



## 5 fiber surprises



Foods  
for **GLP-1  
TAKERS?**

**9**  
processed-food  
buzzwords

**COLDS, FLU, COVID**  
DO SUPPLEMENTS  
HELP?

# Goodbye Red 3, hello better labels



**PETER G. LURIE, MD, MPH**

President, Center for Science in the Public Interest

In the closing days of the Biden administration, the Center for Science in the Public Interest (*Nutrition Action's* publisher) saw a rush of good news that could make it easier for us to eat safer, healthier foods.

## ■ Red 3 dye.

The FDA banned the cancer-causing food dye Red 3 in foods, supplements, and ingested drugs, 35 years after the agency banned Red 3 in cosmetics. The move came in response to a petition CSPI filed in 2022 and our successful campaign to ban the dye in California in 2023. I've worked on Red 3 for more than 40 years, and it's good to finally see the dye in the rearview mirror.

## ■ Front-of-package labels.

The FDA proposed a rule requiring front labels of packaged foods to show whether the foods are high, medium, or low in saturated fat, sodium, and added sugars.

CSPI first petitioned the FDA to require clear and concise front-of-package labels in 2006, then again in 2022.

While "high in" labels only on foods that have too much sat fat, sodium, or added sugars would likely be more effective, the FDA's proposal would greatly improve the status quo.

■ "Healthy" claims. The FDA updated its criteria for foods that voluntarily make

a "healthy" claim. Under the new rule, which limits added sugars, "healthy" foods must provide servings of fruits, vegetables, protein, whole grains, or low-fat or fat-free dairy. Also allowed: bottles of oils (like olive and most other vegetable oils) that are predominantly unsaturated.

■ **Alcohol labels.** The Treasury Department proposed a rule that would require most alcoholic beverages to carry a Nutrition Facts-like label showing the percent alcohol by volume, alcohol content in fluid ounces, and calories, fat, protein, and carbohydrates per serving. (Sugars would be optional.) A second rule would require labels to disclose major food allergens.

It's about time.

In 2003, CSPI petitioned Treasury to require similar disclosures. And in 2022, we sued the department for 19 years of inaction on our petition.

*Peter*

Nutrition Info		
Per serving 1 container	%Daily Value	
Saturated Fat	18%	Med
Sodium	37%	High
Added Sugars	5%	Low
FDA.gov		

The FDA has proposed requiring a box like this on the front of all packaged foods.

**NOTE:** By February, when we went to press, the Trump administration had issued a raft of orders that threaten the public's health. Among them: thousands of CDC and FDA staffers were fired and state funding for food safety inspections was frozen, hindering investigations of food poisoning outbreaks.

Also fired were many FDA staffers who ensure that products like e-cigarettes are safe, even though that work is funded by an excise tax on cigarettes, not by taxpayers.

Go to [cspinet.org](https://cspinet.org) for the latest.

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Mail: CSPI, 1250 I Street NW, Suite 500, Washington, DC 20005

Phone: 1-866-293-CSPI (2774)

Email: [customer@nutritionaction.com](mailto:customer@nutritionaction.com)

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# 5 fiber surprises

BY BONNIE LIEBMAN



Experts recommend that adults eat 28 grams of fiber a day. On average, we get 17 grams. What's more, much of the fiber in ultra-processed foods may not deliver the benefits you expect. Here's what may surprise you.

## 1 Fiber targets aim at heart health.

Why was the fiber target (or Daily Value) on Nutrition Facts labels set at 28 grams?

"Most people would expect that the number was designed to promote regularity," says Joanne Slavin, professor of food science and nutrition at the University of Minnesota.

(Slavin has recently received research funding from Taiyo, which sells guar gum, and she serves on Olipop's advisory board.)

Instead, the target was aimed at preventing heart disease.

Why? That benefit was backed by the strongest evidence.<sup>1</sup>

"People who ate more fiber had protection against heart disease in large prospective cohort studies," explains Slavin, referring to research that tracks thousands of people for years.

In other studies, people who ate more fiber had a lower risk of constipation, diverticular disease, type 2 diabetes, obesity, and even colorectal cancer.

"But in the 1980s, the National Cancer Institute funded intervention studies to test whether high-fiber foods could prevent polyps that turn into colorectal cancer," notes Slavin. "And those trials came up empty."<sup>2,3</sup>

Researchers aren't sure why. A smaller trial is now testing whether eating 1½ cups of beans a day can curb inflammation and cell proliferation that could lead to colorectal cancer (see May/June 2024, p. 3).<sup>4</sup>

While further studies are underway, Slavin advises people to eat the kinds of foods that were linked to a lower risk of heart disease.

"We need a variety of fiber from whole grains, beans, and other real foods, not just one fiber added to soda pop or snack foods."<sup>5</sup>

Needless to say, the food industry has a different take.

## 2 Added fibers may not do what you expect.

Looking for fiber to make you feel more full, stay regular, or lower your blood sugar or bad cholesterol?

Don't assume that just any processed food that's been pumped up with fiber can help.

"A 2001 report introduced the idea that there's dietary fiber and there's added fiber," says Slavin, a member of the panel that wrote the report.

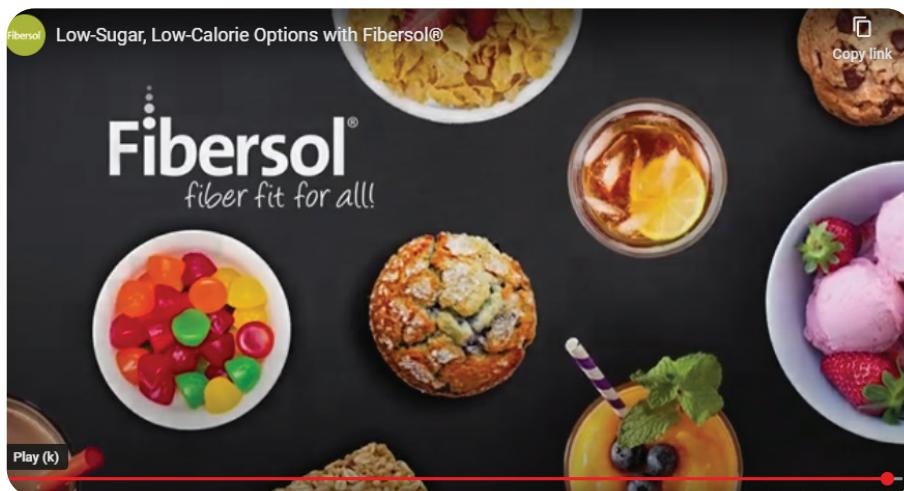
The intact "dietary" fiber that occurs naturally in grains, beans, vegetables, and other plant foods is a mix of fibers. But "added" fiber can be a single type of fiber that's isolated from foods or made in a lab.

"The FDA made sure that the added fibers that they were approving had some physiological benefit in a human study," says Slavin.

But that may not be the benefit you're looking for.

Take inulin (aka chicory root fiber or extract). It's used in most Fiber One bars, brownies, and donuts, as well as in thousands of other foods.

"Inulin got accepted because it raises calcium absorption," says Slavin. (See "Why was that added fiber approved?")<sup>6,7</sup>



ADM helps companies add fiber to candy, cookies, ice cream, and more. Obesity drugs may boost the market for high-fiber foods (see p. 16).

## Why was that added fiber approved?

To count as “fiber” on a Nutrition Facts label, the FDA required added fibers to have some health benefit. Here’s why each fiber was approved and an example of a food that contains it, often along with other fibers. (Some foods, like the Jell-o pudding, contain very little fiber.)



### Improves regularity

➤ Cellulose



### Lowers risk of heart disease

Beta-glucan soluble fiber

➤ Psyllium



### Lowers blood glucose or insulin

➤ Alginate

Arabinoxylan

Gum arabic or acacia gum

Some resistant or modified starches



### Lowers blood cholesterol

Guar gum

Hydroxypropylmethylcellulose

Konjac flour (glucomannan)

➤ Locust bean gum

Pectin



### Lowers calorie intake

➤ Polydextrose



### Raises calcium absorption

Fructooligosaccharides

Galactooligosaccharides

Inulin (chicory root fiber or extract)

Oligofructose

Soluble corn fiber (resistant maltodextrin)

The FDA also approved “mixed plant cell wall fibers” because they contain at least two approved fibers. That group includes oat fiber, pea fiber, and similar fibers from apples, bamboo, barley, citrus, cocoa, corn, cottonseed, rice bran, soy, sugar beets, sugar cane, and wheat.

(Too bad the FDA didn’t require Nutrition Facts labels to list “Added fibers” on its own line and to disclose the benefit that got each fiber approved.)

“Only cellulose got through on laxation,” says Slavin. “It takes an insoluble fiber like that to increase stool weight or do much for constipation.”

Exception: Psyllium, a soluble fiber that’s sold as Metamucil and is added to Kellogg’s All-Bran Buds cereal, is good for regularity.

But don’t expect Metamucil’s Fiber Gummies to help. They’re made with inulin and soluble corn fiber, not psyllium. Ditto for Benefiber gummies.

Nature Made and MiraFIBER gummies (“from the makers of MiraLAX”) are also made with inulin. Olly uses inulin’s shorter-chain cousin, fructooligosaccharides.

## 3 Added fiber gives foods a health halo.

“The U.S. has one of the world’s biggest fiber gaps,” said McKenna Mills, a senior technical specialist at Cargill, in a 2023 brochure from the agribusiness giant.

“Less than 3 percent of the population meets the FDA’s fiber intake guidelines,” noted the brochure.

Its title: “Baked-in Goodness: Using soluble fiber to deliver indulgence and health in the bakery aisle.”

Why bother with beans and veggies, when you’ve got the bakery aisle?

“Muffins, cakes, cookies, bake-stable fillings, even icings—there’s really no limit to where this can go in the bakery space,” said Mills.

Cargill’s soluble corn fiber can replace 30 percent of the sugar in baked goods, says the company.

And it doesn’t take much for companies to be able to slap a “good source of fiber” claim on a cookie label.

“Most bakery products inherently have some fiber from flour or other grains in the formula,” says Cargill.

“As a result, achieving a ‘good’ source of fiber claim (2.8 grams of fiber per serving) is often a relatively easy task.”

Just what Americans need: a claim to make us eat more sweets.

ADM, another agribusiness titan, pitches Fibersol, its soluble corn fiber, as a perfect ingredient for ice cream, candy, cookies, and bars.

(On ingredient lists, soluble corn fiber may show up as “soluble vegetable fiber (corn),” “resistant maltodextrin,” or just “maltodextrin.”)

Fibersol can “help relieve occasional constipation” and “improve stool

consistency” in “selected studies,” says ADM’s website.

Selected, indeed. When the FDA evaluated soluble corn fiber in 2016, it improved laxation in only 1 out of 5 studies.<sup>6</sup> Instead, the agency approved soluble corn fiber for boosting calcium absorption.<sup>7</sup> Apparently, that’s not the strongest sales pitch.

