



STARTER GUIDE

Metabolic Syndrome

STARTER CHEAT SHEET

Know your symptoms. Know your labs. Know what to ask for.



THE 5 WARNING SIGNS

1 • WAIST

Belly fat around your organs

Women $\geq 35"$ • Men $\geq 40"$

2 • BLOOD PRESSURE

Extra strain on your heart

$\geq 130/85$

3 • TRIGLYCERIDES

Fat in your blood

≥ 150 mg/dL

4 • HDL

"Good" cholesterol, too low

Women < 50 • Men < 40

5 • FASTING SUGAR

Blood sugar creeping up

≥ 100 mg/dL

3 or more = metabolic syndrome. Taking medicine for one of these? It still counts.

WHAT YOU MAY NOTICE

Body signals • often brushed off

- Belly weight; "apple" shape
- Hard to lose weight despite effort
- Tired or foggy after meals
- Sugar & carb cravings
- Snoring; waking unrefreshed
- Skin tags; dark, velvety skin patches
- Morning headaches
- Short of breath with activity
- Achy knees, hips & back
- Swollen ankles

WHAT'S HAPPENING INSIDE

Silent • found with labs & a BP cuff

- Insulin running high
- Blood pressure creeping up
- Triglycerides up; HDL down
- Fasting sugar rising
- Fatty liver
- More artery-clogging particles (ApoB)
- Low-grade inflammation
- Higher uric acid
- Kidney strain
- Plaque building in arteries



Did you know? About 1 in 3 U.S. adults has metabolic syndrome, and most don't know it. It about doubles heart disease risk and raises type 2 diabetes risk about 5 times.

BEFORE YOUR VISIT

Ask for a FULL panel: lipids, fasting glucose & insulin, A1c, ApoB, Lp(a), CMP, uric acid, hs-CRP

Measure your waist: tape at the top of your hip bones, after breathing out

Bring a week of home BP readings if you have a cuff

Fast 8-12 hours: water only; test in the morning

Check BP right: sit 5 min, feet flat, arm at heart level, no caffeine for 30 min

List your meds: BP, cholesterol, metformin, GLP-1s & supplements



YOUR METABOLIC NUMBERS, DECODED

Part 1 · The 5 warning signs: what each shows and what to consider

Optimal the range we aim for **Risk** counts toward metabolic syndrome

WAIST SIZE

Measures fat around your organs. A better clue than the scale.

Optimal: under half your height

Risk ≥ 35 " women · ≥ 40 " men*

↑ IF HIGH

May mean: visceral (organ) fat, which drives insulin resistance, inflammation & fatty liver.

Consider: protein, strength training, sleep, stress care; fasting insulin.

↓ IF SHRINKING

May mean: you're losing the fat that matters most, even if the scale is slow.

Consider: measure monthly, same spot, same time of day.

BLOOD PRESSURE

The force on your artery walls with each heartbeat.

Optimal $<120/80$

Risk $\geq 130/85$

↑ IF HIGH

May mean: insulin resistance, salt sensitivity, stress, sleep apnea, alcohol, low potassium or magnesium.

Consider: home readings; sleep apnea screen; kidney labs.

↓ IF LOW

May mean: under 90/60 with dizziness can come from dehydration or a medication dose that's now too strong.

Consider: fluids; medication review, especially after weight loss.

TRIGLYCERIDES

Fat in your blood, much of it made from extra sugar & alcohol.

Optimal <100 mg/dL

Risk ≥ 150 mg/dL

↑ IF HIGH

May mean: insulin resistance, sugary drinks, refined carbs, alcohol, low thyroid. Over 500 raises pancreatitis risk.

Consider: confirm you fasted; triglyceride-to-HDL ratio; ApoB.

↓ IF LOW

May mean: usually a great sign. Very low is rarely an overactive thyroid or poor absorption.

Consider: read with your full lipid panel.

