SPECIAL REPORT

# The Hard Truth About Processed Carbs

WHAT REALLY HAPPENS
when food companies refine your carbs—
and what it means for your health

Mark Hyman <sub>MD</sub>

# **Table of Contents**

- 1 Introduction
- 3 Why Carbs from a Peach Aren't the Same as Carbs from a Package
- 3 Are You Overfed but Undernourished?
- 4 What Are Processed Refined Carbs, Exactly?
- 4 How Corn Becomes Sugar
- 6 Why Manufacturers Use Corn Products
- 7 The Cost of Big Blood Sugar Spikes
- 8 How Whole Grains Become Refined Flour
- 9 Are "100% Whole Grains" Really Whole?
- 10 Why Manufacturers Use Refined Flour
- 10 What's the Deal with White Rice?
- 11 From Flour to Factory Foods
- 11 Why Manufacturers Use Puffing and Extrusion
- 12 Are Veggie Chips Really Vegetables?
- 13 Other Tricks of the Trade
- 13 Is Processing Ever Good?
- 14 From Processed Refined Carbs to Policy
- 15 How to Take Action

# The Hard Truth About Processed Carbs

# A closer look at how they're made, how they harm, and what it means for your health.

You've no doubt heard that processed carbs are "bad." Everyone has. It's the reason we've all been told to avoid foods with added sugars, refined flours, and chemical additives.

Even so, Americans are eating more of these ingredients than ever before, and collectively, our metabolic health has never been worse.

Seventy-four percent of Americans are now overweight or obese, and 38 percent are insulin-resistant or have prediabetes, both all-time highs.

#### How did we get here?

It wasn't by accident.

Our food supply is dominated by ultra-processed foods that prioritize industry profits at the expense of your health.

They're cheap to produce and scientifically engineered to be so delicious that once you start eating them, they're hard to stop. Food scientists even have a name for the precise mix of processed carbs, salt, and fat that makes foods irresistible the "bliss point."

These products don't leave you feeling full, they're designed for quick grab-and-go eating, and they can stay "fresh" for weeks, months, or even years—all of which drives you to consume more overall.

Case in point: Ultra-processed foods now make up 58 percent of the average American's diet, which contains 500 more calories a day than it did 50 years ago.

#### What can we do about it?

Meet David Kessler, MD, former commissioner of the Food and Drug Administration and past dean of the Yale University School of Medicine.

He's submitted a bold <u>new petition</u> to the FDA. (At the link, get the petition by clicking the download button.)

The proposal: that the FDA remove the "generally recognized as safe" (GRAS) designation from "processed refined carbs"—which are key ingredients of ultra-processed foods.

You might be thinking, "Wait—he wants to ban carbs from our foods?!"

No, not quite. Dr. Kessler is saying that processed refined carbs—such as corn syrups, maltodextrins, and refined starches—shouldn't automatically get a free pass as "generally recognized as safe" just because they start as foods.

Instead, he's calling on the FDA to treat them like additives that must be proven safe before they're used. And he's asking for your help.

### **Why This Guide Matters**

To be sure, all this stuff about "processed refined carbs," "GRAS" and "corn syrups, maltodextrins, and refined starches," might be a little (or a lot) confusing.

That's why created this guide, which is adapted from Dr. Kessler's petition. It'll walk you through the terminology, science, and biology in a way that's easy to digest and apply to your own life.

If you've ever wondered whether veggie chips are really any better than potato chips, why some experts say "100% whole wheat" bread isn't truly whole grain, or what the real problems are with high-fructose corn syrup and refined flour, you'll find those answers here.

More than that, you'll gain a deeper understanding of what you're eating—the effect it has on your body, your appetite, and your health. And by the end, you'll see exactly why <u>Dr. Kessler's petition</u> matters—and how you can play a role in supporting it.



74%

of Americans are now overweight or obese

38%

of Americans are insulin-resistant or have prediabetes

# Why Carbs from a Peach Aren't the Same as Carbs from a Package



To fully understand <u>Dr. Kessler's petition</u>, you first need to look at carbs themselves—what they are in whole foods, and what happens when they're taken out.

Carbohydrates include sugars, starches, and fiber, and they're found in nearly all plant foods. Of these, processed refined sugars and starches are the focus of the petition.