## 4 Excess inulin may boost gas and inflammation.

“Diets high in fiber can help keep your digestive system on track,” says Fiber One’s website.

That’s true for some fibers, but not for inulin, the main fiber in most Fiber One sweets.

“Inulin has no effect on laxation,” say Slavin. “And some people are very intolerant to it.”

Ditto for fructooligosaccharides and galactooligosaccharides, she adds.

“They’re all very fermentable. And when they get fermented, short-chain fatty acids get produced.”

So does gas.

In a recent study, researchers gave 18 people a hefty 10, 20, or 30 grams of inulin for one week each.<sup>8</sup> Bloating and flatulence increased at all three daily doses.

At 30 grams, the researchers also saw a rise in inflammatory markers. And in three people, a liver enzyme (alanine aminotransferase, or ALT) spiked outside the normal range, leading the scientists to quickly stop the inulin.

You won’t get 30 grams of inulin in one serving of any food. But many

fiber gummies supply 5 to 8 grams of inulin or fructooligosaccharides per serving. And it’s easy to overdo gummies.

“Inulin is added to a lot of foods, and you can’t always tell how much,” says Andrew Gewirtz, professor at the Institute for Biomedical Sciences at Georgia State University.

And the popularity of obesity meds (which can cause constipation) is spurring companies to add fiber to even more foods (see p. 16).

Gewirtz’s advice: “For now, people would be better off getting their fiber from a variety of diverse plant foods.”

## 5 How fiber affects the microbiome is still unclear.

Keeping the microbes in your gut healthy matters.

“People with more diverse gut microbiomes are often healthier,” says Justin Sonnenburg, professor of micro-

biology and immunology at Stanford University. “They have lower markers of inflammation and better metabolic markers.”

How might microbes help?

“The microbes produce short-chain fatty acids, which dampen inflammation,” says Sonnenburg.

And—unlike protein, fat, and sugars, which are absorbed in the small intestine—the intact fiber in plant foods reaches the large intestine, where it can feed those microbes.

“If we’re not feeding the microbes, they may use the mucus lining of our gut as a backup food source,” notes Sonnenburg. “If the mucus erodes and the microbes get too close to the intestinal cells, that can incite inflammation.”<sup>9</sup>

So Sonnenburg teamed up with Christopher Gardner, professor of medicine at the Stanford University School of Medicine, to test two strategies that might lower inflammation and boost the diversity of microbes in the gut.

“We randomly assigned 36 people to eat either as much fiber-rich food or as many servings of fermented foods like sauerkraut, kimchi, and yogurt as they could,” says Gardner.<sup>10</sup>

“After ramping up for four weeks, the fermented-food group was eating five or six servings a day, and the fiber folks went from about 22 to 45 grams of fiber a day.” And both groups kept it up for another six weeks.

The results were a surprise.

“In the fermented-food group, microbial diversity increased and 20 inflammatory markers decreased,” notes Gardner. “So that was good



Irregular? The inulin in gummies like these is unlikely to help, and it may cause gas. In contrast, regular Metamucil and MiraLAX are laxatives.



## Fibers with benefits

Your goal: at least 28 grams a day.

### Cereals

	Fiber(g)
Kellogg's All-Bran Buds (½ cup)	17
Kellogg's All-Bran Original (⅔ cup)	12
Post Shredded Wheat—Original or Wheat'n Bran (1½ cups)	8
Kellogg's Raisin Bran (1 cup)	7
Post Bran Flakes (1 cup)	7
Oats, any brand (1 cup cooked)	4

### Legumes (cooked)

Black beans, lentils, pinto beans, or split peas (½ cup)	8
Chickpeas or kidney beans (½ cup)	6

### Grains & Pasta (cooked)

Barley (1 cup) or bulgur (¾ cup)	6
Popcorn (4 cups)	5
Whole wheat pasta (1 cup)	5
Quinoa (¾ cup)	4
Brown rice (¾ cup)	3

### Bread & Crackers

Wasa Crispbread, Light Rye (3)	6
Nabisco Triscuit Original (6)	3
Whole wheat bread (1 slice, 1.5 oz.)	3

### Fruits

Blackberries or raspberries (1 cup)	8
Pear (1)	6
Avocado (½)	5
Apple (1)	4
Blueberries (1 cup)	4
Banana or orange (1)	3
Cherries or strawberries (1 cup)	3
Prunes (4)	3

### Vegetables (cooked)

Sweet potato (1)	4
Broccoli (½ cup) or green beans (⅔ cup)	3
Baby carrots (8)	2
Brussels sprouts or kale (½ cup)	2
Cauliflower (5 florets)	2
Corn or spinach (½ cup)	2

### Nuts & Seeds (amount closest to 1 oz.)

Chia seeds (3 Tbs.)	10
Ground flaxseed (3 Tbs.)	6
Almonds (23) or pistachios (49)	4
Peanuts (28) or peanut butter (2 Tbs.)	2

Sources: USDA, company information, and NIQ Product Explorer.



The smartest way to get enough fiber? Load up on beans, whole grains, vegetables, fruits, and nuts, not processed foods with isolated fibers.

news. But it looked like nothing was going on in the fiber group."

Overall, neither microbial diversity nor inflammation changed in the fiber eaters. But a closer look revealed that inflammation dropped in some and rose slightly in others, says Gardner.

"So when we put them all together, they canceled each other out."

What might explain those divergent responses? Some participants may have started the study without enough of the type of gut microbes that could break down the incoming flood of fiber.

"Those with a rise in inflammation started the study with low microbial diversity," says Gardner. "On the high-fiber diet, they were churning out lots of fiber in their stool, as if to say, 'Whoa, I can't handle this fire hose of fiber.'"

In contrast, those with a drop in inflammation started the study with more microbial diversity.

"Maybe they had less fiber in their stool because their microbes were chewing it up for fuel," Gardner suggests.

But those "exploratory" findings need to be tested in a new study.

"Maybe someone who hasn't been eating much fiber needs to ramp up more slowly, or stay on the high-fiber diet for a longer period of time before their gut microbes can handle the extra fiber," says Gardner.

That's only one open question. "There are hundreds of types of microbes in your colon, and hundreds of inflam-

matory markers," notes Gardner. "We need to know which ones matter most."

He and Sonnenburg have now launched a new trial.

"We've enrolled 130 pregnant women at the end of their first trimester," says Gardner. "For their last two trimesters, we're putting them on the high-fiber diet, the fermented-food diet, both, or neither."

"And the women will have an option to continue for a month after the baby's birth. That will give us a chance to see what happens if people eat the diets for longer."

The study's key goal: "We want to see to what extent the maternal microbiome gets picked up by the child, so we're going to look at the kids' poop for five years," says Gardner.

His bottom line: "You can't go wrong with whole foods. We don't know exactly which fibers are best for your microbiome. But with beans, grains, fruits, vegetables, nuts, and seeds, you get different types of fibers for different microbes, so you're hedging your bets." 🍌

<sup>1</sup> [nap.nationalacademies.org/catalog/10490/dietary-reference-intakes-for-energy-carbohydrate-fiber-fat-fatty-acids-cholesterol-protein-and-amino-acids](https://nap.nationalacademies.org/catalog/10490/dietary-reference-intakes-for-energy-carbohydrate-fiber-fat-fatty-acids-cholesterol-protein-and-amino-acids).

<sup>2</sup> *N. Engl. J. Med.* 342: 1149, 2000.

<sup>3</sup> *N. Engl. J. Med.* 342: 1156, 2000.

<sup>4</sup> *BMJ Open* 14: e081379, 2024.

<sup>5</sup> *BMJ* 378: e054370, 2022.

<sup>6</sup> [fda.gov/media/101853/download](https://fda.gov/media/101853/download).

<sup>7</sup> [fda.gov/food/nutrition-food-labeling-and-critical-foods/review-scientific-evidence-physiological-effects-certain-non-digestible-carbohydrates](https://fda.gov/food/nutrition-food-labeling-and-critical-foods/review-scientific-evidence-physiological-effects-certain-non-digestible-carbohydrates).

<sup>8</sup> *Cell Host Microbe* 30: 848, 2022.

<sup>9</sup> *Cell Metab.* 20: 779, 2014.

<sup>10</sup> *Cell* 184: 4137, 2021.

# A better bread?

## HOW TO DECODE LOAF LABELS

BY LINDSAY MOYER & MARLENA KOCH

Healthy bread can be simple: Buy 100% whole grain, look for less sodium, and don't worry about added sugar. But many breads sport claims that are about marketing, not health. Here's what matters and what doesn't. For some good-tasting Best Bites and Honorable Mentions, see the photos on this page.

### 1 Aim for 100% whole grain.

If your bread label says "100% whole grain" or "100% whole wheat," it's a slam dunk. Knowing what percent of the grain is whole matters because health authorities recommend not just eating *more* whole grains, but also eating *less* refined grains.

If no percentage is listed on the label, head to the ingredient list. Look for "whole wheat" or other "whole" grains or flour like quinoa, brown rice, oats, or oatmeal. ("Sprouted" grains are also typically whole.)

Our Best Bites and Honorable Mentions have grains that are all—or nearly all—whole. We disqualified breads with refined (white) flour unless it was far down the ingredient list near yeast or salt, a sign that there's little there. (Don't fret about "cultured wheat flour." It's added in small amounts to help preserve bread.)

### 2 Check the slices per serving.

Usually, it's one slice. But some thin- or small-slice loaves list two slices.

All of the numbers in our chart are for one slice (we adjusted any labels that listed two). If you're staring at the Nutrition Facts labels of two breads at the grocery store, don't compare their calories, sodium, added sugar, or anything else until you're sure that you're looking at the same number of slices.

### 3 Minimize sodium.

Bread has more than you'd expect. A slice of Sara Lee Artesano Smooth Multigrain Bread may not taste salty, but it has 220 milligrams of sodium—more than a 1 oz. serving of Lay's Potato Chips (140 mg) or a small McDonald's Fries (190 mg).

How does salt sneak in? It's baked into the bread, not sprinkled on the surface. That explains how two slices of bread can easily rack up 300 to 400 mg of sodium (roughly 15 percent of a day's max) before you add any more sodium from mayo, mustard, cheese, or deli turkey.

The good news: Some breads do better. Our Best Bites have no more than 120 mg of sodium per slice. Honorable Mentions can have up to 150 mg. And some winners like Food for Life Ezekiel 4:9 (75 mg) and Dave's Killer Bread Thin-Sliced Powerseed (90 mg) have far less.

### 4 Don't fuss over a few grams of added sugar.

Most breads that are healthy don't add more than a few grams of sugar (if that). So we didn't set added-sugar limits for our Best Bites and Honorable Mentions.

Why not just call for zero grams? Because almost no widely available whole-grain breads would fit the bill.

A few breads add sucralose, a low-calorie sweetener we rate as "avoid" (see [chemicalcuisine.org](http://chemicalcuisine.org)). You won't find it in our Best Bites or Honorable Mentions.



#### Food for Life Ezekiel 4:9

Made with sprouted whole grains and less salt than almost any other bread. Find it in the freezer case.



