Inflammation: What It Is and Why It Matters

By Robert Ferguson

Introduction - Understanding the Fire Inside

You've probably heard the word *inflammation* more times than you can count. Maybe you've even said, "I think I'm inflamed." You notice puffiness in your face or body, bloating after meals, or stiffness in your joints. It's easy to assume inflammation is behind it all, but what exactly *is* inflammation? How can you *know* if you have it, and more importantly, what can you do to calm it down?

That's what this article is all about.

By the end, you'll have a clear picture of what inflammation really means, both medically and in everyday life. You'll understand how to confirm if you have it, and most importantly, how to cool it down so you can look and feel your best.

Imagine your body as a neighborhood. When something goes wrong, like a small fire, your body's firefighters (your immune system) rush in to put it out. That's called **inflammation**, and it's a good thing when it happens for a short time.

But imagine those firefighters never go home. They keep their hoses running day and night, spraying water even when there's no fire. Streets flood, homes get damaged, and the neighborhood suffers. That's what happens when **inflammation becomes chronic**: it never turns off.

Millions of people are living with this "silent fire" inside. It doesn't cause pain right away, but over time it damages tissues, disrupts hormones, slows metabolism, and leads to many of the health problems people struggle with, from weight gain and fatigue to heart disease and diabetes.

Let's make sense of it, one piece at a time.

Understanding Inflammation

In medicine, **inflammation** is your body's natural defense system. It helps heal wounds and fight off bacteria and viruses. You see it when a cut becomes red or swollen, that's your immune system at work. This is called **acute inflammation**, and it is a short-term and beneficial process.

However, when your body remains in defense mode for too long, due to stress, a poor diet, insufficient sleep, or toxins, it develops into **chronic inflammation**. This kind doesn't cause obvious swelling or redness. Instead, it quietly damages cells, blood vessels, and organs over time.

In everyday conversation, people often use “inflammation” as a catch-all term for feeling tired, bloated, or “off.” While not all of those feelings are indicative of inflammation, many can be signs that the body’s balance is off, and the immune system is overworking.

Understanding Omega-6 and Omega-3 Fatty Acids

When it comes to inflammation, nothing is more important than maintaining a balance between **omega-6** and **omega-3** fatty acids. These are called **essential fats** because your body needs them but cannot produce them on its own; you must obtain them from food.

Both omega-6 and omega-3 fats play vital roles in your health:

- **Omega-6 fats** help your body respond to injury or infection. They’re found in foods like seed oils (soybean, corn, sunflower, and safflower oil), fried foods, and many processed snacks.
- **Omega-3 fats** help calm inflammation and support your brain, heart, and cell health. They’re found in foods like salmon, sardines, flaxseeds, chia seeds, and walnuts.

Here’s the key: your body needs both types, but in **balance**.

Long ago, humans consumed a nearly **1:1 ratio** of omega-6 to omega-3 fatty acids. But today, because of processed foods and seed oils, the average person’s ratio is closer to **20:1 or even higher**, meaning we’re getting way too much omega-6 and not nearly enough omega-3【Simopoulos, 2008】.

This imbalance fuels **low-grade, chronic inflammation**, the silent fire that damages cells, raises blood pressure, slows metabolism, and increases the risk of disease.

When the ratio is brought back toward balance (ideally around **3:1 or lower**), the body naturally shifts toward healing. Cells become more flexible, blood flow improves, and inflammation begins to cool down.

Simply put:

Your omega balance determines whether your body is fueling the fire or calming it.

Inflammation and Weight

Think of your metabolism like an engine. When inflammation builds up, it’s like dirty oil clogging the system. The body becomes resistant to signals like **insulin**, which tells cells to use energy. When that happens, fat burning slows down and fat storage increases, especially around the waist.

This is one reason people can eat well and exercise yet still struggle to lose weight. Until the “inflammatory fire” is cooled, the metabolism never runs smoothly.

Inflammation and Aging

Have you ever heard the term *inflammaging*? It means that as we get older, the body naturally builds up low levels of inflammation, like tiny sparks that never go out. Over time, those sparks wear down our cells, leading to wrinkles, joint pain, memory problems, and low energy.

The good news? Studies show that people who reduce inflammation through better nutrition, restful sleep, and omega-3 intake age more gracefully, both inside and out.

