



# Inflammation Markers Your Doctor Isn't Testing

*A companion to Bloodwork Literacy — Part 4*

hs-CRP, ferritin, homocysteine, GGT, the neutrophil-to-lymphocyte ratio —  
the markers that read the inflammation a basic panel misses.

## What a basic panel isn't reading

*Five simple markers that read inflammation — and why "normal" cholesterol isn't the whole story.*

A standard blood panel is built to catch disease once it has arrived. Chronic, low-grade inflammation — the slow simmer tied to how you age, how you recover, and how your arteries hold up — usually isn't on it. Cholesterol gets the attention, but most people who have a heart attack have cholesterol in the range their panel calls normal. Think of cholesterol as cargo in trucks on a road: the trouble usually isn't the cargo, it's an inflamed, damaged road. The markers below read the condition of that road.

### hs-CRP

A protein your liver makes in response to inflammation. The high-sensitivity version catches the low, chronic simmer standard CRP misses.

### Ferritin

Your stored iron — but it also rises with inflammation, so a "normal" ferritin can hide a real iron deficiency.

### Homocysteine

An amino acid that climbs when you're low in B6, B12, or folate — and can flag underlying inflammation at the same time.

### GGT

An enzyme your body uses to recycle glutathione, its main antioxidant. A quiet read on oxidative stress.

### NLR

The neutrophil-to-lymphocyte ratio — not a new test, just a ratio you calculate from a blood count you almost certainly already have.

*No single marker sees the whole picture — each reads one arm of inflammation. Read together, these cover the large majority of everyday cases. The pages ahead take them one at a time, then a one-page cheat sheet you can take to your next blood draw. Albumin gets a short mention there too.*

# CRP & hs-CRP

*The liver's inflammation signal — and the version that catches the low simmer.*

## 1. CRP & hs-CRP

*C-reactive protein*

### THE NUMBERS

- Usually reported in mg/L (some US labs use mg/dL — check your units).
- Standard CRP is built for acute problems; it doesn't resolve the low chronic range well.
- hs-CRP (high-sensitivity) reads far lower — that's the one to ask for.
- hs-CRP cardiovascular bands (AHA/CDC): under 1.0 mg/L lower risk, 1.0–3.0 average, above 3.0 higher.
- Above ~10 mg/L usually means an acute infection or injury, not chronic inflammation — retest when well.

### WHAT IT MEASURES IN YOUR BODY

C-reactive protein is a protein your liver produces in response to inflammation. An acute infection, an injury, or even a heavy night of drinking pushes it up. So a CRP result is really a read on how much of this protein your liver is making — and therefore how loudly your body is signalling inflammation right now.

### WHAT IT TELLS YOU

- ✓ Standard CRP is good at loud, acute inflammation — infection, injury, illness.
- ✓ hs-CRP is the version designed to catch the low-grade, chronic inflammation standard CRP averages past.
- ✓ It reads one arm of inflammation, not the whole system — useful, not complete.

### WHERE IT CAN MISLEAD

A single value is a snapshot. A recent cold, an injury, or hard exercise in the days before will push CRP up temporarily and has nothing to do with your baseline. If a reading looks high, retest when you're well and rested rather than reacting to one number.

# Ferritin

*Your stored iron — and why inflammation can make it lie.*

## 2. Ferritin

*stored iron / acute-phase marker*

### THE NUMBERS

- Reported in ng/mL (equivalently µg/L).
- Reference ranges are wide and vary by lab and by sex.
- Below ~30 ng/mL strongly suggests low iron stores.
- A high or even mid-range ferritin does not, on its own, prove your iron is fine.

### WHAT IT MEASURES IN YOUR BODY

Ferritin is the storage form of iron inside your cells. Your body needs iron to build red blood cells and carry oxygen — which is why low iron leaves you fatigued, flat, and low on motivation. But ferritin also rises during illness and chronic low-grade inflammation, independent of how much iron you actually have.

### WHAT IT TELLS YOU

- ✓ Read alongside CRP or hs-CRP — inflammation can inflate ferritin and mask a real deficiency.
- ✓ You can show a ferritin of 100–150 and still be iron-deficient if you're inflamed.
- ✓ This pattern (anemia of inflammation) is well documented but often missed on a routine read.

### HOW TO READ IT WELL

Never read ferritin alone. Pair it with an inflammation marker and, ideally, other iron studies. If ferritin looks reassuring but you feel iron-deficient, inflammation is the first thing to rule in — not the last.

# Homocysteine

*The amino acid that flags both B-vitamin gaps and inflammation.*

## 3. Homocysteine

*amino acid / B-vitamin read*

### THE NUMBERS

- Reported in  $\mu\text{mol/L}$ .
- Lower is generally better; many practitioners treat the low end of the range as optimal.
- Elevated values are commonly flagged and are worth investigating rather than ignoring.

