Villain 3: Corn



### **How to Find Corn in Food:**

**The key to unlocking the secret lair of corn is the ingredient list on food labels.**

**Look for *corn, corn starch, popcorn, corn chips, corn syrup, high fructose corn syrup*.**

**And don’t forget the things also made from corn that are hidden in our food supply like:**

**Corn Starch: A common thickening agent used in sauces, soups, and gravies. It is also used in baking for its ability to provide structure and moisture retention.**

**Corn Dextrin: Used as a binder, filler, or texturizing agent in processed foods. It can also be found in some dietary supplements.**

**Corn Syrup Solids: Dried forms of corn syrup used in powdered drink mixes, desserts, and snack foods.**

**Corn Sweeteners: This category includes various corn-derived sweeteners like high fructose corn syrup (HFCS) and corn syrup, which are used as sweetening agents in beverages, candies, and processed foods.**

**Corn Gum: Also known as corn gum arabic or acacia gum, it is used as a thickener, stabilizer, and emulsifier in various foods and beverages.**

**Corn Maltodextrin: A carbohydrate often used as a thickener, filler, or bulking agent in processed foods and as a texturizer in powdered coffee creamers and dessert mixes.**

**Corn Fiber: Used to increase dietary fiber content in certain foods, such as cereals and fiber-enriched products.**

**Corn Germ Oil: A type of vegetable oil extracted from corn germ, used for cooking and frying and as an ingredient in salad dressings and margarine.**

**Corn Gluten Meal: A protein-rich byproduct of corn milling, often used in animal feed and sometimes in plant-based foods as a protein source.**

**Corn Solubles: Byproducts from corn processing used in animal feed, industrial applications, and occasionally in food products.**

**Corn Derivatives in Vitamins and Supplements: Some vitamins and supplements may contain corn-derived ingredients, such as corn starch as a filler or maltodextrin as a carrier.**

**Corn-Derived Enzymes: Enzymes derived from corn are used in food processing, including in the production of corn syrup and other ingredients.**

**Corn-Based Additives: Various additives and hydrocolloids, such as modified corn starch, corn-derived xanthan gum, and corn-based gelling agents, are used for texture modification, stabilization, and thickening in processed foods.**

**Corn-Based Colors: Some natural food colorings are derived from corn, such as anthocyanins extracted from purple corn.**

**Corn-Based Preservatives: Some preservatives, like citric acid, can be derived from corn and are used to extend the shelf life of certain food products.**

### **Why Corn Is Bad:**

Corn has 2 evil superpowers that break down the body in very different ways, and BOTH of them are working on you at the same time. First, there’s the natural harmful chemistry of the plant. Then, it’s genetically altered. It’s a deadly one-two punch that no one really even knows they’re getting hit with most of the time.

### **First, the chemistry of the plant.**

Omega 3’s decrease inflammation in our bodies, and Omega-6’s increase inflammation. They are constantly working together in a feedback loop to keep one another balanced, so you can heal and not be in pain. Many of the foods we eat have both omega-3’s and omega-6’s in them, while some foods like olive oil have neither, it’s an omega-9.

Enter corn. The biochemistry of the corn plant is ***80:1*** There are 80 inflammation-causing omega-6’s for every 1 anti-inflammatory omega-3. When you eat corn, you are literally adding gasoline to the inflammation fire. Think of it this way: for every 1 piece of popcorn you eat, you’d have to take 80 omega-3 essential fatty acid pills to help balance corn’s horrible 80:1 ratio, and get inflammation to finally calm down. And that’s just the first punch from this villain, next it’s the genetic alteration.

### **Next, the chemistry of the plant.**

Corn (maize) is one of the most genetically modified plants on the planet. It has been genetically modified in several ways to introduce various traits that can benefit agriculture and food production like resisting weeds, insect infestation, and mold growth. You see, genetic engineers use biotechnology techniques to introduce specific genes into corn plants. Let’s take glyphosate as one example. Glyphosate is a chemical often found in RoundUp, and in the case of glyphosate-tolerant (GT) corn, a gene from a different organism, often bacteria, is inserted into the corn’s genome, altering its DNA. This makes the corn plant stay alive while being sprayed by RoundUp, while the weeds around it will die. Sounds like a win-win, right?

Wrong!