In whole foods, every nutrient—sugar, starch, and fiber, but also protein, fat, vitamins, minerals, and more—is part of what scientists call a food matrix.

Think of the food matrix as the natural structure of the food: the combination of nutrients, bioactive compounds, and physical form that affect how your body processes food and uses nutrients.

Once nutrients are broken out of that matrix—through processing—they can have very different physiological effects. And in the case of processed refined carbs? Those effects are especially harmful, according to Dr. Kessler's petition.

# Are You Overfed but Undernourished?

In the sections that follow, you'll learn why and how processed refined carbs affect your body differently than carbs in whole foods. But that's not the only issue with processing.

Another big problem: What it does to the nutrient quality of the food you eat.

When carbs are processed, they retain the calories but are stripped of healthful nutrients, like vitamins, minerals, and phytochemicals. So they literally become less nutritious.

Sure, manufacturers can fortify foods by adding key nutrients back in, but that doesn't replace the full spectrum of nutrition that's removed.

What's more, processed refined carbs are often mixed with added fats, resulting in delicious foods that are overloaded with calories per bite.

So you eat more calories, but get fewer nutrients. This is what's known as being "overfed but undernourished." (Industrial farming methods also play a role in this condition.)

The upshot: This mismatch between calories and nutrition helps explain why chronic disease is rising, even in a country with no shortage of food.

# What Are Processed Refined Carbs, Exactly?

Processed refined carbs are carbohydrates that have been stripped from whole foods and physically or chemically altered into new ingredients. In other words, they've been removed from the food matrix.

Food companies use these ingredients—like refined flour, high-fructose corn syrup, and maltodextrin—to build packaged products that taste delicious, have a long shelf-life, and are cheap to produce.

Think chips, cookies, and soda, sure, but also granola, breakfast cereals, and bread.

These carbs may come from plants originally, but they don't act in your body the way the carbs in a peach, sweet potato, bean, or intact whole grain do.

To see why, it helps to understand what processing actually does to them. Foods can be processed in many different ways, but two transformations show how it works most clearly—ones you encounter almost every day:

- How corn becomes sugar
- How whole grains become refined flour

### **How Corn Becomes Sugar**

Corn is the backbone of America's processed food system. It's cheap to grow, extremely versatile, and heavily subsidized—which means the government helps cover the cost of producing it. That keeps corn prices low and makes corn-based ingredients cheap for food companies to use.

But the real magic for manufacturers is that corn can be broken down into its parts and rebuilt into dozens of different ingredients. Chief among them are sweeteners and texture agents.

Through a series of industrial steps, a kernel of corn can be transformed into syrups that sweeten sodas, thicken sauces, keep baked goods soft, and give processed foods their signature textures. Here's a simplified look at how this happens.



#### Corn Wet Milling—Breaking Down the Kernel

Wet milling is where a simple corn kernel begins its transformation. The process softens, grinds, and separates it into pieces the food industry can reassemble into syrups, oils, and starches. It involves these processes.

**Steeping:** Corn kernels are soaked in warm water for 1-2 days with sulfur dioxide. This softens the kernel and helps loosens the bonds that hold the food matrix together.

**Grinding:** The softened kernels are passed through grinding mills that create a wet mash of starch, germ, fiber, and protein.

**Separation:** The germ, fiber, and protein are removed in stages, and what remains is an almost pure slurry of starch granules—a thick, white, tasteless paste. Think of it like a giant vat of cornstarch mixed with water—smooth, neutral, and ready to be converted into a sugary syrup.

That starch slurry is the starting point for the next phase: breaking it down into sugars. This process is called hydrolysis.



#### **Hydrolysis—Cutting Starch into Sugars**

Chemically speaking, starch is a molecule that's made up of many glucose units linked together. Glucose is the simple sugar that circulates in your blood and fuels your cells. On its own, it tastes sweet (because it's a type of sugar).

For a visual, picture a chain necklace. That's the starch molecule, and each link in the chain is a glucose unit.

When glucose units are strung together in very long chains—as they are in a starch—you don't taste them as sweet. That's because your tongue's taste receptors only respond to shorter chains of glucose units.

Hydrolysis is the step where that long starch chain is "cut down" into sugar.

In this process, acids or special enzymes, along with water, are used to break the bonds that hold glucose units together. The result is shorter chains of glucose.

The more the starch is broken down, the sweeter and faster-digesting it becomes. Think of this as the food industry's "sweetness dial."