### WHAT IT MEASURES IN YOUR BODY

Homocysteine is an amino acid your body produces and then clears using B vitamins — specifically B6, B12, and folate. When you're short on those, homocysteine climbs. So an elevated value is often the first visible sign of a B-vitamin gap you didn't know you had.

### WHAT IT TELLS YOU

- ✓ Points to possible B6, B12, or folate deficiency — nutritional, not just injury or infection.
- ✓ Elevated homocysteine is also associated with underlying inflammation and cardiovascular risk.
- ✓ A reminder that inflammation isn't only about what you ate or caught — deficiencies drive it too.

### WHERE IT FITS

Homocysteine widens the picture: it connects everyday nutrition to inflammation. If it's elevated, the question isn't only "am I inflamed?" but "am I missing the B vitamins my body needs to run cleanly?"

# GGT

*A quiet read on oxidative stress and glutathione — your master antioxidant.*

## 4. GGT

*glutathione-recycling enzyme*

### THE NUMBERS

- Reported in U/L (units per litre).
- Lower is generally the goal — it suggests you're not fighting a heavy oxidative load.
- An elevated GGT is a sign your body is working hard to keep inflammation and oxidative stress at bay.

### WHAT IT MEASURES IN YOUR BODY

GGT is an enzyme present in cells throughout your body. Its job includes helping recycle glutathione — your primary internal antioxidant. When glutathione is under demand, GGT activity reflects that work. That makes GGT a useful, understated read on oxidative stress and low-grade inflammation, not just a liver number.

### WHAT IT TELLS YOU

- ✓ Rises with the things that drive inflammation — alcohol, oxidative load, and toxin exposure.
- ✓ Heavy metals raise it especially, because glutathione binds and helps clear them (chelation).
- ✓ A low, stable GGT is a good sign your antioxidant system isn't under constant strain.

#### A NOTE ON GLUTATHIONE

*Acetaminophen (paracetamol / Tylenol) depletes glutathione — worth knowing if you take it regularly for pain. Your body builds glutathione from glycine, glutamate, and cysteine, which come from good-quality protein. A supplement works too, but a diet rich in bioavailable protein gives your body the raw materials to make its own.*

# Neutrophil-to-Lymphocyte Ratio (NLR)

*The free inflammation marker already sitting in your blood count.*

## 5. NLR

*calculated from your CBC*

The neutrophil-to-lymphocyte ratio isn't a test you order — it's a calculation you can do from a complete blood count (CBC) you almost certainly already have. It reads the immune side of inflammation, and it's one of the better simple markers for seeing whether something is going on.

### THE NLR FORMULA

*NLR = total neutrophil count ÷ total lymphocyte count. Both numbers appear on any CBC with differential. Divide one by the other — no extra test, no extra cost.*

### READING THE RATIO

- A commonly-cited healthy range is roughly 1–3, with lower generally better.
- Neutrophils are the immune system's first responders — elevated levels can signal active inflammation.
- Lymphocytes (T cells, B cells, and more) are the coordinated, longer-term side of immunity.
- A rising ratio — more neutrophils relative to lymphocytes — is the pattern worth noticing.

### WHY IT'S WORTH THE TWO MINUTES

Because the raw numbers are already on your results, the NLR costs you nothing but arithmetic. Combined with hs-CRP, ferritin, homocysteine, and GGT, it rounds out a picture that catches the large majority of everyday inflammation — without a single exotic or expensive test.

## What to ask for at your next blood draw

*The take-to-your-appointment page — markers, wording, and one thing to do today.*

### Cheat sheet

*take this to your appointment*

#### ASK FOR THESE BY NAME

- hs-CRP — the high-sensitivity version, so low-grade inflammation isn't missed.
- Ferritin — read alongside an inflammation marker, not alone.
- Homocysteine — the B-vitamin and inflammation read.
- GGT — the oxidative-stress and glutathione read.
- CBC with differential — so you can calculate your NLR yourself.
- Albumin — no need to chase it, but if it's on your panel, note it: it tends to fall with sustained inflammation.

#### WORDING THAT USUALLY WORKS

*"I'd like to add hs-CRP, ferritin, homocysteine, and GGT to my next blood panel, plus a CBC with differential." "I'm trying to understand my inflammation, not just my cholesterol — could we include these?"*

#### THE ONE THING TO DO AFTER LISTENING

Pull up your old lab results and look. Many people already have a CBC and a CRP in past reports and have never read them this way. Calculate your NLR, check where your CRP and ferritin landed, and note anything that surprises you. Symptoms tend to improve first and bloodwork follows, so track how you feel alongside the numbers. You don't have to fix any of this today — you just need to know you're not alone.



**You don't need to fix this today.**

*You just need to know you're not alone.*

@togetherunprocessed

Everything we share comes from our own journeys and experiences.  
We're not doctors, and nothing here is meant as medical advice.  
Always make decisions about your health with a trusted professional.