fog — a patient who has likely been told repeatedly that their labs are fine.

What Happens After Your Labs?

Ordering comprehensive labs is only the beginning. What happens with those results is what distinguishes functional medicine from simply running more tests. At Elemental Natural Medicine, every lab panel leads to a clear, actionable, personalized plan.

1

In-Depth Results Review

Dr. Lane reviews your complete panel using functional optimal ranges, looking for patterns and clinical correlations across all systems. This is not a 5-minute phone call — it's a thorough clinical encounter.

2

Personalized Clinical Report

You receive a written functional lab report that explains your key biomarkers in plain language, identifies areas of concern, and provides context for why each finding matters to your health goals.

3

Root Cause Identification

Based on your labs, symptoms, history, and lifestyle factors, we identify the underlying drivers of your health concerns — the root causes rather than surface-level symptoms.

4

Customized Treatment Protocol

Your personalized plan may include: targeted nutritional therapy, herbal medicine and botanical protocols, customized supplementation based on your deficiencies, dietary modification, stress management strategies, detoxification support, acupuncture, and lifestyle interventions.

5

Ongoing Monitoring & Optimization

We retest key markers at appropriate intervals to track your progress, adjust your protocol based on results, and ensure you continue moving toward optimal health — not just symptom reduction.

Testing Options at Elemental Natural Medicine

- Most tests can be shipped directly to your door for convenient at-home collection
- Lab assessments available both in-clinic and via telehealth/virtual consultation
- No insurance required — transparent, accessible pricing
- Tests are selected based on your individual goals, symptoms, and health history
- Dr. Lane consults with you personally to determine the right panel for your situation

Ready to Know What's Really Going On?

Stop guessing. Start testing.

Schedule your initial consultation with Dr. Lane today and take the first step toward understanding your body at the deepest level — and getting the answers you deserve.

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