#### Silver Hills Little Big Bread

"Little," "small slice," and "thin-sliced" whole-grain breads are almost always winners.



#### Dave's Killer Bread Powerseed

A large (1.5 oz.) slice of bread with only 1 gram of added sugar. Bravo!



#### Nature's Own 100% Whole Wheat

100% whole grain? Check. Small enough to keep a lid on sodium? Check. An easy Best Bite!



## Gut health gimmick



"Supports digestive health," shouts Arnold Whole Grains 100% Whole Wheat Bread.

What's so special about it? "Fiber in whole grains supports digestive wellness," says the smaller print. True, but Arnold's is no better for your gut than any other 100% whole wheat bread. Whole grains, beans, fruits, and veggies *all* support your digestive wellness.

Any food can make an impressive-sounding claim that it

"supports" a structure or function of the body, with little oversight by the FDA (see p. 22). Marketers love it.

## Slender slices

The healthiest diets have whole grains...but not loads of them.

A DASH-like diet with roughly 2,000 calories a day piles on 10 servings of fruits and veggies, so it has room for just four 1 oz. grain servings. But many bread slices weigh in at 1½ oz. (42 grams) or more. So a sandwich can gobble up three of your four daily grain servings.

Solution: "Thin-sliced" breads like those from Dave's Killer Bread or Pepperidge Farm. None top 1 oz. per slice and most are Best Bites.

Nice!



## Gluten-free flaws

Unless you need to avoid gluten, don't bother. Mimicking gluten's texture is tough, so most gluten-free breads mix in tapioca or arrowroot. We counted both of those starchy, fiber-poor ingredients as refined flour when we chose Best Bites and Honorable Mentions.

What's more, any whole grain in gluten-free bread typically comes from brown rice, which is lower in fiber than the whole wheat or rye in other 100% whole-grain breads. And

you may not get much: Udi's Gluten Free Whole Grain Bread has more tapioca starch than brown rice flour.



## Whole grain or not?

Some breads' names or claims sound good...but they may or may not be 100% whole grain:

■ **Grams whole grain.** Grams alone don't tell you what percent of the grains are whole. A bread with "8g whole grain" could also have 8 (or more) grams of white flour.

■ **"Made with whole grain."** Expect white flour mixed with whole grain. For example, 32 percent of the grain in Sara Lee White Made with Whole Grain is whole, says the label.

■ **Wheat bread.** Most bread is made of wheat—whole or refined—so "wheat bread" doesn't mean much.

■ **Multigrain bread.** "Multigrain" means "more than one grain," so it can be mostly white flour with a smattering of whole grains (like Sara Lee Artesano Smooth Multigrain Bread) or a good dose (like Arnold Whole Grains Healthy Multi-Grain Bread). Check ingredients!



## Keto caveats

With "keto" breads, you're missing out on heart-healthy whole grains.

What replaces them? A slice of Arnold Keto Bread has "1 gram of net carbs" and 9 grams of fiber, mostly from modified wheat starch, inulin, oat fiber, and soluble corn fiber. They may not have the same benefits as whole grains' intact fiber...and some can cause gas (see p. 3).

In contrast, Base Culture Gluten Free Original Keto Bread is heavy on real food like eggs, almond butter and flour, and flax. Alas, it has some added starch (arrowroot flour) ...and costs \$11 a loaf!



## Allergy alert

Because ingredient lists must now disclose sesame, some companies are *adding* sesame to breads that used to be free of it. Why?

The move could lower the costs for cleaning production lines in between products and lower the risk of a recall for a bread that accidentally contained an undeclared allergen due to cross-contamination.

But that means that more breads aren't safe for people with a sesame allergy. If that's you, check the ingredients *every time* you buy bread. 🚫



# Go with the grain

**Best Bites** (✓✓) have no more than 120 milligrams of sodium per slice. **Honorable Mentions** (✓) can have up to 150 mg. The grains in both are all (or almost all) whole. We disqualified breads made with the artificial sweetener sucralose or with non-trivial amounts of starches like tapioca or arrowroot. Within each section, breads are ranked from least to most sodium.

Note: All numbers are per slice. They may not match what's on some packages due to regional variations or the number of slices per serving.

	Calories	Sodium (mg)
<b>Thin-Sliced</b> —all or nearly all whole grain (1 slice)		
✓✓ Pepperidge Farm Thin Sliced 100% Whole Wheat (0.9 oz.)	70	65
✓✓ Pepperidge Farm Thin Sliced 15 Grain (0.9 oz.)	70	70
✓✓ Dave's Killer Bread Thin-Sliced Powerseed (1 oz.)	60	90
✓✓ Oroweat Thin-Sliced Sweet Baby Grains (1 oz.)	70	95
✓✓ Sara Lee Delightful Healthy Multi-Grain (0.8 oz.)	45	95
✓✓ Silver Hills Little Big Bread (0.8 oz.)	50	95
✓✓ Sara Lee Delightful Soft & Smooth Wheat (0.8 oz.)	45	100
✓✓ Dave's Killer Bread Thin-Sliced 21 Whole Grains and Seeds (1 oz.)	60	105
✓✓ Sara Lee Delightful Honey Whole Wheat (0.8 oz.)	45	105
✓✓ Arnold Small Slice Whole Grains 100% Whole Wheat (1 oz.)	70	110
✓✓ Brownberry or Oroweat Small Slice Whole Grains 100% Whole Wheat (1 oz.)	70	115
✓✓ Dave's Killer Bread Thin-Sliced—100% Whole Wheat or Sprouted Whole Grains (1 oz.)	70	115
✓✓ Dave's Killer Bread Thin-Sliced Good Seed (1 oz.)	70	120
✓ Arnold, Brownberry, or Oroweat Thin-Sliced 22 Whole Grains & Seeds (1 oz.)	80	125
✓ Oroweat Thin-Sliced 100% Whole Wheat (1 oz.)	70	130
<b>Thin-Sliced</b> —NOT all or nearly all whole grain (1 slice)		
Pepperidge Farm Light Style Soft Wheat (0.7 oz.) <sup>§</sup>	45	65
Pepperidge Farm Light Style Oatmeal (0.7 oz.)	45	85
Dave's Killer Bread Thin-Sliced White Bread Done Right (1 oz.)	70	95
Pepperidge Farm Light Style 7 Grain (0.7 oz.) <sup>§</sup>	45	95
Arnold Small Slice Whole Grains Oatnut (1 oz.)	80	105
<b>Regular</b> —all or nearly all whole grain (1 slice)		
✓✓ Food for Life Ezekiel 4:9 Low Sodium (1.2 oz.)	80	0
✓✓ Food for Life Ezekiel 4:9 Cinnamon Raisin (1.2 oz.)	80	65
✓✓ Food for Life Ezekiel 4:9 (1.2 oz.)	80	75
✓✓ Nature's Own 100% Whole Wheat with Honey (0.8 oz.)	50	75
✓✓ Nature's Own 100% Whole Grain (0.9 oz.)	70	115
✓✓ Nature's Own 100% Whole Wheat (0.9 oz.)	60	120
Pepperidge Farm Swirl 100% Whole Wheat Cinnamon with Raisins (1.2 oz.) <sup>§</sup>	90	120
✓✓ Sara Lee 100% Whole Wheat (0.9 oz.)	60	120
✓✓ Silver Hills Ancient Grain (1 oz.)	70	120
✓ Nature's Own Life 100% Whole Grain Sugar Free (0.9 oz.)	50	125
✓ Dave's Killer Bread Powerseed (1.5 oz.)	90	130
✓ Silver Hills Heritage Grain (1 oz.)	70	130

	Calories	Sodium (mg)
✓ Pepperidge Farm Whole Grain 100% Whole Wheat (1.5 oz.)	120	135
✓ Silver Hills The Big 16 (1.3 oz.)	90	140
✓ Silver Hills Omegamazing (1.3 oz.)	90	150
Arnold, Brownberry, or Oroweat Grains Almighty Gut Balance (1.1 oz.)	80	160
Dave's Killer Bread 100% Whole Wheat (1.5 oz.)	100	160
Arnold or Brownberry Whole Grains 100% Whole Wheat (1.5 oz.)	110	170
Dave's Killer Bread 21 Whole Grains and Seeds (1.6 oz.)	110	170
Silver Hills Squirrely (1.3 oz.)	80	170
Arnold or Brownberry Whole Grains Healthy Multi-Grain (1.5 oz.)	120	180
Arnold, Brownberry, or Oroweat 22 Whole Grains & Seeds (1.7 oz.)	140	220
Mestemacher Whole Rye (2.5 oz.)	180	270

## Regular—NOT all or nearly all whole grain (1 slice)

Dave's Killer Bread Raisin' the Roof! (1.2 oz.)	100	100
Nature's Own Honey 7 Grain (0.9 oz.)	70	105
Nature's Own Honey Wheat (0.9 oz.)	70	110
Nature's Own Whitewheat Healthy White (0.9 oz.)	60	125
Sara Lee Honey Wheat (0.9 oz.)	70	125
Nature's Own Ancient Grain (1 oz.)	70	130
Sara Lee White Made with Whole Grain (1 oz.)	70	140
Thomas' Swirl Cinnamon Raisin (1.1 oz.)	90	140
Brownberry Natural Health Nut (1.2 oz.)	90	160
Dave's Killer Bread Good Seed (1.6 oz.)	120	160
Dave's Killer Bread White Bread Done Right (1.4 oz.)	110	180
Pepperidge Farm Farmhouse Whole Grain White (1.7 oz.)	120	190
Sara Lee Artesano Golden Wheat (1.3 oz.)	100	190
Arnold or Pepperidge Farm Seeded Rye (1.1 oz.)	80	200
Pepperidge Farm Farmhouse Homestyle Oat (1.7 oz.)	130	210
Silver Hills Soft Wheat (1.4 oz.)	100	210
Sara Lee Artesano Smooth Multigrain (1.3 oz.)	110	220
Silver Hills Multigrain (1.4 oz.)	110	220
Brownberry Natural Wheat (1.3 oz.)	100	230
The Rustik Oven Hearty Grains & Seeds (2.3 oz.)	180	290

## Keto or Gluten-Free—NO refined starches (1 slice)

✓ Carbonaut Seeded (1.2 oz.)	80	130
✓ Carbonaut Original (1.2 oz.)	70	140
✓ Arnold, Brownberry, or Oroweat Keto (1 oz.)	40	150
✓ Carbonaut Gluten Free Seeded (1.2 oz.)	60	150
Nature's Own Life Keto Soft White (1 oz.)	35	190
Unbun Unbread Gluten-Free (1.1 oz.)	90	230

## Keto or Gluten-Free—with refined starches (1 slice)

Canyon Bakehouse Gluten Free Ancient Grain (1 oz.)	70	95
Food For Life Gluten Free Brown Rice (1.5 oz.)	100	95
Udi's Gluten Free Whole Grain (0.9 oz.)	70	140
Base Culture Gluten Free Original Keto (1.1 oz.)	100	160

✓✓ Best Bite | ✓ Honorable Mention | <sup>§</sup>Contains sucralose.  
Sodium Daily Value: 2,300 milligrams.