Inflammation and Disease

Think about someone who eats well, exercises, and still struggles with high blood pressure, joint pain, or fatigue. Maybe that person is you. What most people don't realize is that **chronic inflammation** could be the silent force behind these issues.

Chronic inflammation is like rust slowly eating away at a car. It affects every system in your body, from your heart and brain to your liver, lungs, and gut. Scientists now link chronic inflammation to **more than 70 percent of today's most common health problems**, including:

- Type 2 diabetes
- Heart disease
- High blood pressure
- Stroke
- Alzheimer's disease and other memory loss conditions
- Cancer
- Obesity
- Arthritis and joint pain
- Autoimmune conditions (like rheumatoid arthritis, lupus, and Hashimoto's thyroiditis)
- Asthma and allergies
- Digestive issues (such as irritable bowel syndrome and inflammatory bowel disease)
- Fatty liver disease

Inflammation doesn't cause every disease directly, but it creates the perfect environment for disease to grow and thrive. When inflammation persists for too long, it gradually damages tissues, disrupts hormone balance, weakens the immune system, and sets the stage for many of the health challenges people face today.

How Inflammation Helps Cancer Spread (in 60 Seconds)

You've heard that inflammation and cancer are linked, and it's true. While inflammation doesn't *cause* cancer by itself, **chronic inflammation creates the perfect environment for cancer cells to grow and spread.**

Here's how it happens:

- **Fuel for growth:** When inflammation stays active, your body releases chemical messengers like **Interleukin-6 (IL-6)** and **Tumor Necrosis Factor-alpha (TNF-α)** that make cancer cells multiply faster.
- **Weakened defense:** Ongoing inflammation can **suppress immune cells** that normally target tumors, allowing cancer to hide and survive.
- **Breaking barriers:** Inflammatory enzymes loosen the surrounding tissues, allowing cancer cells to slip through and travel to new locations.
- **Sticky traps:** Certain white blood cells release "webs" called **Neutrophil Extracellular Traps (NETs)** that can actually *catch* cancer cells in the bloodstream and help them attach to other organs.

In a recent study by researchers at **Weill Cornell Medicine**, inflammation triggered by respiratory viruses, such as the flu or COVID-19, awakened **dormant breast-cancer cells** and caused them to spread to the lungs.

The bottom line: **Chronic inflammation acts like fertilizer for cancer's growth and spread.** The more you calm inflammation, the less fertile that environment becomes.

Inflammation and Food

Food is either water for the fire or gasoline on it.

Diets high in sugar, processed foods, and refined seed oils pour fuel on the flames. On the other hand, foods rich in omega-3 fatty acids, polyphenols (found in fruits, vegetables, and olives), and fiber help cool things down.

When people balance their **omega-6 to omega-3 ratio**, reduce their consumption of processed seed oils, and eat real food, their inflammation markers tend to drop, and they often experience increased energy, weight loss, and improved cognitive function.

How to Know If You're Inflamed

Most people who experience inflammation are often unaware of it. They may feel tired, puffy, or bloated, or struggle to lose weight, but they can't *see* what's happening inside their body. That's where testing comes in.

The right test gives you real answers, not guesses, about how inflamed your body truly is. Here's how to find out what's really going on, from the **most accurate cellular test** to the **basic blood test your doctor can order**.

The Global Gold Standard: Arachidonic Acid (AA) to Eicosapentaenoic Acid (EPA) Ratio

Across the world, at **Harvard University** and research centers in **Norway, Japan, and Europe**, scientists use the **AA to EPA ratio** as the *gold standard* for measuring inflammation.

- **AA (Arachidonic Acid)** is an omega-6 fatty acid that can promote inflammation.
- **EPA (Eicosapentaenoic Acid)** is an omega-3 fatty acid that helps calm and control it.

When this ratio is too high, your body produces more inflammatory compounds than anti-inflammatory ones. When it's balanced, your body is calm, protected, and thriving.

You can discover your own **AA to EPA ratio** through the **28-Day Anti-Inflammatory Program**, a simple at-home solution that combines a **dried blood spot test** with personalized guidance to help you understand and reduce inflammation.

