



Cardiovascular & Metabolic Marker Guide

This educational guide accompanies this month's newsletter and is intended to help support more informed conversations around cardiovascular and metabolic health. It is not intended to diagnose disease or replace medical care.

Standard Lipid Markers

Marker	Common Lab Range	Functional / Optimal Consideration	Why It Matters
Total Cholesterol	Varies by lab	< 200 mg/dL	General cholesterol overview
LDL Cholesterol	Varies by lab	Context dependent	Carries cholesterol to tissues
HDL Cholesterol	40–60+ mg/dL	> 50–60 mg/dL	Protective cardiovascular support
Triglycerides	< 150 mg/dL	< 100 mg/dL	Can reflect insulin resistance and inflammation

1. Standard Lipid Markers

- **Total Cholesterol:** General cholesterol overview.
- **LDL Cholesterol:** Carries cholesterol through the body.
- **HDL Cholesterol:** Protective cardiovascular support.
- **Triglycerides:** May reflect insulin resistance and inflammation.

Advanced Cardiovascular & Metabolic Markers

Marker	Functional / Optimal Consideration	Why It Matters	Additional Notes
ApoB	< 80 mg/dL	Assesses number of atherogenic particles	Often more predictive than LDL alone
ApoA1	> 140 mg/dL	Protective HDL-associated protein	Higher may be supportive
ApoB/ApoA1 Ratio	Lower is generally better	Balance between risk and protection	Used in prevention-focused cardiology

Lipoprotein(a)	< 30 mg/dL	Genetic cardiovascular risk marker	Helpful to test at least once
Fasting Insulin	2–6 µIU/mL	Early marker of metabolic imbalance	Can rise years before diabetes
HbA1c	Below 5.3–5.5%	Reflects long-term blood sugar balance	Used alongside fasting glucose
hs-CRP	< 1.0 mg/L	Marker of systemic inflammation	Higher levels may increase cardiovascular risk
Homocysteine	6–8 µmol/L	Linked to methylation and vascular health	May relate to B-vitamin status

2. Advanced Cardiovascular & Metabolic Markers

- **ApoB:** Helps assess the number of particles that may contribute to plaque formation.
- **ApoA1:** A protective protein associated with HDL cholesterol.
- **ApoB/ApoA1 Ratio:** Looks at the balance between risk and protection.
- **Lipoprotein(a):** An inherited cardiovascular risk marker worth testing at least once.
- **Fasting Insulin:** Can identify metabolic imbalance years before diabetes develops.
- **HbA1c:** Reflects long-term blood sugar balance.
- **hs-CRP:** A marker of inflammation within the body.
- **Homocysteine:** Linked to cardiovascular and methylation health.

LDL Particle Size: Helps assess whether LDL particles may be more inflammatory

3. Functional / optimal considerations

Marker	Functional / Optimal Consideration
Triglycerides	<100 mg/dL
Fasting Insulin	2–6 µIU/mL
hs-CRP	<1.0 mg/L
HbA1c	Below 5.3–5.5%
ApoB	<80 mg/dL
Lipoprotein(a)	<30 mg/dL

Health is rarely about one isolated number. The more we understand how the body communicates through patterns involving inflammation, blood sugar balance, digestion, and metabolism, the greater opportunity we have to support it earlier and more wisely.

Always looking out for you,
Small changes for a healthier "U"