Sources: company information and NIO Product Explorer. Nutrition Facts and ingredients can change; always check the label. The use of information from this article for commercial purposes is strictly prohibited without written permission from CSPI.

# Quick Studies

A snapshot of the latest research on diet, exercise, and more.

## Processed red meat & your brain



Can processed red meats like sausage, ham, and bacon harm your brain?

Scientists followed 133,771 health professionals for roughly 30 to 40 years. Those who consumed the most processed red meat (they averaged at least  $\frac{1}{4}$  serving a day) had a 13 percent higher risk of dementia than those who ate the least

(less than  $\frac{1}{10}$  serving a day). And when 17,458 of the participants took six memory tests, those who ate the most processed red meat showed an additional 0.82 years of cognitive aging compared to those who ate the least.

**WHAT TO DO:** This kind of study can't prove that processed red meats cause dementia because something else about people who eat them may explain their link with cognitive decline. But processed meats also cause cancer, says the International Agency for Research on Cancer. 'Nuf said.

*Neurology* 104: e210286, 2025.

## Vitamin D vs. COPD or asthma?

Does vitamin D prevent breathing difficulties in people with COPD or asthma?

Researchers randomly assigned 3,632 people aged 50 or older (men) or 55 or older (women) with chronic obstructive pulmonary disease (COPD) and/or asthma to take vitamin D (2,000 IU) or a placebo every day.

After five years, the vitamin D takers were no less likely to have COPD or asthma flare-ups than the placebo takers.

**WHAT TO DO:** Got COPD or asthma? Don't expect extra vitamin D to reduce flare-ups.

*J. Nutr.* 2025. doi:10.1016/j.tjnut.2025.02.003.



## Does being cold boost your appetite?

Do you eat more when you're cold?

Researchers had 47 adults with excess weight aged 18 to 55 spend 24 hours in an enclosed chamber at room temperature (74°F) and another 24 hours in the cold (66°F). On both days, they had unlimited access to free food from vending machines.

## GLP-1s & thyroid cancer



GLP-1 drugs like semaglutide and tirzepatide (sold as Ozempic, Wegovy, Mounjaro, and Zepbound) carry a warning about thyroid tumors based on animal studies. But the risk to humans is unclear.

Researchers compared thyroid cancer risk in 98,147 people with type 2 diabetes who were using GLP-1 drugs to the risk in 2,488,303 people using dipeptidyl peptidase-4 inhibitors like sitagliptin (Januvia) and linagliptin (Tradjenta). (Some of the authors had previous research funded by Novo Nordisk, which makes semaglutide.)

After roughly two to three years, the GLP-1 drug takers had no higher risk of thyroid cancer than those who took the other diabetes drugs.

**WHAT TO DO:** This study is too short to be definitive, but it's good news for GLP-1 takers. Ask your doctor about the drugs' risks and benefits for you.

*Thyroid* 35: 69, 2025.



On average, the participants ate roughly 400 more calories on the cold day, even though they burned no extra calories that day.

**WHAT TO DO:** Stay tuned. This study suggests that cold may boost appetite, but it's too early to say.

*Am. J. Clin. Nutr.* 121: 293, 2025.





## Eat carbs last?

Eating carbs at the end of a meal may keep a lid on blood sugar if you have type 2 diabetes.

Researchers provided three meals a day to 20 people taking metformin for their diabetes. For six days, they were told to eat high-fiber vegetables and protein first and carbs last. And for six more days, they were told to reverse the order.

Their peak post-meal blood sugar levels were 44 percent lower when they ate the carbs last.

**WHAT TO DO:** Got type 2 diabetes? Try eating carbs last.

*Diabetes Care* 48: e15, 2025.

## Mouth taping & sleep apnea

Got sleep apnea?

Tape your mouth closed, say thousands of TikTok posts. Not so fast.

Researchers studied 54 people with apnea who had high, moderate, or near-zero levels of breathing through their mouth.

Mouth closure had no impact on the 10 people with near-zero mouth breathing, and it improved airflow in the 32 people with moderate levels. But closure *worsened* airflow in the 12 people with high levels of mouth breathing.

Many had an obstruction in the soft palate at the back of the throat, which is likely what forced them to breathe through their mouth while asleep.

**WHAT TO DO:** Mouth taping may make your sleep apnea better, worse, or no different. Check with your doctor.

*JAMA Otolaryngol. Head Neck Surg.* 150: 1012, 1020, 2024.



## Semaglutide for alcohol use disorder?

Can semaglutide (sold as Ozempic for diabetes and Wegovy for obesity) help people with alcohol use disorder (AUD)?

Researchers examined hospitalization records on 227,868 people with AUD over roughly nine years. Among the 4,321 semaglutide takers, the risk of being hospitalized for alcohol-related problems was 36 percent lower while they were taking the drug (for obesity

or diabetes) than when they weren't.

**WHAT TO DO:** This study can't prove that semaglutide prevents AUD hospitalizations because something else about those who take the drug may explain their lower risk. But clinical trials testing semaglutide or tirzepatide versus a placebo *can* determine whether the drugs help people with AUD. Stay tuned. 📌

*JAMA Psychiatry* 82: 94, 2025.

## Diet & colorectal cancer



Which foods are linked to a higher—or lower—risk of colorectal cancer?

Researchers followed 542,778 women for 16 years. Each 20 grams of alcohol a day (about 1½ servings) was linked to a 15 percent higher risk, and each ounce of red or processed meat was linked to an 8 percent higher risk.

In contrast, dairy milk and yogurt were linked to a lower risk. Those links were largely driven by calcium, said the scientists. Every 300 milligrams of calcium a day was linked to a 17 percent lower risk.

**WHAT TO DO:** This study can't prove what causes or prevents colorectal cancer, because something else about people who eat those foods may explain the links.

However, the International Agency for Research on Cancer has concluded that alcohol and processed meats cause colorectal cancer, so it's worth limiting both.

And aim for the recommended intakes of calcium, which are designed to protect your bones. That's 1,000 mg a day, rising to 1,200 mg a day at age 50 for women and at age 70 for men.

*Nat. Commun.* 16: 375, 2025.

# Testosterone therapy

IT'S ALL THE RAGE...BUT IS IT SAFE AND EFFECTIVE?

BY CAITLIN DOW

"You can't have a sensible conversation about testosterone," says Bradley Anawalt, chief of medicine at the University of Washington Medical Center. "Everybody thinks it's going to make you stronger, faster, better looking, and better at sex. That's magical thinking. It doesn't do that."

## What lowers testosterone?

Genetics, chemotherapy, radiation, and injuries to the testicles can all result in a drop in testosterone. Some of the more common causes:

■ **Older age.** Testosterone levels peak in early adulthood and then begin to gradually decline. "There is, on average, a decline in the testicles' ability to make testosterone as you age," says Anawalt.

Though estimates vary, 10 to 15 percent of men above age 65 likely have testosterone levels that fall below 250 nanograms per deciliter of blood.<sup>1</sup> (Normal blood testosterone levels for men typically range from 300 to 1,000 ng/dL.)

■ **Excess weight.** In one analysis of 13 studies of roughly 4,300 men with obesity, 43 percent had blood testosterone levels under 300 ng/dL.<sup>2</sup>

Shedding weight can help. In an analysis of 10 studies, losing roughly 10 percent of body weight through diet changes was linked to a roughly 80 ng/dL rise in testosterone.<sup>3</sup>

■ **Other factors.** "Lower testosterone levels are commonly encountered in men who are taking opioids or are not getting adequate amounts of sleep," says Michael Irwig, an endocrinologist and associate professor of medicine at Harvard Medical School.

But that doesn't mean that testosterone replacement therapy (often called

TRT or T therapy) is the answer.

"Having sexual health issues can be a sign of other health problems," says Justin Dubin, a urologist at Memorial Healthcare System in South Florida.

"Diabetes, obesity, and high blood pressure can be risk factors for erectile dysfunction and potentially low testosterone. I like to tell my patients that what's good for your heart is good for your parts."

## Testosterone's benefits

Over the past decade or so, four landmark trials looking at a total of roughly 7,300 men have tested the benefits and risks of testosterone replacement therapy for at least one year in middle-aged and older men.<sup>4</sup>

Those trials largely enrolled men with low (or borderline-low) blood testosterone levels and symptoms of testosterone deficiency. That's a small percentage of men. So

the benefits may not apply to men with normal testosterone levels.

Here are some key findings:

■ **Sexual function.** One of the four trials—the study was called the Testosterone Trials—looked only at men with low testosterone.<sup>5</sup>

"Giving these guys testosterone increased their sex drive and sexual desire," says Anawalt. "And it increased erectile function about half as effectively as Viagra does."

The two trials that included men with borderline-low testosterone were inconsistent.<sup>4</sup>

■ **Mood and cognition.** In the Testosterone Trials, "there was a positive effect of testosterone therapy on mood and vitality," says Anawalt. "They felt better, like they had more energy."<sup>6</sup>

But in the studies that enrolled men who had low or borderline-low testosterone levels (up to 400 ng/dL), taking



Testosterone naturally falls with age. Exercise, getting enough sleep, and a healthy weight can help preserve it.



testosterone didn't boost mood. None of the studies found that testosterone improved cognition.<sup>4</sup>

■ **Physical function and strength.** In the Testosterone Trials, researchers measured how far the men could walk in six minutes. "This is a test that correlates with longevity," explains Anawalt.

About 20 percent of the testosterone takers—versus only 13 percent of the placebo takers—upped their six-minute walk distance by at least 164 feet.

"But in the guys who were frailest and couldn't walk very far, testosterone therapy didn't improve how far they walked," says Anawalt. "So if you're really frail, testosterone therapy isn't going to do much. But if you're older and not so frail, it actually might do something."

Anawalt's takeaway: "The effects of testosterone replacement therapy on physical function are probably pretty modest."

That said, the trials used only moderate doses of testosterone because the goal was to bring levels up to the normal range.

"If you use a high dose, you get an effect on muscle and strength," says Anawalt.<sup>1</sup> "But then you're no longer using testosterone as a hormone replacement therapy. You're using it as a drug. And when you do that, there's no question that testosterone increases muscle mass and strength. That's why athletes use it."

## Testosterone's risks

■ **Fertility.** "One of the biggest risks is that testosterone therapy causes infertility," explains Dubin.

It can take six months to two years for sperm to return to normal after discontinuing testosterone therapy.<sup>7</sup>

"The longer you're on it, the longer it takes to rebound," says Dubin.

"So if a patient is interested in future fertility, I will not offer them testosterone replacement therapy. I will offer them alternative medications that can boost testosterone and preserve fertility like clomiphene or human chorionic gonadotropin, also called hCG."

■ **Red blood cell count.** "Taking testosterone can cause proliferation of your red blood cells," says Dubin. That may increase the risk of blood clots, though studies disagree.<sup>4</sup> To monitor the risk, "we check their blood every six months," he says.

