

Glyphosate: What It Is, Why It Matters, and How to Protect Your Health

By Robert Ferguson

Glyphosate is one of the most controversial chemicals in the world, and for good reason. While many countries have banned or severely restricted its use in food production, both the **United States and Canada continue to allow it** in agriculture. As a result, people in the U.S. and Canada are exposed to far higher levels of glyphosate than those living in countries that have taken strong action to protect their food supply.

But the biggest concern isn't just how widely it's used - it's what researchers are now discovering about its impact on human health. Glyphosate has been increasingly linked to a growing list of health issues, including:

- **Cancer risks**, especially non-Hodgkin lymphoma
- **Gut microbiome disruption**, like taking a daily antibiotic
- **Autoimmune disorders**
- **Chronic inflammation**
- **Hormone and metabolic disruption**
- **Reproductive concerns**
- **Neurological impacts**

Even more concerning is the fact that glyphosate doesn't just stay on the crops where it's sprayed. It is now found **inside our bodies** - including in **urine, blood, and even breast milk** (Krüger et al., 2014; Centers for Disease Control and Prevention, 2022; Moms Across America, 2014). Independent testing has detected glyphosate in cereals, breads, grains, beans, snack foods, baby food, wine, beer, and even some organic-labeled products due to environmental contamination (Zenon et al., 2021).

And yet, glyphosate is **not listed as an ingredient** on any food label. You can consume it every day without knowing it.

With all of this, it's easy to feel overwhelmed, even hopeless, as if there's no way to avoid a chemical that has quietly infiltrated the modern food system. But here's the truth:

You are not powerless.

There *are* ways to reduce your exposure.

There *are* steps you can take to protect your gut, immune system, and cells.

There *are* science-backed strategies to strengthen your body's ability to detoxify glyphosate.

And that's exactly what you'll learn in this article.

Adding to the concern, the **World Health Organization (WHO)** and its **International Agency for Research on Cancer (IARC)** classified glyphosate in 2015 as:

“Probably carcinogenic to humans.”

(Myers et al., 2016)

This classification was based on evidence of DNA damage, oxidative stress, cancer in animals, and human data linking glyphosate to **non-Hodgkin lymphoma**.

This article will show you what glyphosate is, how it enters our food and bodies, how it impacts health, and most importantly, **what you can do to protect yourself and your family**.

What Is Glyphosate?

Glyphosate is a synthetic herbicide introduced in the 1970s. It is the active ingredient in:

- **Roundup®**
- Ranger Pro
- Rodeo
- Touchdown
- Zero Weedkiller
- Erase Weed & Grass Killer
- Glyfos
- Duramax

Over 300 million pounds are applied annually in the United States alone.

How Glyphosate Ends Up in Your Food

1. Direct Spraying on Crops

Used on:

- Corn
- Soy
- Wheat
- Oats
- Barley
- Lentils
- Chickpeas
- Canola
- Cotton

2. Pre-Harvest Spraying (“Desiccation”)

Applied days before harvest to dry crops uniformly, increasing residue levels in:

- Wheat
- Oats
- Barley
- Beans
- Peas

3. Through Animal Feed

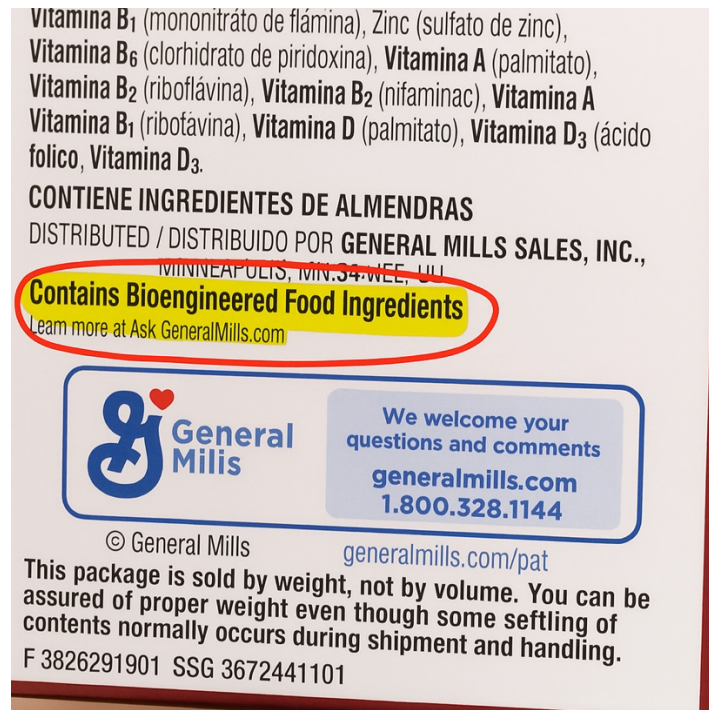
Animals eat glyphosate-treated grains → residues enter:

- Meat
- Dairy
- Eggs

4. Water Contamination

Glyphosate enters rivers, streams, and groundwater through runoff (United States Geological Survey, 2020).

