FREE GUIDE FROM ELINMED

5 Biomarkers Every New Yorker Should Track for Longevity

The tests most doctors skip — and why they could save your life.

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Why Most Routine Bloodwork Isn't Enough

If your doctor tells you your cholesterol is "normal" and sends you home, you may be getting incomplete information. Standard panels miss the markers that best predict cardiovascular events — especially in people who look healthy on paper.

These five biomarkers are the ones I order when I want a true picture of a patient's cardiovascular and metabolic risk. They're available at most labs. Many are covered by insurance. And knowing them can change the trajectory of your health.

A note before you read:
This guide does not replace a conversation with your doctor. It's designed to help you ask better questions.

BIOMARKER 01

ApoB — Apolipoprotein B

"The number of particles, not just how much cholesterol they carry."

Every LDL and VLDL particle that can enter your artery wall carries exactly one ApoB molecule. Standard LDL-C tells you how much cholesterol is inside those particles — ApoB tells you how many particles there are. More particles means more opportunities for arterial damage, even when LDL-C appears normal.

Why it matters for longevity:
Studies consistently show ApoB outperforms LDL-C as a predictor of cardiovascular events. A patient can have a "normal" LDL-C of 100 mg/dL but an elevated ApoB if their particles are small and dense — a pattern common in insulin resistance and metabolic syndrome.

	Standard Range	Optimal for Longevity
ApoB	< 130 mg/dL	< 80 mg/dL (primary prevention) < 65–70 mg/dL (if ASCVD or high risk)

What to do:
Ask your doctor to add ApoB to your next lipid panel. Most major labs offer it.

BIOMARKER 02

Lp(a) — Lipoprotein(a)

"A genetically inherited risk factor that standard cholesterol panels don't measure."

Lp(a) is a modified LDL particle with unique properties that make it particularly pro-atherosclerotic and pro-thrombotic. It is largely genetically determined — diet and exercise have minimal effect on it. Approximately 1 in 5 people have elevated levels and most have never been tested.

Why it matters for longevity:
Elevated Lp(a) is one of the strongest independent risk factors for premature heart attack and aortic stenosis. Knowing your level is critical for accurate risk stratification and may influence when to start preventive therapy. It only needs to be measured once in your lifetime.

	Standard Range	Optimal for Longevity
Lp(a)	< 125 nmol/L or < 50 mg/dL	< 75 nmol/L (lower is better)

What to do:
Request Lp(a) testing at least once. If elevated, discuss implications with a cardiologist.

BIOMARKER 03

Fasting Insulin & HOMA-IR — Insulin Resistance Markers

"Insulin resistance damages your arteries years before diabetes appears."

Fasting glucose can appear normal for a decade while insulin resistance silently drives inflammation, dyslipidemia, hypertension, and endothelial dysfunction. Fasting insulin and HOMA-IR (calculated from glucose + insulin) reveal this hidden pathology early.

Why it matters for longevity:
Insulin resistance is present in an estimated 40% of American adults. It accelerates atherosclerosis, raises triglycerides and small dense LDL, lowers HDL, and promotes visceral fat — a cluster that dramatically increases cardiovascular risk. It is reversible with targeted lifestyle intervention.

	Standard Range	Optimal for Longevity
Fasting Insulin	2–25 uIU/mL (lab range)	< 8 uIU/mL (optimal)
HOMA-IR	< 2.0 (acceptable)	< 1.0 (optimal)
Fasting Glucose	70–100 mg/dL	< 90 mg/dL (optimal)

What to do:
Ask for fasting insulin alongside your fasting glucose on your next metabolic panel.

BIOMARKER 04

hs-CRP — High-Sensitivity C-Reactive Protein

"Inflammation is the engine of heart disease — hs-CRP measures its speed."

Atherosclerosis is an inflammatory disease. hs-CRP is the most clinically validated blood marker of systemic vascular inflammation. It is independent of cholesterol levels and adds predictive value beyond standard lipid panels — even in people with "normal" LDL.

Why it matters for longevity:
The landmark JUPITER trial showed that patients with normal LDL but elevated hs-CRP had significantly reduced cardiovascular events with statin therapy. High hs-CRP in the absence of infection may signal metabolic dysfunction, sleep apnea, visceral obesity, or early vascular disease — all addressable.

	Standard Range	Optimal for Longevity
hs-CRP	< 3.0 mg/L	< 1.0 mg/L (low risk) 1.0–3.0 mg/L (moderate) > 3.0 mg/L (high risk)

What to do:
Specify hs-CRP (not standard CRP) on lab orders. Ensure no active infection when testing.

BIOMARKER 05

CAC Score — Coronary Artery Calcium Score

"A 10-minute scan that shows calcified plaque already in your arteries."

The CAC score is a non-invasive CT scan that quantifies calcified atherosclerotic plaque in your coronary arteries. It is the single best imaging test for reclassifying cardiovascular risk in intermediate-risk individuals — and it's often not offered until a patient has already had an event.

Why it matters for longevity:
A CAC score of 0 ("power of zero") confers a very low 10-year cardiovascular event risk and may allow safe deferral of statin therapy. A score above 100 or 75th percentile for age/sex significantly upgrades risk and changes treatment decisions. MESA data shows CAC is the strongest predictor of cardiovascular events among all risk factors tested.

CAC Score	Interpretation	General Guidance
CAC = 0	Very low risk	Reassess in 5–7 years
CAC 1–99	Mild plaque present	Lifestyle + discuss statins
CAC 100–399	Moderate burden	Statin therapy recommended
CAC ≥ 400	Extensive burden	Aggressive risk reduction

What to do:
CAC scanning costs $75–$250 out of pocket. No contrast, ~1 mSv radiation, 10–15 minutes.

What Comes Next

These five biomarkers are the starting point of every new patient evaluation at ElinMed. But numbers on a page only matter when they're interpreted in the context of your full history, risk factors, and goals.

ElinMed is a new virtual cardiology practice launching in New York — focused on prevention, cardiac optimization, and longevity. We see patients on your schedule, explain everything, and never bill insurance (so we answer only to you).

ElinMed is not yet accepting patients.
Join the interest list at **elinmedicine.com** to be notified when we open and receive early-access pricing.