■ **Cardiovascular disease.** For years, whether testosterone therapy raised

"The major findings are that in men who were treated with low-to-moderate doses of testosterone, there were no observed increases in any major cardiovascular events," says Anawalt. "That's strokes, heart attacks, or deaths from cardiovascular disease."

(The study did detect some adverse events—like irregular heart rhythm, acute kidney disease, or clots in the blood vessels that feed the lungs—that were rare, but more common, in testosterone than placebo takers.)

While the study doesn't completely close the case on testosterone's role in cardiovascular risk, it's by far the largest trial to look.

"You cannot extrapolate from this study to 20-year safety," Anawalt acknowledges. "But it looks like if there is an effect, it's unlikely to be large."

## ■ Prostate cancer.

"There's no signal that testosterone therapy increases the risk of prostate cancer," says Anawalt.<sup>1</sup> But he adds a critical caveat: None of the studies have lasted more than a few years.

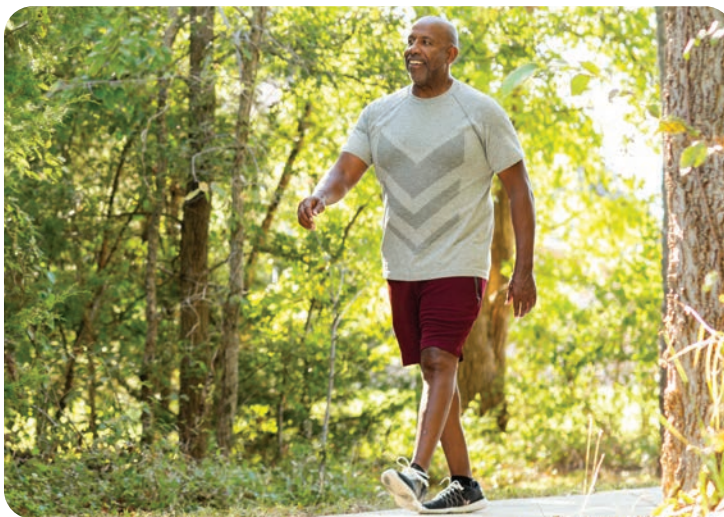
"That's too short to establish whether there is any effect on the risk of prostate cancer," Anawalt notes. "It's a disease that develops over many years."

"In fact, if you did see something occur in the first year or two, it would most likely be unmasking an underlying prostate cancer, as opposed to causing it. That is, you throw a little kerosene on the cancer, and it kicks off."

The bottom line: "We can't say one way or the other whether testosterone replacement therapy increases the risk of prostate cancer," says Anawalt.

## Diagnosing low testosterone

"We have men come in all the time as a result of commercials or ads online asking, 'Do you feel tired? Do you not



Restoring low testosterone levels to the normal range may help some men walk farther and faster.

the risk of cardiovascular disease was an open question. At the behest of the Food and Drug Administration, pharmaceutical companies that sell testosterone tried to find out.

The researchers enrolled roughly 5,200 middle-aged and older men with hypogonadism (which includes low testosterone levels and symptoms like low libido, fatigue, or loss of body hair) who either had cardiovascular disease or a high risk of it. The men were randomly assigned to use a testosterone gel or a placebo gel for an average of nearly two years and were followed for roughly one more year.<sup>8</sup>

feel quite so alive? Maybe you should ask your doctor if you have low T,” says Anawalt.

“That’s thanks to a very successful advertising campaign put together by pharma in the early 2000s.”

(Not surprisingly, U.S. prescriptions for testosterone ballooned 10-fold between 2000 and 2011.<sup>9</sup>)

But tiredness and other “non-specific symptoms” like depressed mood and erectile dysfunction could be a result of other problems.

“They could be due to inadequate sleep, sleep apnea, vascular disease, or depression,” Irwig points out.

Having either low testosterone levels or the signs and symptoms of low testosterone isn’t enough. You need *both* to be diagnosed with testosterone deficiency.

“Low libido is the most sensitive symptom for detecting low testosterone,” says Dubin. Infertility, osteoporosis, or breast growth or breast tenderness may also trigger a testosterone test.<sup>10</sup>

Testosterone levels should be tested first thing in the morning, when they’re the highest.

“My testosterone levels could be up to 30 percent lower in the late afternoon than they are in the morning,” notes Anawalt.

Levels also fluctuate wildly, so they need to be measured more than once. About 30 percent of men who have low testosterone on one measurement will have normal testosterone on the next.<sup>11</sup>

How men feel at a given testosterone level also varies. Some men may have levels below 300 ng/dL and no symptoms, so screening all men for low testosterone is a bad idea, say the Endocrine Society’s guidelines.<sup>11</sup>

On the other hand, “if someone comes in and they have a testosterone of 310

and they have symptoms and feel miserable, it’s not fair to say that they don’t have low testosterone,” says Dubin.

### Can supplements help?

There’s no shortage of supplements promising to “naturally boost your testosterone,” “blowtorch body fat faster,” or “supercharge your drive and sexual performance.”

They typically include ingredients like ashwagandha, fenugreek, *Tribulus terrestris*, horny goat weed, zinc, and/or B vitamins.

Spoiler alert: “There is no evidence that any combination of these or other ingredients in dietary supplements is effective for any claimed benefit you might see advertised to increase testosterone levels.” That’s from the Defense Department’s Operation Supplement Safety website.<sup>12</sup>

And that blunt assessment is spot-on. While many studies (often company-funded) suggest that some of those ingredients can boost testosterone, the results don’t hold up to scrutiny.<sup>13</sup>

“Those supplement studies are a bunch of hokey,” says Anawalt.

“They’re fundamentally flawed.”

Why? “If you want to make something look good, you can,” he says.

And that’s particularly easy to do with testosterone, in large part because blood levels vary so much throughout the day and between days.

“If you do only one blood sample at each of these time points, just by chance you could see an effect,” Anawalt says.

Then there’s when you measure.

“Testosterone is highest between 7 and 10 in the morning,” explains Anawalt. If you measure later in the day at the beginning of the study and earlier in the day at the end, odds are you’ll show a “boost” in testosterone.

What’s more, testosterone is notoriously tricky to measure.

“There are many bad tests out there,” says Anawalt, who adds that a national effort is underway to standardize testosterone tests. “Many are now certified by the Centers for Disease Control and Prevention,” he notes.

Most studies don’t provide enough detail to know exactly when or how testosterone was measured.

Others may use a flawed test. In one company-funded randomized trial, testosterone levels in middle-aged and older men were roughly 15 percent higher in ashwagandha takers than in placebo takers after eight weeks.<sup>14</sup> But the researchers measured

testosterone in the men’s saliva, which isn’t a method validated by the CDC.

Despite those and other opportunities to put a thumb on the scales, many trials still find no effect of supplements on testosterone.

In one review article, only nine of 32 trials that tested various botanicals found a benefit.<sup>13</sup> And in most cases, the results were ho-hum.

Most of the studies were conducted in men with normal testosterone levels who ended up with marginally higher—but still normal—levels.

Bottom line: Don’t expect



There’s no good evidence that any supplements raise testosterone levels, says the Department of Defense.



a 15-or-so percent change in already-normal testosterone levels to “send your libido into hyperdrive” or “pack on slabs of lean muscle,” as one supplement’s website claims.

## A changing marketplace

Testosterone therapy is a booming business.

“This is the hottest topic for men,” says Dubin.

And it’s not just middle-aged and older men. In one not-yet-published survey, Dubin found that 40 percent of men under 40 were interested in taking testosterone and 14 percent had used testosterone therapy or taken a testosterone booster (like anabolic steroids).

What’s more, ads for testosterone therapy have expanded from TV to social media and online advertising. The barrage of ads and easy access to doctors who prescribe testosterone has convinced many men that they need to take the hormone.

In fact, you don’t even need to visit your doctor’s office to get your hands on a testosterone prescription.

“There’s been a proliferation of online companies and for-profit men’s health clinics,” says Irwig, who has written about the off-label use of testosterone.<sup>15</sup>

“Off-label” means that a healthcare provider prescribes a drug for a purpose or in a population that hasn’t been approved by the FDA. For testosterone, that often means that it’s prescribed for men with normal T levels. The practice is perfectly legal.)

Irwig is talking about “direct-to-consumer”—or DTC—online health platforms that offer telehealth services, and brick-and-mortar “Low-T” clinics that provide testosterone and other medications specifically for men’s health.

Many don’t accept insurance. Instead, they make money by offering testosterone prescriptions (and meds



Direct-to-consumer men’s health companies may offer testosterone prescriptions to those who don’t need them.

for things like hair loss or erectile dysfunction) directly to men, often included in pricey monthly membership fees.

“Many of these companies prescribe testosterone to men with above-average levels and mislead customers by telling them that their normal T levels are low,” Irwig points out.

Dubin, who has had to care for patients who had been treated at DTC platforms, decided to try it out on himself.

“I pretended to be someone who had symptoms of low testosterone like low energy and libido who was interested in future fertility,” he says.

“Before I started, I got blood work. My testosterone was 675 ng/dL, so I was clearly not a good candidate for testosterone replacement therapy.”

Dubin met with telemedicine providers from seven direct-to-consumer companies.<sup>16</sup>

“Six out of the seven offered me testosterone replacement therapy, and I was not informed about infertility by half of them.”

Half of the platforms that offered him testosterone said that their goal was to get his levels up to or above 1,000 ng/dL. While there are no hard-and-fast rules about ideal testosterone levels, they *should not* be above 1,000 ng/dL, says Dubin.

“When we treat men with testosterone replacement therapy, our testos-

terone level goal is 450 to 600 ng/dL. We want to keep you below 1,000.”

Direct-to-consumer telemedicine services, and even for-profit men’s health clinics, may feel less stigmatizing or more convenient for men who feel embarrassed about seeking treatment or who live in an area without easy access.

Even so, Dubin advises men to go in with open eyes and some skepticism.

“Ask yourself, ‘Who is this person that I’m trusting my health to?’”

In one study of roughly 220 direct-to-consumer men’s health clinics, nearly 90 percent did not list an endocrinologist or urologist on staff on their websites. Many listed non-physicians like naturopaths or chiropractors as their primary providers.<sup>17</sup>

If you do go with a for-profit men’s health clinic or direct-to-consumer platform, make sure you’ve been informed of the risks of the meds they prescribe.

“Their goal is to make money by prescribing medications such as testosterone,” Irwig points out.

“In contrast, as a hospital-employed endocrinologist, I have no financial incentive to prescribe a particular medication. Instead, I strive to base my recommendations on what I think is best for the patient’s overall health.”

<sup>1</sup> [ncbi.nlm.nih.gov/books/NBK278998/](https://ncbi.nlm.nih.gov/books/NBK278998/).

<sup>2</sup> *Eur. J. Endocrinol.* 182: 11, 2020.

<sup>3</sup> *Eur. J. Endocrinol.* 168: 829, 2013.