HDL CHOLESTEROL

The "cleanup crew" that carries cholesterol away from arteries.

Optimal >60 mg/dL

Risk <50 women · <40 men

↑ IF HIGH

May mean: usually protective. Very high (over 100) is often genetic and not always extra protective.

Consider: look at ApoB & Lp(a) too.

↓ IF LOW

May mean: insulin resistance, inactivity, smoking, high-sugar diet, low sex hormones.

Consider: movement, omega-3s, quitting smoking; hormone check.

FASTING GLUCOSE

Your blood sugar after an overnight fast. It often rises last.

Optimal 75–90 mg/dL

Risk ≥ 100 mg/dL

↑ IF HIGH

May mean: 100–125 is prediabetes; 126+ on two tests is diabetes. Stress, poor sleep or illness can raise it.

Consider: fasting insulin, A1c; repeat to confirm.

↓ IF LOW

May mean: under 70 can come from a long fast, intense exercise, alcohol or diabetes medication.

Consider: symptoms like shaking or sweating; review meds.



YOUR METABOLIC NUMBERS, DECODED

Part 2 · Beyond the basics, patterns and co-factors

APOB

Counts the particles that actually get into artery walls. Often more telling than LDL.

Optimal <80 mg/dL

Many labs flag ≥90–100*

↑ IF HIGH

May mean: higher heart risk, even when LDL looks "normal." Common with insulin resistance.

Consider: lifestyle first; discuss medication if very high or family history.

LP(A)

A mostly inherited cholesterol particle. Check it once in your life.

Optimal <30 mg/dL (<75 nmol/L)

Higher risk >50 mg/dL*

↑ IF HIGH

May mean: inherited heart risk that diet doesn't change much.

Consider: keep ApoB, BP & blood sugar extra tight; tell family members to test.

FASTING INSULIN & A1C

Insulin resistance is the engine behind metabolic syndrome.

Insulin 2–6 µIU/mL · **A1c** <5.4%

A1c <5.7%*

↑ IF HIGH

May mean: insulin resistance, often years before sugar rises.

Consider: see our [Insulin Resistance Starter Guide](#) for details.

ALT & URIC ACID

Clues to fatty liver and sugar & fructose overload.

ALT <25 U/L · **Uric acid** <5.5 mg/dL

↑ IF HIGH

May mean: fatty liver, sugary drinks, alcohol, kidney strain; gout risk.

Consider: liver ultrasound; cut sugary drinks & alcohol; hydration.

READING THE PATTERN

↑ high · ↓ low · N in range

Signs met	Other results	What it may point to
0 of 5	all N	Low metabolic risk: keep it up
1–2 of 5	fasting insulin ↑	Early warning: hidden insulin resistance, the best time to act
3+ of 5	A1c 5.7–6.4%	Metabolic syndrome with prediabetes
3+ of 5	A1c 6.5%+	Type 2 diabetes range (confirm with a repeat test)
any	ApoB ↑ or Lp(a) ↑	Higher heart risk even with "normal" LDL
any	ALT ↑	Possible fatty liver

METABOLIC CO-FACTORS WORTH CHECKING

hs-CRP <1.0 mg/L

Vitamin D (25-OH) 50–80 ng/mL

RBC Magnesium 5.5–6.5 mg/dL

TSH 0.5–2.0 mIU/L + Free T3

Testosterone & SHBG

Sleep apnea screen

The good news: losing 5–10% of body weight, plus strength training and better sleep, can reverse metabolic syndrome. **Chest pain, or BP 180/120+ with headache or vision changes? Call 911.**

*Warning-sign cutoffs follow the AHA/NHLBI harmonized definition. Waist cutoffs are lower for people of Asian descent (≥31.5" women, ≥35.5" men). Reference ranges vary by lab and testing method. Optimal ranges reflect Clarity for You Wellness's functional-medicine approach and are not diagnostic. For education only; always review your results with your healthcare provider.