#### The Sweetness Dial

Food scientists control how far this starch breakdown goes—tweaking sweetness, texture, and function depending on whether they need a thickener, syrup, or sweetener. They label the result with a number called the dextrose equivalent (DE).

DE is expressed as a percentage, where 0 means pure starch and 100 means pure glucose. Different ranges on this scale create very different ingredients—from bland thickeners to syrupy sweeteners.

**Maltodextrin** (DE <20%): Barely sweet. Used not for taste but for bulk and texture—it makes powdered products flow better, thickens sauces, and adds body to drinks and processed foods. This is technically a processed refined starch, so it doesn't show up as "Added Sugars" on a nutrition label—but it raises blood sugar almost like pure glucose.

**Corn syrup/Glucose syrup** (DE 20–99%): Mildly to very sweet, depending on the ratio of short sugars to longer starch chains in the mix. These syrups hold water, which keeps foods moist so they can stay soft and chewy for longer. They also prevent crystallization, so candies, ice creams, and sauces stay smooth instead of gritty. That improves the "mouth feel" of products, making them more palatable. These do count as "Added Sugars" on a nutrition label.

**High-fructose corn syrup (HFCS)**: Starts as high-DE syrup (about 90–97% glucose), then an enzyme called glucose isomerase converts a portion of that glucose into fructose. The resulting syrup typically contains 42–55% fructose. (Now you know why it's called "high-fructose" corn syrup.) Because fructose is sweeter than glucose, the syrup ends up about as sweet as table sugar (a.k.a. sucrose, which is 50% glucose and 50% glucose), so manufacturers can use it in place of sugar in sodas and packaged foods. HFCS blends easily into liquids, doesn't crystallize, and stays stable in acidic drinks like soda. It also shows up as "Added Sugars" on labels.



### Insider Info

# Why Manufacturers Use Processed Corn Products

#### Cost savings

With wet milling, almost nothing goes to waste. The starch becomes syrups, the germ produces corn oil, and the leftover fiber and protein are sold as animal feed. What's more, high-fructose corn syrup (HFCS) is usually cheaper than cane or beet sugar in the U.S. thanks largely to those corn subsidies and sugar import quotas. That price advantage makes it attractive for soda, candy, baked goods, sauces—anywhere sugar would normally be used.

#### Shelf life and moisture control

Corn syrups are hygroscopic (they hold water). They keep products soft and moist far longer than sucrose. Example: A packaged snack cake with HFCS stays chewy and palatable for weeks, compared to a homemade cake that stales in days.

### • Texture engineering

Unlike sucrose, syrups don't crystallize easily and become gritty. That makes them ideal for chewy candies, smooth sauces, and ice creams. Plus, using the "sweetness dial," food technologists can fine-tune textures—for sticky glazes, gooey centers, and chewy bars.

### Blendability

Liquid syrups flow straight into large-scale mixing systems. They dissolve instantly, unlike crystalline sugar, which must be handled carefully to avoid recrystallization. This makes production faster, more consistent, and machines less prone to clogs or texture failures in continuous manufacturing.

### Health Takeaway

# Why It Matters in Your Body

No matter the form—maltodextrin, corn syrup, or high-fructose corn syrup (HFCS)—these corn-based ingredients break down and are absorbed rapidly. Maltodextrin, in particular, spikes blood sugar even faster than table sugar. Because they're cheap and endlessly versatile, food companies use them in huge quantities across processed foods—meaning you often consume far more than you realize.



# The Cost of Big Blood Sugar Spikes 1

Your body is built to handle rises in blood sugar.

Eat some brown rice or a piece of fruit, and your glucose levels go up. Your body then releases insulin—a hormone that helps move that sugar from your blood into your muscles, where it can be used for energy.

Soon after, levels come back down. No problem.

The trouble comes when those blood sugar rises are larger, more frequent, and longer-lasting—as they often are with processed refined carbs.

• More demand on insulin. Every spike calls for insulin. Occasional spikes aren't harmful, but when they're constant and high, the system becomes less efficient at responding. Over time—and especially when overall calories are in excess—this can contribute to insulin

resistance, where the same amount of insulin no longer lowers blood sugar as effectively.

