MINIMAL BLOOD MARKERS FOR LONGEVITY

A practical framework for tracking
1) cardiovascular, 2) metabolic, 3) inflammatory, and 4) liver health.

⚠️ DISCLAIMER

This document reflects my personal framework and the target ranges I choose to aim for. It is not medical advice and is not a substitute for working with a qualified healthcare professional.

Standard clinical ranges vary by country and laboratory.
My targets are often more conservative than standard "normal" lab ranges.

Note: "What moves it" lists lifestyle levers only. Genetics, medications, and medical conditions aren't listed.

1) CARDIOVASCULAR HEALTH

Triglycerides

Fat in transit. Highly lifestyle-responsive.

Time horizon: often changes within days to weeks.

What moves it: refined carbs and sugar, alcohol, calorie surplus, weight gain, low activity.

My target:	**<0.9 mmol/L (80 mg/dL)**
Standard clinical range:	<1.7 mmol/L (150 mg/dL)

LDL-C (Low-Density Lipoprotein)

The amount of cholesterol being carried toward artery walls. Persistently higher levels increase long-term cardiovascular risk.

Time horizon: usually shifts over weeks to months.

What moves it: saturated fat intake, soluble fiber intake, and body weight.

My target:	**<2.0 mmol/L (77 mg/dL)**
Standard clinical range:	<2.6 mmol/L (100 mg/dL)

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1) CARDIOVASCULAR HEALTH

HDL-C (High-Density Lipoprotein)

How well your metabolic system is functioning. Very low levels often signal insulin resistance, while stable mid-range levels typically track with good metabolic health.

Time horizon: tends to move slowly, months.

What moves it: regular exercise (aerobic + resistance), smoking, alcohol intake, weight change, and overall diet quality (less refined carbs, more whole foods).

My target:	**1.3-2.3 mmol/L (50-90 mg/dL)**
Standard clinical range:	>1.3 mmol/L (>50 mg/dL)—women >1.0 mmol/L (>40 mg/dL)—men

Blood Pressure

Force against artery walls.

Time horizon: can vary day to day, but sustained changes typically show up over weeks to months.

What moves it: body weight, sodium intake, alcohol, aerobic fitness, sleep quality, and stress load.

My target:	**<120 / 80**
Standard clinical range:	<120/80

ApoB

Number of atherogenic (plaque-building) particles that can enter artery walls. More particles = higher lifetime plaque risk.

Time horizon: shifts over weeks to months.

What moves it: saturated fat intake (replacing it with unsaturated fats), soluble fiber intake, overall calorie balance (weight gain/loss).

My target:	**<0.6 g/L (60 mg/dL)**
Standard clinical range:	<0.9 g/L (90 mg/dL)

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2) METABOLIC

Fasting Insulin

How hard your body has to work to keep glucose normal. Early marker of insulin resistance.

Time horizon: often shifts within weeks.

What moves it: calorie surplus, refined carbs/sugar, low activity, sleep deprivation.

My target:	**2-5 mIU/L**
Standard clinical range:	~2–25 mIU/L (varies widely by lab)

Fasting Glucose

Snapshot of blood sugar after an overnight fast.

Time horizon: can fluctuate day to day. Meaningful shifts over weeks to months.

What moves it: carb intake (amount and timing), calorie balance, sleep, stress, and physical activity.

My target:	**3.9-4.7 mmol/L (70-85 mg/dL)**
Standard clinical range:	<5.6 mmol/L (<100 mg/dL)

HbA1c

Average blood glucose exposure over ~2–3 months.

Time horizon: reflects previous 8–12 weeks.

What moves it: long-term diet pattern (especially carbohydrate load), calorie balance, activity level, and sleep.

My target:	**5.0-5.4%**
Standard clinical range:	<5.7%

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3) INFLAMMATORY

hs-CRP

Low-grade systemic inflammation. Higher levels associate with higher cardiovascular risk.

Time horizon: shifts over weeks. Can "spike" with infection or hard training.

What moves it: excess body fat, smoking, poor sleep, chronic stress, low activity, and ultra-processed food intake.

My target:	**<0.3 mg/L**
Standard clinical range:	<1.0 mg/L = low risk; 1-3 = average risk, 3.0 mg/L = high risk

4) LIVER ENZYMES

ALT (Alanine Aminotransferase)

Enzyme reflecting liver cell stress.

Time horizon: within days due to acute factors (illness, hard training, alcohol). Lifestyle-driven improvements usually show over weeks to months.

What moves it: chronic calorie surplus, alcohol intake, and acute stressors like intense training.

My target:	**<17 U/L**
Standard clinical range:	7-55 U/L

AST (Aspartate Aminotransferase)

Enzyme that can reflect liver strain or muscle damage. Best interpreted alongside ALT.

Time horizon: within days due to acute factors (illness, hard training, alcohol). Lifestyle-driven improvements usually show over weeks to months.

What moves it: overlapping drivers with ALT, but more sensitive to muscle damage from training.

My target:	**<17 U/L**
Standard clinical range:	8-48 U/L

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4) LIVER ENZYMES

GGT (Gamma-Glutamyl Transferase)

Enzyme that tends to rise with alcohol intake and liver fat, and correlates with cardiometabolic risk.

Time horizon: shifts over weeks to months. Best interpreted as trend.

What moves it: alcohol intake, chronic calorie surplus, and diet pattern (especially excess refined carbs/sugar).

My target:	**<14-20 U/L (women)** <25 U/L (often cited for men)
Standard clinical range:	8-61 U/L (varies by lab and sex)