What “Contains Bioengineered Food Ingredients” Really Means, and Why It Often Signals Glyphosate Exposure



If you look closely at food labels today, you'll sometimes see a statement like:

“Contains Bioengineered Food Ingredients.”

This disclosure became mandatory in the United States in 2022 under the **National Bioengineered Food Disclosure Standard**. It is the new term used instead of “GMO,” and it means:

One or more ingredients in the product were genetically altered in a laboratory.

But here's the part most people don't know:

Bioengineered (GMO) crops are typically engineered to withstand heavy glyphosate spraying.

This means farmers can spray fields with Roundup® (glyphosate), killing weeds - while the genetically engineered crop survives.

Because of this:

When a label says, “Contains Bioengineered Food Ingredients,” the likelihood of glyphosate residues is extremely high.

The most common GMO crops include:

- Corn
- Soy
- Canola
- Sugar beets
- Cottonseed
- Alfalfa

These ingredients appear in *thousands* of packaged foods - from snacks to cereals to dressings to protein bars.

✓ **Bioengineered ingredients = high glyphosate exposure risk.**

Yet:

- Glyphosate doesn't have to be disclosed
- Companies don't have to test for residues
- Consumers are left unaware that they're likely consuming glyphosate

This is why understanding this label matters. It's one of the few clues consumers have to detect likely glyphosate exposure.

THE HARSH REALITY: Ultra-Processed Foods = Daily Glyphosate Exposure

Because glyphosate is used on grains and as a pre-harvest drying agent, nearly all grain-based processed foods contain residues.

This includes:

- Frozen meals
- Chips
- Crackers
- Cereal
- Instant noodles
- Snack bars
- Packaged breads
- Cookies
- Pretzels
- Tortillas
- Microwave popcorn
- Processed meats

Even foods marketed as “healthy,” “natural,” or “whole grain” often test positive for glyphosate (Zenon et al., 2021).

Bottom line:

Eating ultra-processed foods is like taking repeated micro-doses of glyphosate - a chemical linked to gut damage, inflammation, autoimmune issues, endocrine disruption, and cancer.

This explains why glyphosate now shows up in:

- Urine
- Blood
- Breast milk

The Reality: You Can't Wash Your Way Out of Glyphosate Exposure

Glyphosate contamination is not a minor issue; it's a *massive* one. And the truth is harsher than most people realize:

Glyphosate is practically everywhere in the modern food supply.

It's in:

- Fruits
- Vegetables
- Beans
- Grains
- Bread
- Cereal
- Baby food
- Juice
- Wine and beer
- Snack foods
- Frozen meals
- Restaurant food
- Fast food
- Even many “healthy” options like whole-grain products and plant-based foods

This is because glyphosate isn't just sprayed *on top* of crops - it is **absorbed into the plant's tissues**, especially when used as a pre-harvest drying agent.

So, washing produce does NOT remove glyphosate.

This isn't like dirt or bacteria on the surface.

Glyphosate is **inside the plant** - in the leaves, stems, roots, and grains.

That means:

- Rinsing
- Soaking
- Scrubbing
- Vinegar baths
- Baking soda solutions

...do **almost nothing** to remove glyphosate.

The only way to avoid or reduce glyphosate is through sourcing, not cleaning.

Such as:

- Choosing organic when possible
- Avoiding top glyphosate-sprayed crops (wheat, oats, soy, corn, chickpeas, lentils) unless organic
- Reducing ultra-processed food consumption
- Supporting gut, liver, and detox pathways

People cannot “shop” or “wash” their way out of glyphosate exposure...
...but they *can* detox better, support their gut, protect their cells, and strengthen their resilience.

Why Glyphosate Is a Health Concern

1. Glyphosate Acts Like an Antibiotic

Glyphosate kills beneficial gut bacteria needed for:

- Digestion
- Immunity
- Serotonin production
- Detoxification
- Inflammation control

2. Impaired Detox Pathways

Glyphosate suppresses **cytochrome P450** enzymes, reducing the liver’s ability to detoxify chemicals (Samsel & Seneff, 2013).

3. Increases Oxidative Stress

Contributes to DNA damage, inflammation, and cellular aging.

4. Mineral Chelation

Glyphosate binds essential minerals, including magnesium, iron, zinc, and manganese.

