Blood Test Reference

70+ biomarkers across 7 systems.
What we test, why it matters,
and what EVA™ does about it.

Clinically guided • Evidence-led • Personalised to your biology

Key Tests at a Glance

The markers below form the core of your EVA™ blood analysis — selected for their clinical relevance to longevity, metabolic health, and disease prevention. The complete panel of 70+ biomarkers is detailed in Section 2.

Heart & Blood Vessels

– ApoB
– Lipoprotein(a)
– LDL Cholesterol
– HDL Cholesterol
– Triglycerides

Blood Sugar Control

– HOMA-IR
– Fasting Glucose
– Fasting Insulin
– Triglyceride / HDL Ratio

Inflammation & Liver

– hs-CRP
– GGT
– ALT
– AST
– Uric Acid

Nutrition & Vitamins

– Vitamin D
– Vitamin B12
– Folate
– Homocysteine
– Magnesium (RBC)
– Zinc
– Ferritin

Hormones

– Testosterone
– Cortisol
– IGF-1
– Estradiol (E2)
– TSH
– Free T3
– Free T4

Kidney & Electrolytes

– Creatinine
– Sodium
– Potassium
– BUN

SECTION 1

Key Blood Markers — Detailed

Each marker includes what it measures, why it matters for longevity, and the EVA™ action taken when levels fall outside optimal range. Optimal, Suboptimal, and Abnormal ranges for every marker are calibrated via the EVA™ Recommendation Engine. App view indicates whether the marker appears in the Main View or Expanded View of the EVA™ app.

HEART & BLOOD VESSELS

ApoB — Main View

Counts the number of cholesterol-carrying particles that can enter artery walls and cause plaque buildup — the most direct measure of cardiovascular risk.

EVA™ Action: Supports ApoB reduction using Berberine to improve cholesterol clearance.

Lipoprotein(a) — Main View

An inherited cholesterol particle that significantly increases the risk of heart attack and stroke, independent of other cholesterol markers.

EVA™ Action: Triggers aggressive cardiovascular risk reduction and stricter ApoB targets.

LDL Cholesterol — Expanded View

Carries cholesterol through the bloodstream and contributes to plaque formation in artery walls when elevated.

EVA™ Action: Supports cholesterol metabolism through dietary optimisation.

HDL Cholesterol — Expanded View

Removes excess cholesterol from the bloodstream and transports it back to the liver for elimination.

EVA™ Action: Supports cardiovascular protection through metabolic optimisation.

Triglycerides — Expanded View

Measures circulating fats in the blood, reflecting metabolic health, dietary habits, and insulin sensitivity.

EVA™ Action: Supports fat metabolism using Omega-3 fatty acids.

BLOOD SUGAR CONTROL

HOMA-IR — Main View

Estimates how resistant your cells are to insulin — the primary driver of metabolic disease, Type 2 diabetes, and fat gain.

EVA™ Action: Supports insulin sensitivity using Berberine and Magnesium.

Triglyceride / HDL Ratio — Main View

A composite ratio reflecting how efficiently your body processes energy. A high ratio is one of the strongest predictors of insulin resistance.

EVA™ Action: Supports metabolic health using Omega-3 and Berberine.

Fasting Glucose — Expanded View

Measures blood sugar levels in a fasted state, indicating how well your body maintains glucose stability.

EVA™ Action: Supports glucose control through dietary optimisation.

Fasting Insulin — Expanded View

Shows how much insulin your pancreas must produce to keep blood sugar stable — elevated levels indicate early-stage insulin resistance.

EVA™ Action: Supports insulin sensitivity using Berberine.

INFLAMMATION & LIVER

hs-CRP — Main View

High-sensitivity C-Reactive Protein measures systemic inflammation — a root cause of cardiovascular disease, metabolic dysfunction, and accelerated ageing.

EVA™ Action: Supports inflammation reduction using Omega-3 and Vitamin C.