- Higher baseline blood sugar. With chronic intake of refined carbs, blood sugar doesn't return to baseline as easily. Instead, it stays elevated for longer periods. This is what doctors measure with an A1C test, which reflects your average blood sugar levels over the past 2–3 months. Higher A1C means your body is spending more time in a high-sugar state, raising risk for prediabetes and type 2 diabetes.
- Inflammation and fat storage. Persistently high blood sugar itself is inflammatory. And when those carbs come with excess calories (often paired with added fats in processed foods), your body stores the surplus energy as fat, which can also increase inflammation.

It's not just the spikes themselves, but the scale of exposure. Many processed foods deliver doses of sugar and starch far beyond what you'd find in nature.

Take a large Coke from McDonald's: It has about 100 grams of sugar—the same as 7 or 8 apples. Few people would eat even half that many apples at once, and those apples would also come with fiber, which slows sugar absorption, plus vitamins, minerals, and other beneficial compounds.

Now add the burger and fries that often go with that Coke, which might contribute another 80 to 100 grams of processed carbs. That's nearly 200 grams of refined carbohydrate in one sitting—far more than humans typically consumed for most of history.

This may sound like an extreme example—but it's not all that uncommon. Here's the kicker: When doctors test for insulin resistance, they give patients a 75-gram sugar drink and monitor their response for two hours afterward. This is known as a "metabolic stress test."

It's very useful as a diagnostic tool, but—as the name suggests—it's not something you'd want to repeat every day. Yet many people are effectively putting themselves through that same stress test daily, sometimes multiple times a day, when they load up on sodas, snacks, and fast-food meals built around processed refined carbs.



# How Whole Grains Become Refined Flour

Grains like wheat, corn, and rice start out as compact nutrition packages—fiber, healthy fats, protein, and starch all bound together.

Milling strips away much of that balance, leaving behind mostly starch in the form of white flour.

### The Anatomy of a Whole Grain

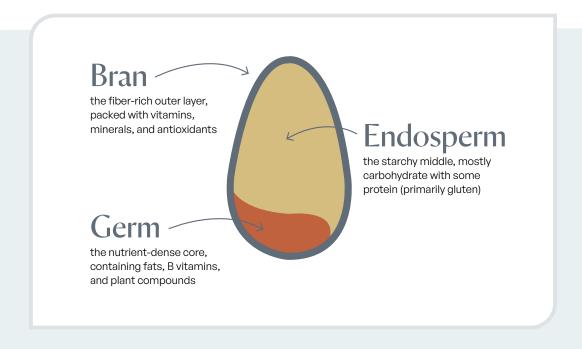
A grain of wheat (and most cereal grains) has three main parts:

- Bran: the fiber-rich outer layer, packed with vitamins, minerals, and antioxidants.
- Germ: the nutrient-dense core, containing healthy fats, B vitamins, and plant compounds.
- Endosperm: the starchy middle, mostly carbohydrate with some protein (primarily gluten).

In nature, you eat all three together, which slows digestion and delivers fiber and nutrients along with the starch.

### **How Milling Changes It**

Modern roller mills crush and sift the grain, separating out the bran and germ. What's left behind is almost entirely the starchy endosperm. This is ground into the fine white powder we call refined flour. The natural "matrix" that slowed down digestion has been stripped away.



### Food Fact Check

## Are "100% Whole Grains" Really Whole?

Not in most cases. When you see "100% whole grain" on a package, it usually means the grain was first milled into parts—bran, germ, and endosperm—then recombined in the right proportions. Technically all the pieces are there, but the natural structure has been lost.

That matters because:

- **Digestion speeds up.** Flour, even "whole grain" flour, is broken down into glucose much faster than an intact kernel (like wheat berries, oats, or brown rice), raising blood sugar more quickly.
- Nutrients are more vulnerable. Once ground, the oils in the germ can oxidize, and certain vitamins and antioxidants degrade faster than they would in a whole kernel.
- The food matrix is disrupted. In an intact grain, fiber, starch, and nutrients are tightly woven together. In flour, they're loose particles that don't interact the same way in your body.

So while "100% whole grain" flour may be better than white flour (because it keeps the bran and germ), it's still not the same as eating the grain in its original form.