<sup>4</sup> *Eur. J. Endocrinol.* 191: R22, 2024.

<sup>5</sup> *J. Clin. Endocrinol. Metab.* 101: 3096, 2016.

<sup>6</sup> *N. Engl. J. Med.* 374: 611, 2016.

<sup>7</sup> *Asian J. Androl.* 18: 373, 2016.

<sup>8</sup> *N. Engl. J. Med.* 389: 107, 2023.

<sup>9</sup> *Med. J. Aust.* 199: 548, 2013.

<sup>10</sup> *J. Urol.* 200: 423, 2018.

<sup>11</sup> *J. Clin. Endocrinol. Metab.* 103: 1715, 2018.

<sup>12</sup> [opss.org/article/testosterone-boosters-0](https://opss.org/article/testosterone-boosters-0).

<sup>13</sup> *Adv. Nutr.* 12: 744, 2021.

<sup>14</sup> *Am. J. Mens Health.* 2019. doi:10.1177/1557988319835985.

<sup>15</sup> *Endocr. Pract.* 26: 340, 2020.

<sup>16</sup> *JAMA Intern. Med.* 182: 1321, 2022.

<sup>17</sup> *Urology* 174: 135, 2023.

# Cashing in on obesity meds

THE FOOD INDUSTRY WANTS ITS SHARE

BY BONNIE LIEBMAN

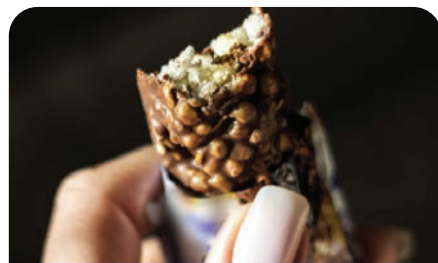
"Could obesity drugs take a bite out of the food industry?" asked a 2023 article on MorganStanley.com, noting that "millions of people could be eating less food overall and shunning unhealthy fare." Maybe...but to some companies, the drugs are a new marketing opportunity! Here's what to know.

## 1 Food companies have a new target audience.

ADM, a global supplier of food ingredients, is ready to help companies "capture [their] share of the growing GLP-1 support market."

How? "Consumers who are currently using a GLP-1 for weight management may experience specific pain points including: loss of muscle mass, GI discomfort and the risk of dehydration," explains ADM.

No problem! ADM's soy, pea, and wheat protein can help maintain muscle. And its flavors, lower-calorie sweeteners, and coconut water powder can help prevent dehydration. (Of course, so would ordinary water.)



### Co-Create GLP-1 Companion Products

ADM can help you capture your share of the growing GLP-1 support market. Reach out and partner with us today to develop companion products using our specialized portfolio of ingredients and full-formula expertise.

The food industry is gearing up to attract people taking GLP-1 drugs.

For GI discomfort, you've got probiotics and postbiotics, Fibersol (soluble corn fiber), and a "digestive support flour blend." Do they help people taking GLP-1 drugs? Apparently, food companies have no need—or time—to find out.

"Opportunity awaits in this dynamic marketplace," says ADM, "but it won't wait long."

## 2 GLP-1 foods may not be healthy.

"The new Vital Pursuit brand from Nestlé, designed to provide dietary support to GLP-1 users and consumers focused on weight management, is now available at retailers nationwide including Walmart, Target, and Kroger," announced the press release in September.

"Made with quality proteins, vegetables and whole grains, Vital Pursuit is food that moves you forward."

Really? Take the Cauliflower Crust Three Meat Gluten Free Pizza.

Whole grains? None.

Vegetables? "One serving of this product does not provide a significant amount (½ cup)" of them, notes the tiny print on the box.

Quality proteins? The pizza has sausage and pepperoni, which are processed meats that cause cancer, according to the International Agency for Research on Cancer.



Vital Pursuit entrées target GLP-1 takers. Don't assume they're healthy.

"Meals to crush your goals," says Nestlé. If those goals are to overdo saturated fat and sodium, you're on your way. The 400-calorie pizza has 40 percent of a day's worth of each.

Some Vital Pursuit bowls and sandwiches do have whole grains. And some bowls reach ½ cup of veggies, say the labels. But most also have at least 35 percent of a day's saturated fat and 30 percent of a day's sodium. That's a lot for just 220 to 430 calories.

In contrast, it's worth looking for the "ON TRACK" badge (it says "GLP-1 Friendly") on some Healthy Choice Cafe Steamers and Simply Steamers.

Nearly all have roughly 200 to 300 calories. And they keep a lid on



saturated fat (about 5 to 15 percent of a day's worth) and sodium (about 20 to 25 percent of a day's limit).

That's no coincidence. A food that calls itself "healthy" isn't allowed to overdo either one (see p. 2).

### 3 Added fibers may not help with side effects.

"17 g fiber," say two Vital Pursuit pizza labels. "4 g fiber," say its other pizzas. Why the difference?

The "17 g fiber" pizza crusts have more "modified wheat starch" than any ingredient other than water.

Modified wheat starch may help lower blood insulin levels (see p. 3). But odds are, if GLP-1 takers are seeking fiber, it's because the drugs can cause constipation.

Roughly 24 percent of people taking the GLP-1 drug semaglutide (vs. 11 percent of placebo takers) report constipation, according to the package insert.

But don't expect most processed fibers, like modified wheat starch, to help. Cellulose is the only processed fiber that's been approved for regularity (see p. 3).

Instead, look for the intact fiber in bran cereals, beans, fruits, vegetables, and whole grains.

Rule of thumb: Anytime you see more than, say, 5 or 6 grams of fiber per serving, check the ingredients to see if you're getting a processed fiber.



Healthy Choice "On Track" items don't overdo saturated fat or sodium.

## 4 Extra protein for muscle? It's unclear.

Protein claims are already splashed all over food labels. Expect to see more.

"Any time a person loses weight quickly, as can be the case with GLP-1 drugs, loss of lean muscle mass can result," says ADM. "In fact, 20-40% of typical weight loss comes from muscle mass."

That's about right. And people taking GLP-1 drugs do need to get *enough* protein despite eating less food. (That's 0.36 grams of protein for each pound you weigh, or 54 grams for someone who weighs 150 pounds.)

But it's not clear if (or how much) *extra* protein can curb muscle loss. The Agency for Healthcare Research and Quality recently said that the evidence is "insufficient" to answer that question, though it didn't look at people taking GLP-1 drugs.<sup>1</sup>

What's more, it's not clear how much the muscle loss caused by the drugs might matter.<sup>2</sup>

"People with obesity don't just have elevated adiposity, they also have elevated muscle mass and lean tissue mass overall," explained Kevin Hall, a researcher at the National Institute of Diabetes and Digestive and Kidney Diseases, on a "Ground Truths" podcast in November.

So it's uncertain if taking GLP-1 drugs would affect their health or daily lives.

"There's not a lot of reports of people losing weight with semaglutide saying, 'You know what? I'm really having trouble actually physically moving around. I feel like I've lost a lot of strength,'" said Hall.

In fact, the opposite is true. "The quality of the muscle that's there seems to be improved."<sup>2</sup>

"They seem to have more physical mobility, because they've lost so much more weight, [and] that weight had been inhibiting their physical movement in the past."

What is clear: "Resistance exercise

training increases muscle mass," noted Hall.

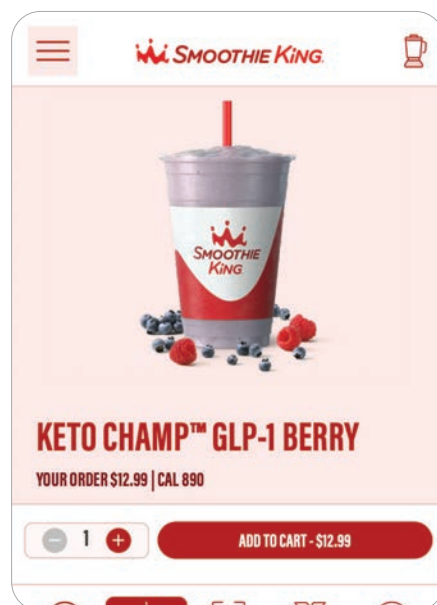
Squats, anyone?

## 5 High-calorie GLP-1 foods could hinder weight loss.

"Smoothies to support your GLP-1 routine," promises Smoothie King.

And *some* of its GLP-1 smoothies may help customers who want fruit, protein, and liquid without too many calories. Just don't assume they *all* do.

Take the large (44 oz.) Keto Champ GLP-1 Berry. It has 38 grams of saturated fat. That's nearly two day's worth.



A 44 oz. Keto Champ GLP-1 Berry Smoothie packs 890 calories.

What's more, the smoothie packs 890 calories. Heck, a large McDonald's Chocolate Shake has 800 calories.

GLP-1 drugs lead to weight loss by making it easier to cut calories. How, exactly, does a drink that's pushing 900 calories "support your GLP-1 routine"? 🍷

<sup>1</sup> effectivehealthcare.ahrq.gov/products/effect-protein-intake/research.

<sup>2</sup> JAMA 332: 9, 2024.

# Can supplements ward off a cold, the flu, or Covid?

BY CAITLIN DOW

Why do people take so-called immune boosters? Many believe the supplements help. Others are looking for an all-natural insurance policy. After all, an entire industry worth billions of dollars can't be that far off the mark. Or can it?

Here's the evidence from randomized trials testing whether popular supplements can prevent or treat respiratory infections like a cold, the flu, or Covid.

(We only looked at trials that measure whether a supplement prevents an infection or shortens an illness. The rise or fall of any single marker of immune function—like the number of immune cells—doesn't tell you much.)

## Vitamin C

Nothing screams "immunity boost" like vitamin C. At least that's what the supplement sellers would have us believe.

But in 24 trials with nearly 11,000 participants, people who took 200 to 2,000 milligrams a day of vitamin C for an average of three months were no less likely to catch a cold than those taking a placebo.<sup>1</sup>

When the volunteers did catch a cold, they were sick for less time—but only about half a day less for a weeklong cold.

And in another seven studies that tested vitamin C's ability to *treat* a cold, taking roughly 3,000 mg a day starting at the first sniffle didn't translate to a shorter or less severe illness.<sup>1</sup>

Vitamin C may help one group avoid colds, though: intense exercisers.

In five trials that enrolled roughly 600 people doing heavy exercise (like ultramarathoners), taking 250 to 1,000 mg a day of vitamin C for two to eight weeks reduced their risk of catching a cold by 50 percent.<sup>1</sup>



Do ingredients like vitamin C, zinc, elderberry, and vitamin D defend the immune system? So far, the evidence is lackluster.

Can vitamin C fight Covid? In one randomized trial of 66 adults, Covid symptoms didn't clear up any faster in those who took 1,000 mg of vitamin C every day for two weeks than in those who took a placebo.<sup>2</sup>

**BOTTOM LINE:** Unless you're doing intense exercise, don't waste your money on vitamin C to prevent or treat a cold or Covid.

