



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.

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)
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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
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5. Blood & Immune System

Red Blood Cells	
– RBC Count	– MCH
– Haemoglobin	– MCHC
– Haematocrit	– RDW
– MCV	
White Blood Cells	
– WBC (Total Count)	– Monocytes
– Neutrophils	– Eosinophils
– Lymphocytes	– Basophils
Platelets	
– Platelet Count	– MPV (Mean Platelet Volume)
Inflammation	
– hsCRP (High-Sensitivity C-Reactive Protein)	
Iron Status	
– Serum Iron	– TIBC
– Ferritin	– UIBC

6. Hormones

Thyroid	
– TSH	– Free T4
– Free T3	
Stress & Adrenal	
– Cortisol	
Sex Hormones	
– Total Testosterone	– Progesterone (Women only)
– SHBG (Men only)	– FSH (Women only)
– Free Testosterone % (Calculated)	– LH (Women only)
– Estradiol (E2)	– 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