Glyphosate has some nasty effects on human health and biology like *interfering with the body’s hormonal systems, altering the balance of beneficial bacteria in the gut microbiome, potentially affecting digestion and overall health, and even Cancer*. In 2015, the International Agency for Research on Cancer (IARC), a branch of the World Health Organization (WHO), classified glyphosate as “probably carcinogenic to humans” based on some evidence discovered in an association with non-Hodgkin lymphoma.

Eating corn gives you that consistent exposure to glyphosate because a majority of fields are dusted with roundup to kill weeds, and corn has been genetically modified to tolerate the toxin. A genetic modification that is now entering and modifying your gut, microbiome, bloodstream, brain and body.

### ***But wait! There’s more!!***

Did you know that eating corn can also expose you to microorganisms and compounds that can make you sick? Things like:

**1. Mycotoxins:**

Corn is susceptible to fungal contamination, which can lead to toxins (e.g., aflatoxins) that harm liver health if consumed in large quantities over time.

and,

**2. Anti-Nutrients:**

Contains phytates and lectins, which can interfere with the absorption of certain minerals if consumed excessively. Plus, when eaten in larger amounts, corn can also strip your body of essential amino acids like tryptophan (helps with mood, appetite, sleep, and pain) and lysine (helps with bone health, reduces cold sores, hypertension, anxiety and muscle strength).

So yeah, we’ll say it again: **NO CORN**. Slay this Villain for good!

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### **The Antidote - Balancing The Risks**

Even corn has its weaknesses and can be systematically reduced to nothing. You have to be diligent and strong against this villain because he is EVERYWHERE! Morphed into all kinds of different forms, food ingredients on labels are the first line of defense to reverse the nasty effects of corn. But for even more ammo, incorporate lysine-rich proteins, nutrient-dense vegetables, healthy fats, gut-supporting whole, organic, and properly prepared foods into your daily routine. And of course… limit processed foods in your diet. Here are some of the superpower heroes that will help repair your corn woes:

**1. Foods Rich in Lysine**

Corn is low in lysine, an essential amino acid. Pairing corn with lysine-rich foods ensures a more complete protein profile.

Examples:

Beans (e.g., black beans, kidney beans, lentils)

Quinoa

Chickpeas

Soy products (e.g., tofu, tempeh, edamame)

**2. High-Antioxidant Foods**

To counteract the oxidative stress potentially caused by exposure to mycotoxins or processed corn products:

Examples:

Berries (e.g., blueberries, raspberries)

Leafy greens (e.g., spinach, kale)

Citrus fruits (e.g., oranges, lemons)

Nuts and seeds (e.g., flaxseeds, walnuts, almonds)

**3. Foods Rich in Healthy Fats**

The antioxidants lutein and zeaxanthin in corn are fat-soluble, meaning they are better absorbed when consumed with healthy fats.

Examples:

Avocado

Olive oil

Fatty fish (e.g., salmon, mackerel)

Nuts and seeds (e.g., chia seeds, pumpkin seeds)

**4. Probiotic and Prebiotic Foods**

To support gut health and counteract potential digestive discomfort from corn:

Examples:

Probiotics: Yogurt, kefir, sauerkraut, kimchi, miso

Prebiotics: Garlic, onions, asparagus, bananas

**5. Mineral-Rich Foods**

Corn contains phytates that can inhibit mineral absorption, particularly zinc and iron. Pairing corn with mineral-rich or vitamin C-rich foods helps enhance absorption.

Examples:

Zinc-rich foods: Shellfish, seeds, nuts, legumes

Iron-rich foods: Red meat, poultry, fortified cereals

Vitamin C-rich foods (enhances iron absorption): Bell peppers, tomatoes, citrus fruits

**6. Alkaline-Forming Foods**

To balance the acidity of processed corn products, include alkalizing foods in your diet:

Examples:

Green leafy vegetables (e.g., spinach, Swiss chard)

Cucumbers

Watermelon

Broccoli

Lemon water (paradoxically alkalizing after digestion)

**7. Low-Glycemic Index Foods**

To mitigate the blood sugar spikes caused by corn’s high carbohydrate content, eat more low-GI foods:

Examples:

Whole grains (e.g., barley, oats)

Non-starchy vegetables (e.g., zucchini, asparagus)

Protein sources (e.g., eggs, lean meats)

**8. Fermented Corn Products**

If consuming corn directly, opt for fermented or nixtamalized corn products, which improve nutrient availability and reduce anti-nutrient content:

Examples:

Masa harina (used in traditional tortillas)

Fermented corn-based beverages (e.g., chicha)