This test measures 11 different fatty acids, including AA and EPA, providing a clear picture of how inflamed your cells are and what steps to take next.

The Omega-6 to Omega-3 Ratio

This ratio offers another key piece of the puzzle.

- A *healthy ratio* is **3:1 or lower**.
- The *average American ratio* is **15:1 to 25:1**, which means most people unknowingly fuel inflammation every day [Simopoulos, 2008].

The dried blood spot test measures the **fatty acids in your red blood cell membranes**, not just in your plasma.

That's a big advantage because plasma tests only show what you've eaten in the last few days. The fatty acids inside your red blood cells reflect your biology over the last three to four months, the lifespan of those cells.

Think of it like this:

- A **plasma test** is like checking the weather.
- A **dried blood spot test** is like checking the climate.

If you want to know your body's long-term balance, the dried blood spot test is the way to go.

C-Reactive Protein (CRP)

Your doctor can order a **C-Reactive Protein (CRP)** test to measure inflammation in your bloodstream.

- **Below 1.0 milligram per liter (mg/L)** – Low inflammation
- **1–3 mg/L** – Mild inflammation
- **Above 3 mg/L** – High inflammation

It's essential to remember that **everyone experiences some inflammation**, and that's a natural and beneficial process. Acute inflammation helps your body heal.

The problem arises when inflammation persists for too long, a condition known as **chronic inflammation**. It can have a silent impact on your metabolism, hormones, and energy levels.

CRP can detect when inflammation is high, but it doesn't tell you **why** or **where**. That's why the **AA to EPA ratio** and **omega-6 to omega-3 ratio**, both part of the **28-Day Anti-Inflammatory Program**, are far more useful for identifying and correcting the *root cause* before problems appear.

Why This Order Matters

By starting with the **Global Gold Standard (AA to EPA ratio)**, then checking your **omega-6 to omega-3 ratio**, and lastly using **CRP** if needed, you can see both the *cause* and the *effect* of inflammation.

It's like connecting the dots between what's happening inside your cells and what's showing up in your blood, providing you with a comprehensive picture of your health.

The Global Gold Standard - Now Made Simple

Around the world, scientists rely on the **AA to EPA ratio** as the best marker for inflammation. And now, through the **28-Day Anti-Inflammatory Program**, you can access this same level of insight from home.

A Test That Looks at the Real You, at the Cellular Level

The at-home **dried blood spot test** included in the **28-Day Anti-Inflammatory Program** measures **11 different fatty acids**, including AA and EPA. Unlike a standard plasma test, which reflects what you've eaten over the past few days, this test analyzes your **red blood cell membranes**, which live about 120 days. That means it captures your body's actual long-term state, not just a snapshot of its current state.

Think of it like this:

- A plasma test is like checking the weather.
- A dried blood spot test is like checking the climate.

By understanding your results, you'll know if your body is running cool and balanced or inflamed and overactive.

The 28-Day Anti-Inflammatory Program

After taking your test, the **28-Day Anti-Inflammatory Program** guides you through a simple, natural process to calm internal inflammation. You'll learn which foods help cool the fire (like omega-3-rich fish, olive oil, and colorful vegetables) and which ones fuel it (like sugar, processed foods, and seed oils).

In just four weeks, people often report more energy, less bloating, better mood, and clearer thinking — all signs that the fire inside is cooling down.

Why This Matters

Chronic inflammation often lies beneath the surface, manifesting years before symptoms or disease appear. By testing and following a proven program, you can measure, understand, and improve your health from the inside out.

With the **28-Day Anti-Inflammatory Program**, you're not guessing, you're testing.
And once you know your numbers, you'll have the power to take action and truly **reset your inflammation**.

Next Steps

1️⃣ Order your **dried blood spot test** (included in the **28-Day Anti-Inflammatory Program**) and get your AA to EPA and omega-6 to omega-3 ratios.
2️⃣ Follow the **28-Day Anti-Inflammatory Program** to cool inflammation and restore balance.
3️⃣ After four to six weeks, retest to see how your numbers have improved.
4️⃣ Maintain your results with better sleep, stress management, regular movement, and whole foods.

You don't have to wait until a health crisis appears. By understanding your internal inflammation today, you're giving yourself the best chance to stay strong, vibrant, and disease-resistant for the rest of your life.

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