### What counts as a true whole grain?

Here are grains you can buy in the store that are still intact, with their bran, germ, and endosperm all together just as they grew:

- Amaranth
- Barley (hulled)
- Black rice (forbidden rice)
- Brown rice
- Buckwheat groats (kasha)
- Farro
- Millet

- Oats (rolled, steel-cut, or whole oat groats)
- Quinoa
- Rye berries
- Wheat berries
- Wild rice

### Insider Info

# Why Manufacturers Use Refined Flour

- Soft texture: Refined flour makes light, fluffy breads, pastries, and cakes—the kinds of products consumers expect to feel soft and indulgent.
- Neutral taste: With the flavorful bran and germ gone, flour has a mild, uniform taste.
   That makes it a blank canvas for sugar, fat, and flavorings.
- Long shelf life: Removing the germ (which contains oils) prevents rancidity, so refined flour can sit on store shelves or in warehouses for months without spoiling.
- Consistency: Industrial bakers value predictability. Refined flour behaves the same way in massive mixers and ovens, making largescale production faster and more reliable.

### Health Takeaway

# Why It Matters in Your Body

Because Refined flour breaks down rapidly into glucose, increasing blood sugar much more than intact grains do. Over time, this contributes to the same metabolic problems tied to sugar itself.

This same type of processing isn't unique to wheat. Corn, rice, oats, potatoes, and tapioca are also milled or refined into flours and starches that behave the same way in the body—fast-digesting and quick to raise blood sugar.

## Food Fact Check

### What's the Deal with White Rice?

Rice can be confusing. Some labels call it a "whole grain," others don't, and it's not always clear how white, brown, and wild rice compare. Here's how they actually differ:

- Brown rice: A true whole grain. It keeps the bran (fiber and nutrients), germ (healthy fats, B vitamins), and endosperm (starch). Chewier, nuttier, and slower to digest.
- Wild rice: Not technically rice but a grass seed. Higher in protein, fiber, and certain micronutrients than either brown or white rice. Has a chewier texture and slower digestion.
- White rice: Brown rice that's been polished to remove the bran and germ. What's left is mostly the starchy endosperm. Softer, quicker to cook, but digests fast and spikes blood sugar like other refined carbs. Many brands are "enriched" with added vitamins and minerals (like iron and B vitamins), but that doesn't restore the lost fiber or slow digestion.

Bottom line: Brown and wild rice deliver the full "food matrix" of fiber, nutrients, and structure. White rice has been processed—like refined flour—into mainly fast-digesting starch, even if it's enriched with some nutrients.

# From Flour to Factory Foods



# Once grains have been stripped down to starch, food companies don't just stop there.

They often engineer it into new forms—airy puffs, crunchy cereals, chewy bars—that look, feel, and behave differently than the original grain.

These steps don't just change how the food looks or tastes—they change how quickly you eat it and how it affects your body.

### **Puffing & Extrusion—How Starch Gets Transformed**

What it is: A dough made from refined flour or starch is forced through a barrel under high heat, pressure, and intense mechanical stress (shear). When it exits through a small opening (a die), the sudden drop in pressure makes the water inside flash into steam—puffing the dough into a light, porous shape. This process also "precooks" the starch—known as "gelatinization"—and denatures proteins, so the natural grain structure is completely gone.

What you get: Light, crispy pieces with thin cell walls and lots of pores. They fracture easily and sometimes "melt" on the tongue. That means less chewing, faster bites, and quicker eating. Controlled trials even show that texture differences alone can lead people to consume more calories.

### Insider Info

# Why Manufacturers Use Puffing and Extrusion

- Coating-friendly: Extruded puffs are designed to hold maximum flavor in every bite. Their airy structure soaks up sugar glazes, cheese powders, and seasoning blends, then locks them in—delivering an intense burst of taste with every mouthful.
- Shelf-stable: High heat sterilizes the product, and low water content keeps it from spoiling. That's why a bag of puffs can sit in your pantry for months, while a homemade muffin or loaf of bread goes stale in just a few days. The trade-off is that long shelf life makes these foods ever-present and easy to over-rely on—snacks that are always within reach tend to get eaten more often.
- "Eatability": The light crunch quickly dissolves into a melt-in-your-mouth texture. It feels pleasant and effortless, which makes these foods especially appealing.
- Cost efficiency: Extrusion turns cheap starches into highly profitable products with long shelf life. It also creates entirely new textures and shapes—think Cheetos, Rice Krispies, or Froot Loops—that companies can brand, flavor, and market as unique foods, even though they all start from the same basic starch slurry.
- Versatility: One machine can churn out cereals, chips, bars, even pasta—just by changing the die shape and mix. For food companies, that means endless product lines from the same cheap starch base. For consumers, it means a wall of different-looking options at the store that are nutritionally almost identical.