## Zinc

A zinc deficiency can impair your immune system, so it's important to get enough of the mineral. (Most people do.)

Just don't count on a zinc supplement to ward off a cold.<sup>3</sup>

On the other hand, if you already have a cold, sucking on zinc lozenges might help you fight it off. By slowly releasing zinc, they may prevent

viruses from replicating or attaching to cells in your throat and nose.

In a handful of trials, adults who used zinc lozenges every few hours during a cold shortened their illness by roughly a third compared to those taking placebo lozenges.

In those studies—many of them funded by zinc supplement makers—participants took at least 75 milligrams of zinc acetate or zinc gluconate a day at the first sign of symptoms.<sup>4</sup>

But one of the best-designed studies to test zinc lozenges came up empty.

Researchers randomly assigned 87 adults with a cold to suck on either zinc acetate lozenges or placebo lozenges for five days. On average, the volunteers used five lozenges each day. The zinc takers took no less time



to recover from their colds than the placebo takers.<sup>5</sup>

What about Covid? A recent trial tested zinc and vitamin C—taken together or separately. Researchers randomly assigned 214 adults who tested positive for Covid to standard care or to take 8,000 mg of vitamin C, 50 mg of zinc gluconate (in a pill, not a lozenge), or both daily for 10 days.

The study was stopped early due to “futility.”

Translation: People who took the supplements—either together or separately—had no shorter illness than those who took nothing.<sup>6</sup>

**BOTTOM LINE:** Zinc lozenges might help shorten a cold, but the evidence is iffy. Don’t expect zinc supplements to treat Covid.

## Elderberry

Few good studies have tested elderberry’s role in preventing or treating a cold or the flu.

In the only trial (it was company-funded) to look at whether elderberry can prevent colds, researchers randomly assigned 312 adults to take elderberry or a placebo for nine days leading up to airline travel and for six to seven days following the trip.

Twelve elderberry takers and 17 placebo takers caught a cold, a difference that wasn’t statistically significant.<sup>7</sup> (That said, the study may have been too small to detect a difference.)

Can elderberry help if you already have symptoms? In two poor-quality company-funded studies, researchers randomly assigned a total of 124 people with the flu or flu-like symptoms to take elderberry or a placebo.

In one, volunteers took elderberry as a lozenge for two days.<sup>8</sup> In the other, they took the elderberry syrup Sambucol for five days.<sup>9</sup> In both studies, flu-like symptoms resolved

sooner in the elderberry takers than in the placebo takers.

But in the only study not funded by an elderberry supplement maker, elderberry bombed. Researchers randomly assigned 87 adults and children who tested positive for the flu to take elderberry or a placebo. They were also offered the antiviral drug Tamiflu, which can shorten the



Don’t expect elderberry supplements to prevent a cold or shorten the length of a bout of flu.

length of a weeklong flu by about a day.

Flu symptoms lasted just as long in those randomly assigned to take elderberry for five days as in those who took the placebo.<sup>10</sup>

**BOTTOM LINE:** There’s no good evidence that elderberry can help prevent or treat a cold or the flu.

## Vitamin D

If you want to prevent a cold or the flu, vitamin D might help a tiny bit.

In one analysis of 37 randomized trials that enrolled roughly 46,000 people, those who took a daily dose of vitamin D had an 8 percent lower chance of getting a cold or the flu than those who took a placebo.<sup>11</sup> That difference probably doesn’t mean much for most people.

Can vitamin D prevent Covid? Two huge trials (both partly funded by

vitamin companies) that enrolled a total of roughly 40,000 people have looked.

People who were randomly assigned to take 400 IU, 800 IU, or 3,200 IU a day of vitamin D for six months were no less likely to catch Covid (or another respiratory infection) than those who got a placebo.<sup>12,13</sup>

Can vitamin D help people who are hospitalized with Covid?

In two small pilot trials on a total of 126 patients, those who received vitamin D fared better than those given either a placebo or no vitamin D.<sup>14,15</sup> (One trial was co-authored by employees of a company that sells vitamin D supplements.)

But in two larger trials on a total of 780 Covid patients, those who were given vitamin D when they were admitted to the hospital stayed there just as long and were just as likely to end up in the ICU or to die as those who received either a placebo or standard care.<sup>16,17</sup>

**BOTTOM LINE:** Most evidence shows no meaningful benefit of taking vitamin D to prevent a cold or the flu. And so far, the evidence that vitamin D can prevent or treat Covid isn’t promising. But two trials that randomly assigned a total of more than 4,000 people to take vitamin D or a placebo are expected soon. Stay tuned. 📺

<sup>1</sup> Cochrane Database Syst. Rev. 1: CD000980, 2013.

<sup>2</sup> J. Am. Board Fam. Med. 35: 695, 2022.

<sup>3</sup> Cochrane Database Syst. Rev. 5: CD014914, 2024.

<sup>4</sup> JRSM Open 2017. doi:10.1177/2054270417694291.

<sup>5</sup> BMJ Open 10: e031662, 2020.

<sup>6</sup> JAMA Netw. Open 4: e210369, 2021.

<sup>7</sup> Nutrients 8: 182, 2016.

<sup>8</sup> Onl. J. Pharmacol. Pharmacokinet. 5: 32, 2009.

<sup>9</sup> J. Int. Med. Res. 32: 132, 2004.

<sup>10</sup> J. Gen. Intern. Med. 35: 3271, 2020.

<sup>11</sup> Lancet Diabetes Endocrinol. 9: 276, 2021.

<sup>12</sup> BMJ 378: e071245, 2022.

<sup>13</sup> BMJ 378: e071230, 2022.

<sup>14</sup> Nutrients 14: 3048, 2022.

<sup>15</sup> J. Steroid Biochem. Mol. Biol. 203: 105751, 2020.

<sup>16</sup> JAMA 325: 1053, 2021.

<sup>17</sup> BMC Med. 20: 83, 2022.

# The Healthy Cook



## Get shredded

Keep a supply of cooked shredded chicken in your fridge, and you're never more than 15 minutes away from dinner. Where to get it? Simple. Poach skinless chicken breasts on the stovetop, then shred with two forks. Or use leftover roasted or rotisserie chicken. 🍴

### CHICKEN IN ADOBO SAUCE

I love Chicken Adobo, the classic Filipino dish, but it can take hours of marinating and braising to prepare. In a pinch, my quick adobo sauce delivers the tart and savory flavors I crave. Not a cilantro fan? Top with thinly sliced scallions instead.

- |                                     |  |  |
|-------------------------------------|--|--|
| 1 Tbs. extra-virgin olive oil       | 1½ Tbs. reduced-sodium soy sauce       | <b>1</b> In a medium pan over medium heat, heat the oil until shimmering. Sauté the garlic, bay leaves, and pepper until fragrant, about 1 minute. |
| 3 cloves garlic, minced             | ⅓ cup unsweetened light coconut milk   |  |
| 2 bay leaves                        | 1½ cups shredded cooked chicken breast |  |
| 1 tsp. freshly cracked black pepper | a few sprigs cilantro (optional)       |  |
| ½ tsp. brown sugar                  |  |  |
| 1 Tbs. rice vinegar                 |  | <b>2</b> Add the sugar, vinegar, soy sauce, and coconut milk. Simmer until slightly thickened, 2–3 minutes.  |
|                                     |  | <b>3</b> Toss the chicken in the sauce and remove and discard the bay leaves. Top with the cilantro.   |

TIME: 15 MINUTES | SERVES 2

PER SERVING (¾ cup): calories 280 | total fat 13 g | sat fat 4 g | carbs 5 g | fiber 0 g | total sugar 1 g | added sugar 1 g | protein 33 g | sodium 500 mg

For more of The Healthy Cook's recipes: [cspinet.org/recipes](https://cspinet.org/recipes)

For cooking advice, write to Chef Kate at [healthycook@cspinet.org](mailto:healthycook@cspinet.org)



## SMOKY CITRUS CHICKEN

This recipe is inspired by the Mexican dish Chicken Tinga, but I've pared it down and cut the heat. (To put it back, use chipotle powder instead of the smoked paprika.)

- |                               |  |
|-------------------------------|--|
| 2 Tbs. extra-virgin olive oil | ¼ cup fresh orange juice                           |
| ½ white onion, thinly sliced  | ¼ cup chicken stock (preferably homemade) or water |
| 1 clove garlic, minced        | 1½ cups shredded cooked chicken breast             |
| 2 Tbs. tomato paste           | ¼ tsp. kosher salt                                 |
| 1 tsp. smoked paprika         | freshly ground black pepper, to taste              |
| ¼ tsp. ground coriander       |  |
| pinch dried oregano           |  |

TIME: 15 MINUTES | SERVES 2

PER SERVING (¾ cup): calories 340 | total fat 18 g  
sat fat 2.5 g | carbs 10 g | fiber 2 g | total sugar 6 g | added sugar 0 g  
protein 33 g | sodium 320 mg



- 1 In a medium pan over medium heat, heat the oil until shimmering. Sauté the onion until it softens, 2–3 minutes. Stir in the garlic and cook for 30 seconds.
- 2 Add the tomato paste, paprika, coriander, and oregano. Cook, while stirring, for 1 minute.
- 3 Stir in the juice and stock. Simmer until thickened, 1–2 minutes.
- 4 Toss the chicken in the saucy onions, then season with the salt and pepper.

For tacos, serve with corn tortillas, sliced avocado, shredded lettuce, lime wedges, and, if you like, your favorite hot sauce

## CREAMY LEMON CHICKEN ORZO

This simple stew, which is based on the Greek soup avgolemono, is at its best when made with homemade stock (for a how-to, go to [cspinet.org/stock](http://cspinet.org/stock)).

- |   |  |
|---|--|
| ⅓ cup dry whole-wheat orzo                | 1½ cups shredded cooked chicken breast |
| 2 cups chicken stock, preferably homemade | ¼ tsp. kosher salt                     |
| 1 egg, well whisked                       | 1 scallion, thinly sliced              |
| 1 Tbs. fresh lemon juice                  |  |

TIME: 15 MINUTES | SERVES 2

PER SERVING (1½ cups): calories 350 | total fat 7 g  
sat fat 1.5 g | carbs 27 g | fiber 3 g | total sugar 3 g | added sugar 0 g  
protein 41 g | sodium 390 mg



- 1 Bring a medium pot of water to a boil over high heat. Add the orzo, stir, and boil until just al dente, 5 minutes. Drain and set aside.
- 2 In another medium pot over high heat, bring the stock to a boil, then reduce the heat to medium-low.
- 3 In a medium bowl, whisk together the eggs and lemon juice until foamy. Continue to whisk while slowly pouring the hot stock into the egg mixture.
- 4 Return the egg-stock mixture to the pot and stir in the cooked orzo. Simmer while whisking until the liquid thickens to the consistency of heavy cream, 1–3 minutes.
- 5 Stir in the chicken and salt. Top with the scallions.

PROTEIN!

LOWER SUGAR!

YOGURT!