GGT — Main View

A liver enzyme that rises with oxidative stress, alcohol exposure, and detoxification burden — one of the earliest markers of metabolic liver stress.

EVA™ Action: Supports liver detox and metabolic recovery.

ALT — Expanded View

Measures liver cell stress and damage. Elevated ALT is more specific to liver injury than AST and is a key early indicator of fatty liver disease.

EVA™ Action: Supports liver health through metabolic optimisation.

AST — Expanded View

Reflects liver, heart, and muscle stress. Elevated AST alongside ALT indicates liver damage; isolated elevation may indicate muscle or cardiac origin.

EVA™ Action: Supports metabolic recovery.

Uric Acid — Expanded View

A byproduct of purine metabolism. Elevated uric acid is linked to gout, kidney stones, cardiovascular risk, and metabolic syndrome.

EVA™ Action: Supports metabolic and inflammatory control through dietary optimisation.

NUTRITION & VITAMINS

Vitamin B12 — Main View

Essential for nerve function, red blood cell production, and methylation — the biochemical process that controls gene expression and DNA repair.

EVA™ Action: Supports methylation using Vitamin B12 supplementation.

Folate — Main View

Required for DNA synthesis, repair, and the methylation cycle. Low folate elevates homocysteine and impairs cellular renewal.

EVA™ Action: Supports methylation using L-Methylfolate.

Homocysteine — Main View

An amino acid that rises when methylation is impaired. Elevated homocysteine independently predicts cardiovascular disease, cognitive decline, and stroke.

EVA™ Action: Supports methylation using L-Methylfolate and Vitamin B12.

Magnesium (RBC) — Main View

Intracellular magnesium — measured in red blood cells for accuracy — supports energy production, sleep quality, stress resilience, and nervous system function.

EVA™ Action: Supports recovery using Magnesium Glycinate.

Vitamin D — Main View

A pro-hormone regulating immune function, bone density, mood, and metabolic balance. Deficiency is widespread and linked to poor long-term health outcomes.

EVA™ Action: Optimises levels using Vitamin D3 + K2.

Zinc — Expanded View

Supports immune defence, hormone synthesis, cellular repair, and antioxidant enzyme function. Commonly depleted in high-stress individuals.

EVA™ Action: Supports immune and hormone health using Zinc.

Ferritin — Expanded View

The body's primary iron storage protein. Low ferritin impairs energy, cognitive function, sleep, and hair health. High ferritin may indicate inflammation.

EVA™ Action: Supports iron levels using Iron + Vitamin C.

Haemoglobin — Expanded View

Carries oxygen in red blood cells to every tissue. Low haemoglobin causes fatigue, breathlessness, and impaired physical and cognitive performance.

EVA™ Action: Supports oxygen delivery through iron optimisation.

HORMONES

Testosterone

Main View

The primary anabolic hormone in both men and women. Regulates energy, lean muscle mass, libido, mood, and metabolic rate.

EVA™ Action: Supports hormone balance using Zinc, Magnesium, and Vitamin D.

Cortisol

Main View

The body's primary stress hormone. Chronically elevated cortisol drives fat accumulation, immune suppression, sleep disruption, and accelerated ageing.

EVA™ Action: Book a telehealth consult with an EVA physician.

IGF-1

Main View

Insulin-like Growth Factor 1 reflects growth hormone activity. Mid-range IGF-1 is associated with optimal longevity; both low and high levels increase mortality risk.

EVA™ Action: Book a telehealth consult with an EVA physician.

Estradiol (E2)

Main View (Women) / Expanded (Men)

The primary oestrogen hormone. Regulates reproductive health, bone density, cardiovascular protection, and mood in both men and women.

EVA™ Action: Book a telehealth consult with an EVA physician.

TSH

Expanded View

Thyroid Stimulating Hormone signals the thyroid to produce T3 and T4. Abnormal TSH is the first indicator of thyroid dysfunction, affecting every system in the body.

EVA™ Action: Book a telehealth consult with an EVA physician.