### Health Takeaway

## Why It Matters in Your Body

Extrusion doesn't just reshape starch—it transforms how it behaves when you eat it. Gelatinized starch is already partly "digested," so your body absorbs it quickly. And because puffed, porous foods dissolve with almost no chewing, they're easy to consume rapidly and in large amounts before satiety has a chance to register.



**Key point:** On the label, you'll never see the word "extrusion." Packages just list "cornmeal," "rice flour," or "starch." The label doesn't tell you that these ingredients have been physically transformed into a fast-absorbing, easy-to-overeat form.

### Food Fact Check

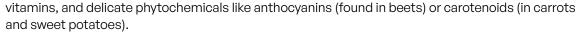
## Are Veggie Chips Really Vegetables?

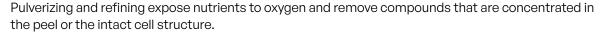
Veggie chips may sound healthy, but they're often a marketing sleight-of-hand.

Even if the bag says "made from sweet potatoes, beets, or spinach," the vegetables have usually been pulverized into starch-rich powders or pastes, then extruded or fried and reassembled into chip form.

By the time they reach the bag, much of what makes vegetables beneficial has been damaged or stripped away.

Heat from frying or extrusion breaks down heatsensitive nutrients such as vitamin C, many B





Added oil and salt shift the nutritional balance away from "vegetable" and toward "snack food," raising calories and sodium without adding protective compounds.

What's left is mostly starch, oil, salt, and flavorings—nutritionally much closer to a potato chip than to a serving of vegetables.



### Insider Info

### Other Tricks of the Trade

Refining turns grains into fast-digesting starches and sugars that are already easy to overeat. Additives are the next layer—they amplify those qualities, making processed foods taste fresher, feel creamier or chewier, and last on the shelf for even longer.

Examples you'll see on labels:

- Humectants (like glycerin, sorbitol): Hold water, keeping snack bars chewy and cookies soft far beyond their natural shelf life. That means foods stay hyper-palatable long after they should have gone stale.
- Emulsifiers and gums (like soy lecithin, mono- and diglycerides, guar gum, xanthan gum, carrageenan): Create creamy, uniform textures in ice creams, sauces, and breads. Research suggests some emulsifiers may also alter gut bacteria and promote inflammation.
- Dough conditioners (like azodicarbonamide, L-cysteine): Make white bread rise higher, stay softer, and resist staling—helping "fresh" bread last for weeks on the shelf.
- Modified starches (often labeled "modified corn starch" or "modified food starch"):
   Starches treated chemically or physically so they hold up to freezing, reheating, or long transport. They don't add nutrients—just durability for industrial food.

### Health Takeaway

## Why It Matters in Your Body

Additives don't add nutrition. They just make it easier to eat more of the refined carbs your body needs less of—and some may carry health risks of their own.

### Food Fact Check

## Is Processing Ever Good?

Not all processing is harmful. Some methods make food safer, more convenient, or even more nutritious. The key difference is whether the process preserves the food's natural structure or strips it down into fast-digesting starches and sugars (and loads it up with additives and unhealthy fats).

Examples of "good" processing:

- Canned beans—protein and fiber remain intact. Rinse to cut the sodium and improve taste (and to wash away some of the starches in the liquid that can cause gas).
- Nut butters—simply ground peanuts or almonds; a healthy choice as long as sugar and hydrogenated oils aren't added.
- Frozen fruits and vegetables—locks in nutrients and reduces spoilage without additives. When flash-frozen at peak ripeness, they're often as nutritious as fresh.

- Bagged salad greens—still whole vegetables, just pre-washed and chopped for convenience.
- Canned sardines—rich in protein and omega-3s, and ready-to-eat in shelf-stable packaging.
- **Hummus or packaged guacamole**—blended versions of whole foods that keep most of their original nutrition. (Just check the labels for additives.)
- **Protein powder**—a concentrated food extract. Unlike refined carbs, it won't drive overconsumption, and it can be a convenient, healthy way to significantly boost intake.