Endocrine Disruption: How Glyphosate Interferes With Hormones

One of the most concerning and least understood effects of glyphosate is its potential to act as an **endocrine disruptor**. Endocrine-disrupting chemicals interfere with hormones that regulate metabolism, thyroid function, fertility, development, stress response, and brain function.

How Glyphosate Disrupts Hormones

1. *Mimics or Interferes With Estrogen*

Studies show glyphosate can trigger estrogen-like effects in hormone-sensitive cells, potentially promoting:

- Hormonal imbalance
- Breast cancer cell growth
- Early puberty or reproductive changes

2. Disrupts Reproductive Hormones

Research suggests glyphosate may:

- Reduce testosterone
- Alter the estrogen and progesterone balance
- Damage ovarian follicles
- Lower sperm count and quality
- Reduce fertility

3. Impacts Thyroid Function

Glyphosate may influence thyroid hormone pathways, contributing to:

- Hypothyroidism
- Fatigue
- Weight gain
- Mood changes

Why This Matters

Hormones regulate nearly every system in the body. When disrupted, symptoms may appear months or years later - affecting fertility, metabolism, immunity, and chronic disease risk.

Regulatory Controversy

- Independent scientists say evidence strongly supports endocrine disruption.
- Regulators, such as the **Environmental Protection Agency (EPA)**, claim the evidence is “insufficient.”

A 2021 systematic review found glyphosate met **8 out of 10 key characteristics** of an endocrine-disrupting chemical.

Is Glyphosate Banned in Other Countries?

Countries with Full or Partial Bans:

- Mexico
- Germany
- France
- Italy
- Luxembourg
- Vietnam
- Thailand
- Sri Lanka
- Austria

The **United States and Canada** still allow it.

Is Glyphosate Carcinogenic?

✓ WHO/IARC Classification

“Probably carcinogenic to humans.”

✓ Evidence Includes:

- DNA damage
- Oxidative stress
- Tumors in animal studies
- Human epidemiology

✓ Court Verdicts

Over 100,000 lawsuits have been filed linking Roundup® (a glyphosate-based herbicide) to cancer.

How to Reduce Exposure

- Choose organic foods
- Reduce ultra-processed food intake
- Washing produce removes bacteria but doesn't remove glyphosate.
- Filter drinking water
- Choose organic meat and dairy
- Avoid high-glyphosate crops unless organic

How to Support Natural Detoxification

1. Increase Glutathione

Glutathione is your body's master antioxidant and essential for detoxifying glyphosate.

Support with:

- Broccoli, garlic, onions
- N-acetylcysteine (NAC)
- Vitamin C
- Selenium

2. Use Polyphenols to Activate Nrf2 - Your Detox Switch

Polyphenols trigger **Nrf2**, boosting your body's production of:

- Glutathione
- Catalase
- Superoxide dismutase
- Detox enzymes

Glutathione removes toxins

Polyphenols turn glutathione ON

This is why omega-3s + polyphenols (as in BalanceOil+) support:

- Detoxification
- Cell membrane fluidity
- Inflammation control
- Gut health

3. Improve Cell Membrane Fluidity

Omega-3s support cell membrane health, allowing nutrients in and toxins out.

Testing your **omega-6 to omega-3 ratio** reveals inflammation and detox potential.

4. Restore Gut Microbiome Balance

Support your microbiome with:

- Prebiotic fiber
- Polyphenols
- Fermented foods
- A healthier omega-6 to omega-3 ratio
- Increased indole-3 propionic acid (IPA), a gut-derived antioxidant

5. Sweat Regularly

Exercise and sauna help support natural detoxification pathways.

6. Eat Liver-Supportive Foods

- Beets
- Leafy greens
- Turmeric
- Green tea
- Lemons

Bottom Line: Test, Don't Guess

We live in a world where a chemical that is:

- ✓ Probably carcinogenic
- ✓ A likely endocrine disruptor
- ✓ Damaging to gut bacteria
- ✓ Disruptive to detox pathways
- ✓ Chelates essential minerals
- ✓ Found in urine, blood, and breast milk

...is still allowed in our food supply.

But you *can* take control.

✓ Get the BalanceTest

Reveals your omega-6 to omega-3 ratio and full fatty acid profile.

✓ Get the Gut Health Test

Shows gut-driven inflammation, microbiome balance, and tryptophan pathways affected by glyphosate.

Once you know:

- Your inflammation levels
- Your microbiome health
- Your detoxification efficiency

...you can take targeted steps that work.

Email: robert@dietfreelife.com

[Schedule a free consultation](#)

Or **contact the person who shared this article with you** to get started.

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