Free T3

Expanded View

The active thyroid hormone responsible for cellular energy production, metabolism, and temperature regulation.

EVA™ Action: Book a telehealth consult with an EVA physician.

Free T4

Expanded View

The precursor to active T3, produced by the thyroid and converted in tissues. Measuring both T3 and T4 reveals where thyroid dysfunction originates.

EVA™ Action: Book a telehealth consult with an EVA physician.

KIDNEY & ELECTROLYTES

Creatinine

Main View

A waste product of muscle metabolism filtered by the kidneys. Rising creatinine signals declining kidney filtration capacity.

EVA™ Action: Supports kidney health through hydration and monitoring.

Sodium

Main View

The primary electrolyte controlling fluid balance, blood pressure, and nerve signal transmission.

EVA™ Action: Supports hydration and electrolyte balance.

Potassium

Main View

Critical for heart rhythm, muscle contraction, and nerve function. Both high and low potassium can trigger dangerous cardiac arrhythmias.

EVA™ Action: Supports electrolyte balance through diet.

BUN

Expanded View

Blood Urea Nitrogen reflects protein breakdown and kidney clearance capacity. Elevated BUN alongside creatinine confirms kidney impairment.

EVA™ Action: Supports kidney monitoring.

SECTION 2

Complete Blood Panel

The complete EVA™ blood panel — 70+ biomarkers across 7 systems. Men's and Women's panels share the same core markers, with gender-specific additions noted.

1. Heart & Blood Vessels

Lipid Profile

- Total Cholesterol
- LDL Cholesterol
- HDL Cholesterol
- Non-HDL Cholesterol
- Triglycerides
- VLDL

Lipid Ratios (Calculated)

- Total Cholesterol / HDL Ratio
- LDL / HDL Ratio
- Triglycerides / HDL Ratio

Advanced Cardiovascular Risk

- Apolipoprotein B (ApoB)
- Lipoprotein(a) [Lp(a)]

2. Metabolic Health

Blood Sugar & Insulin

- Fasting Glucose
- HbA1c
- Fasting Insulin
- HOMA-IR (Calculated)

3. Liver Health

Liver Enzymes

- ALT
- AST
- GGT
- Alkaline Phosphatase (ALP)

Liver Function

- Total Bilirubin
- Direct Bilirubin
- Total Protein
- Albumin
- Globulin
- A/G Ratio (Calculated)
- HSI — Hepatic Steatosis Index (Calculated)

4. Kidney Health

Kidney Function

- Creatinine
- Urea
- BUN
- Uric Acid

5. Blood & Immune System

Red Blood Cells

- RBC Count
- Haemoglobin
- Haematocrit
- MCV
- MCH
- MCHC
- RDW

White Blood Cells

- WBC (Total Count)
- Neutrophils
- Lymphocytes
- Monocytes
- Eosinophils
- Basophils

Platelets

- Platelet Count
- MPV (Mean Platelet Volume)

Inflammation

- hsCRP (High-Sensitivity C-Reactive Protein)

Iron Status

- Serum Iron
- Ferritin
- TIBC
- UIBC

6. Hormones

Thyroid

- TSH
- Free T3
- Free T4

Stress & Adrenal

- Cortisol

Sex Hormones

- Total Testosterone
- SHBG (Men only)
- Free Testosterone % (Calculated)
- Estradiol (E2)
- Progesterone (Women only)
- FSH (Women only)
- LH (Women only)
- DHEA-S (Women only)

Growth & Longevity

- IGF-1

Prostate (Men only)

- Total PSA

7. Vitamins, Minerals & Nutrition

B Vitamins & Methylation

– Vitamin B12	– Homocysteine
– Folate (Serum)	

Fat-Soluble Vitamins

– Vitamin D (25-OH)	

Minerals

– Magnesium (RBC – intracellular)	– Calcium
– Zinc	– Phosphate

Electrolytes

– Sodium	– Chloride
– Potassium	– Bicarbonate