Bottom line: Processing itself isn't the problem. It's when refining breaks foods apart and reassembles them into engineered products—designed for overconsumption and "bliss point" appeal—that trouble begins.

# Your Say Matters in the Fight Over Food Ingredients

You've seen how processed carbs are made and the impact they can have on our collective health. Now comes the bigger question: What can you do to help?

That's where Dr. Kessler's petition comes in.

#### What GRAS Actually Means—and Why It Matters

GRAS ("generally recognized as safe") is the FDA category that lets common food ingredients be used without special approval if experts agree they're safe "under present conditions of use." For example, salt, vinegar, and baking powder are GRAS.

Right now, refined sweeteners (corn syrup, glucose syrups, maltodextrin, high-fructose corn syrup) and refined flours and starches (from wheat, corn, tapioca, oat, or potato) all have GRAS status. Many additives that get paired with them—like emulsifiers, humectants, gums, and dough conditioners—hold GRAS status of their own.

GRAS =
GENERALLY
RECOGNIZED
AS
SAFE

That means food companies can freely combine these ingredients in nearly unlimited amounts, without having to prove safety.

Dr. Kessler's petition argues that processed refined carbs should not be considered GRAS, because they're not safe "under present conditions of use."

New evidence shows chronic, heavy consumption contributes to insulin resistance, fatty liver, inflammation, overeating, and changes in brain reward signaling. In other words, they're not "safe by default" anymore.

#### What Would Change If GRAS Status Is Revoked?

- Food companies couldn't just dump refined carbs into products automatically.
- Each ingredient—maltodextrin, glucose syrup, HFCS, refined extruded starches—would need a food additive petition.
- A petition requires safety data, and the FDA must decide whether the ingredient can be used and under what limits.

If petitions fail, those refined carbs couldn't legally be added to foods.



Important: This doesn't apply to table sugar (sucrose), plain flour, or corn starch used at home. The target is industrial-scale refining and recombining in packaged foods.

### **Why This Matters**

This isn't about banning carbs. It's about ending the automatic free pass that lets food companies build products around processed refined carbs without proving they're safe. If GRAS status were revoked, the FDA could:

- Set limits on how much processed refined carbohydrate goes into food.
- Restrict use in especially vulnerable categories, like products marketed to children.
- Reject unsafe ingredients outright if the evidence doesn't support them.

Just as important, this petition reframes the issue for the public: Refined carbs aren't just "empty calories," they're engineered additives hiding under the GRAS label. That awareness alone could change how consumers, journalists, and policymakers think about processed carbs—much like how trans fats went from "just another ingredient" to "a public health hazard."

# How to Take Action

The FDA has opened a public comment period on <u>Dr. Kessler's petition</u>. That means anyone can share their perspective, and those comments become part of the official record that regulators review.

Here's how to make your comment count:

- Share a personal story about how processed carbs have affected your health, your family, or your community.
- Explain how cutting back on processed carbs has made a positive difference for you.
- Just say something. Keep it simple and honest—it doesn't need to be long or technical. Even one sentence is valuable.



# Want Some Help?

Use the examples below as thought starters, adjust them, or copy and paste one directly. The most important thing is showing support.

- I support this petition because processed foods with refined carbs make it harder for me to manage my weight and energy. I feel better and stay full longer when I stick to real, whole foods.
- Please take this issue seriously. I've seen how sodas, white bread, and packaged snacks have hurt my family's health. We need stronger oversight of these ingredients.
- Cutting back on processed refined carbs has made a big difference for me. My energy is steadier, and I don't feel as hooked on junk food. Everyone deserves food that helps health, not hurts it.
- As a parent, I'm worried about how many kids' foods are loaded with processed carbs. It shouldn't be this hard to find healthy choices in the store.
- These ingredients are in almost everything, and they make it too easy to overeat without real nutrition. I want the FDA to stop giving processed carbs a free pass.

Remember, the more comments submitted, the harder it becomes for regulators to ignore the evidence—and the easier it is to put public health, not profit, at the center of our food system.



Disclaimer: The information in this guide is for educational purposes only and is not a substitute for professional medical advice, diagnosis, or treatment.

Reading this material does not establish a doctor-patient relationship of any kind. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition, and never disregard professional medical advice or delay in seeking it because of something you have read here.

© 2025 Hyman Health LLC. All rights reserved.