# 9 buzzwords that help sell processed foods

BY LINDSAY MOYER

If food marketers want to make a processed food stand out—or distract shoppers from unhealthy fats, added sugar, or empty calories—all they have to do is slap on a healthy-ish buzzword. Here are 9 examples.

## Buzzword: **BRAN**

Bran is the fiber-rich part of whole grains (good!). But it's also a ploy to sell sugary cereals (not good).

Case in point: Kellogg's new Blueberry Bran Crunch Cereal is loaded with 16 grams (4 teaspoons) of added sugar per cup. Its fiber (5 grams) is enough for the box's "good source of fiber" claim, but you can do better with regular bran flakes.

A cup of Post Bran Flakes, for example, has more fiber (7 grams), less added sugar (6 grams), and fewer calories (110 vs. 210). And a cup of Whole Foods 365 Organic Bran Flakes has 7 grams of fiber and just 3 grams of added sugar for only 130 calories.

Now *that's* more like it.



## Buzzword: **ALMOND BUTTER**

Almonds, peanuts, hazelnuts...there's nuttin' unhealthy about them. But when manufacturers tout those nuts—or their butters—to hawk shakes, bars, chocolate spreads, and other sugary snacks, all bets are off.

Take Bolthouse Farms Protein Plus with Almond Butter Banana Honey Protein Shake. Each 15.2 oz. bottle has more cane sugar plus honey (29 grams) than almond butter. (In fact, the shake "contains 2% or less" almond butter, which works out to 2 tsp. or so in the whole bottle.) The rest is mostly water, milk, banana purée, whey, and soy.

That adds up to a small meal's worth of liquid calories (400). Instead, make your own smoothie to skip the 7 teaspoons of added sugar. Or just grab a handful of almonds. They're more filling to chew than to sip.



## Buzzword: **IMMUNITY SUPPORT**

How does new Quaker Mighty Life Strawberry Blueberry Bliss Multi-grain Cereal provide the "Immunity Support" its box promises?

"Helps maintain healthy immune function with an excellent source of vitamins C, D + zinc," explains the tiny pale text.

Sigh. Adding vitamins and minerals that "support immunity" is one of the oldest tricks in the book. As long as companies don't name a disease or health problem, they can make claims about how a food affects the "structure or function" of the body with little oversight by the Food and Drug Administration.

But unless you're deficient in vitamins C or D or zinc, consuming more of them is unlikely to ward off infections. And if you think you might be running short on a vitamin, it's smarter to cover your bases with an inexpensive multivitamin-and-mineral we recommend (see Sept./Oct. 2024, p. 3).



## Buzzword: **YOGURT**

"Made with Greek yogurt," says the label of General Mills Honey Vanilla YoBark, which calls itself a "dairy bark with granola." What's that?

Don't confuse it with recipes for homemade "yogurt bark," which freeze yogurt and toppings on a sheet pan, then crack it into pieces.

YoBark gets its "yogurt" from dried nonfat Greek yogurt plus milk powder and "milk mineral concentrate." The "bark" texture comes from coconut oil and palm kernel oil, two unhealthy fats that stay solid above freezer temperatures.

Compared to a 5.3 oz. container of nonfat Chobani Vanilla Greek Yogurt, a 1 oz. serving of YoBark has less added sugar (6 vs. 9 grams) but more saturated fat (7 vs. 0 grams), more calories (150 vs. 110), and less protein (5 vs. 12 grams).

Swapping real yogurt for ultra-processed powdered-yogurt-and-oil chunks? Now that's a sour deal.







## Buzzword: **VEGGIES**

" $\frac{1}{3}$  cup of veggies per serving," says the box of Simple Mills Pop Mmms Cheddar Baked Snack Crackers. "Powered by veggies. Our nutritious veggie flour blend is made from butternut squash which delivers Vitamin A and fiber, and red beans which deliver minerals such as potassium and iron."

Yes, a  $\frac{1}{2}$  cup serving of roasted butternut squash supplies a good shot of fiber (3 grams) and 60 percent of a day's vitamin A. But each 1 oz. serving of Pop Mmms has only 1 gram of fiber and 4 percent of a day's vitamin A (along with just 4 percent of a day's iron and 2 percent of a day's potassium).

That's because the crackers are far from just butternut squash and beans. They're full of other ingredients like starchy tapioca and arrowroot, oil, and cheese. Let's face it: You can only squeeze so many processed vegetables into a cracker.



## Buzzword: **PROTEIN**

"Supports muscle health," say Well Market Dark Chocolate Protein-Boosted Almonds (sold at CVS). "A delicious way to get the plant-based protein and fiber your body needs." Really?

Thanks to a coating of mostly sugar, pea protein, and cocoa, the nuts come with a teaspoon (4 grams) of added sugar in each  $\frac{1}{4}$  cup serving. They have about the same calories (170) and fiber (3 grams) as plain almonds...and only 1 more gram of protein (7 vs. 6). *That's a boost?*

The bottom line: Plain (or lightly salted) nuts are healthy, but no nuts pile on the protein.

## Buzzword: **AÇAÍ**



Ahh, açaí. What is it about that berry that adds an aura of health to pricey sugary bowls?

We paid \$4 for one single-serving frozen Dole Original Açaí Bowl. What did we get? Just over 200 calories' worth of an açaí-banana-berry-honey smoothie with granola (oats, coconut, more honey, and oil). Its added sugar (11 grams) makes it a better-for-you *dessert*...but only a you-can-do-better *snack*.

Unlike Dole's smallish portions, many smoothie shops pile it on.

At Jamba Juice, the Açaí PB Chocolate Hazelnut Bowl, which has some peanut butter and unsweetened fruit (blueberries, strawberries, and bananas), also has an açaí pulp blend sweetened with white grape juice concentrate, sweetened vanilla soymilk, sweetened granola, and sweetened "hazelnut cocoa spread." And its protein (11 grams) is less than you'd expect from its 600-plus calories. Sheesh!

## Buzzword:

## "**BETTER THAN**"

"Better than popcorn," proclaims the bag of Like Air Classic Puffcorn. But what's inside is puffed corn meal, oil, and seasonings, not whole-grain corn kernels like regular popcorn.

So you get just 1 gram of fiber in every 1 oz. serving (3 cups) instead of roughly 3 grams in a 1 oz. serving of popcorn.

"50 calories per cup," says the front of the puffcorn bag. That sure beats movie theater or microwave popcorns that add enough oil or "buttery topping" to pile on the calories.

But the better pre-popped supermarket popcorns, like original Skinny Pop or Boomchickapop Sea Salt Popcorn, have even fewer calories (40 per cup).

"Amazing melt-in-your-mouth texture," says Puffcorn. Maybe, but softer foods that go down quickly—with little crunch or chew—may be easier to overeat (see Sept./Oct. 2023, p. 3). Our take: Puffcorn's "better than popcorn" is a bunch of puffery.



## Buzzword: **LOWER SUGAR**

"Go ahead and boost your expectations, for your gummies and for your goals," say Albanese Lower Sugar Gummi Worms.

Nowadays, just about every candy company has jumped onto the zero-sugar or lower-sugar bandwagon. But many come with caveats, and Albanese is no exception:

**Not calorie-free.** Each 50-gram single-serve bag of Albanese Lower Sugar Gummi Worms has only 2 grams of sugar, but it also gets enough calories from non-sugar carbs plus the few grams of protein in its gelatin to hit 70 calories.

That's half as much as the same serving of the company's full-sugar worms—serious savings, but no freebie.

**Not gut-friendly.** Albanese replaces the sugar with a mix of isomalto-oligosaccharide (a poorly digested carb), allulose (a poorly digested sugar), and inulin (a fiber that can cause gas). All three can lead to GI woes, especially in people who are sensitive to them.

And don't "boost your expectations" for the gummies too high. Some of their colors come from synthetic food dyes (Yellow 5 and Blue 1) and titanium dioxide, all of which we rate as "avoid" (see [chemicalcuisine.org](http://chemicalcuisine.org)). 🚫





## FOOD FIND

# Open sesame!

Just about any hummus is a winner. That's no surprise, given its base of chickpeas, tahini (sesame butter), and largely unsaturated oils (like sunflower, soybean, canola, or olive). It's a trifecta of legumes, good fat, and (usually) not too much salt.

For a new spin on the healthy snacking staple, try the latest newcomer: **Little Sesame**.

True to its name, the company started as a restaurant serving up hummus-based bowls and pita sandwiches in Washington, DC, in 2018. When the pandemic hit, Little Sesame began packaging its hummus for grocery store shelves, where it debuted in 2021.

Today, it's sold coast to coast. Lucky you!

It's hard to find a hummus that yields a creamier, smoother combo of chickpeas, tahini, sunflower and olive oils, garlic, lemon, and salt than Little Sesame's **Classic Hummus**.

Want to kick things up a notch? Punchy flavors like **Jammy Tomato**, **Caramelized Onion**, **Preserved Lemon**, and **Herby Jalapeño** do the trick. And Little Sesame manages to dial up the flavor with no more sodium than a typical hummus—around 125 to 150 milligrams in each two-tablespoon serving.

Got the right six ingredients, a food processor, and a few minutes? You can give Little Sesame a run for its money with The Healthy Cook's Quick Dish.

Raw veggies for dipping, anyone?

## QUICK DISH

### SIX-INGREDIENT HUMMUS

Combine 1 cup no-salt-added canned or cooked (and drained) chickpeas, 2 Tbs. fresh lemon juice, 1 Tbs. extra-virgin olive oil, 1 Tbs. tahini, 1 minced garlic clove, and ¼ tsp. kosher salt in a food processor and process until smooth. Optional: For a nice bit of color and a subtle pepper taste, top with a sprinkle of paprika. Makes 1 cup (16 Tbs.).



## FOOD FAIL

# The big cheese

Of all the breakfast sandwiches sold at Panera, McDonald's, and Starbucks, only one racks up enough calories, unhealthy fat, and sodium to rival a McDonald's Double Quarter Pounder with Cheese.

The **Panera Asiago Sausage & Egg Sandwich** piles egg, pork sausage, processed American cheese, and garlic aioli (a mayo-like sauce) on a 320-calorie bagel that's made with white flour and baked-in chunks of cheese, then topped with more cheese.

No wonder patrons walk away with 810 calories, a full day's saturated fat (20 grams), and nearly two-thirds of a day's sodium (1,460 milligrams), all before lunchtime rolls around.

And what's for lunch? *More* Asiago bagels.

In January, Panera bolstered its lunch and dinner menus with a limited-time offer of Asiago Bagel Stack sandwiches. The lineup: Chicken Roma, Spicy Steak, and Zesty Tuscan. Each "Stack"—it's on that same cheese-crust bagel—has roughly 600 calories, half a day's sat fat, and 1,000 to 1,500 mg of sodium (not counting your choice of a side).

"Panera announces biggest menu transformation in brand history," proclaimed the company in February 2024. "More than 20 menu updates offering innovated favorites, enhanced portions and better value."

"Enhanced portions"? No kidding. What about enhancing customers' health?