

# Nutrition Action

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HEALTH LETTER®  
CENTER FOR SCIENCE IN THE PUBLIC INTEREST

## VITAL Signs

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M E M O

# FOLLOW THE MONEY?



Conflict of interest is back in the news. José Baselga, chief medical officer at New York's esteemed Memorial Sloan Kettering Cancer Center, resigned in September after the [New York Times](#) and [ProPublica](#)

reported that he had failed to disclose in dozens of articles in medical journals that he had received millions in payments from drug and health care companies.

Not long after, other non-disclosing Sloan Kettering researchers were forced into embarrassing journal corrections. Among them: the hospital's chief executive, Craig Thompson, who also resigned from the corporate boards of two drug companies—Merck and Charles River Laboratories.

Scientists with corporate ties aren't limited to the drug business, of course. As long as the money is flowing, it's reasonable to expect similar behavior, regardless of the industry.

Enter Marion Nestle—

one of the nation's most prominent nutritionists, professor emerita at New York University, and a former CSPI board member—with a new book that is as timely as it is revelatory. *Unsavory Truth: How Food Companies Skew the Science of What We Eat* (Basic Books) may be the most comprehensive survey of corporate influence on nutrition science ever published.

It's an unappetizing portrait:

- Nutrition conferences awash in corporate largesse, including sponsored sessions where industry-friendly scientists hold forth.
- Big Food setting the research agenda for academics and then leaning on them to spin

their results in the industry's favor.

■ Hefty donations to the American Society for Nutrition (mostly academic researchers) from the National Cattlemen's Beef Association, the National Dairy Council, Coca-Cola, the Sugar Association, and others.

■ Scientists with industry ties on the advisory panel that shapes the government's *Dietary Guidelines for Americans*, which is used to set standards for school lunches, home-delivered meals for seniors, and other food programs.

To make matters more complicated, we can't assume that a study's conclusions are

inherently invalid simply because the research was funded by a self-interested company. One is always left with the task of trying to pinpoint precisely where any bias might have crept in.

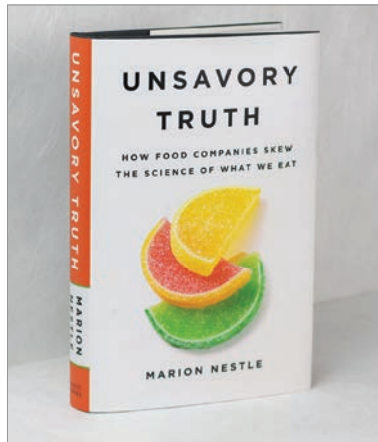
Disentangling this self-serving science is hard enough for scientists, as Nestle notes. (See our March 2017 interview with her.)

But what can everyone else do?

That's where *Nutrition Action* comes in. To help

you interpret a study's results, we disclose, when possible, any corporate backers of the research. Our goal is to arm you with the information you need to weigh the unrelenting avalanche of new findings on diet and health.

When it comes to the battle against industry misinformation, an informed citizenry is the strongest weapon we've got.



See how Big Food uses science to boost sales.

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# VITAL Signs

## New findings on fish oil & vitamin D

BY BONNIE LIEBMAN



"Fish-oil drugs protect heart health, two studies say," declared the [Washington Post](#) in November. "Vitamin D and fish oils are ineffective for preventing cancer and heart disease," announced the [New York Times](#) the same day. Both were reporting on the VITAL trial. Why such different headlines? It's complicated. Here's what the lead investigator told us.



**JoAnn E. Manson** is a physician and professor of medicine at Harvard Medical School, professor of epidemiology at the Harvard T.H. Chan School of Public Health, and Chief

of the Division of Preventive Medicine at Brigham and Women's Hospital. She co-leads the VITamin D and OmegA-3 Trial (VITAL) and the COcoa Supplement and Multivitamin Outcomes Study (COSMOS). Manson, who serves on *Nutrition Action's* Science Advisory Board, spoke to *NAH's* Bonnie Liebman.

### Omega-3 Fats

#### Q: Why was the VITAL trial done?

**A:** Previous trials of the omega-3 fats in fish oil—EPA and DHA—were largely in high-risk populations. Most included people with heart disease or stroke or with specific risk factors such as diabetes or high cholesterol levels.

VITAL is the first large-scale randomized trial of omega-3s in a usual-risk population. We enrolled nearly 26,000 healthy men and women and gave them either 1 gram of fish oil, 2,000 International Units of vitamin D, both, or two placebos every day for an average of 5.3 years.<sup>1-3</sup>

#### Q: What evidence on omega-3s led you to do the trial?

**A:** Observational research has suggested that eating fish is linked to a lower risk of heart disease and stroke. And other studies have suggested that omega-3s may decrease inflammation, blood clotting, and triglycerides and decrease the risk of irregular heart rhythms. Early randomized trials in high-risk patients had also been promising.

#### Q: What did VITAL find?

**A:** We did not find a statistically significant reduction in the

study's primary cardiovascular endpoint—a composite of heart attack, stroke, and death from cardiovascular causes—in people who were given omega-3s.

But when we looked at those events separately—as we had originally specified as a goal of the trial—we saw a significant 28 percent reduction in heart attacks, and no reduction in stroke or cardiovascular deaths.

But because VITAL's primary endpoint combined the three, the effect on heart attacks was diluted out.

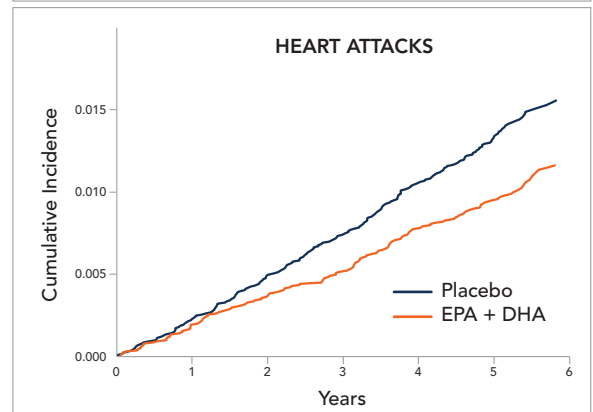
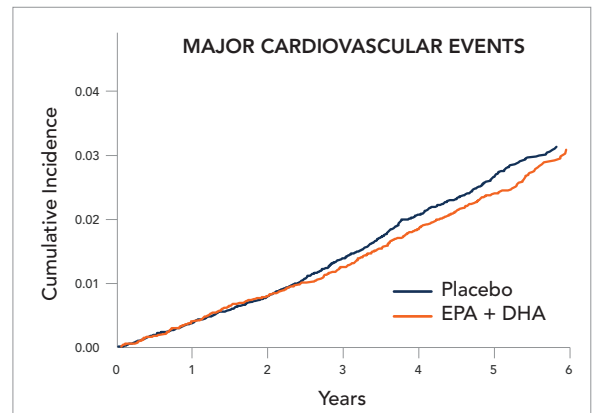
#### Q: Some media reports simply said that omega-3s have no benefit.

**A:** That's because journals often require that the conclusion include results for only the primary endpoint. And we have to be cautious about the result for heart attacks, because it was a secondary endpoint.

#### Q: But you can't ignore those results?

**A:** Right. And our other findings add to the biological plausibility that omega-3s have benefits for heart health.

For example, among those who entered the trial eating less fish than the average,



Omega-3s did not lower a composite of major cardiovascular events (top), but did lower the risk of heart attacks (bottom).



## Fishing for Omegas

Shoot for one or two servings of seafood—especially fatty fish—per week, says the [American Heart Association](#).

### Food

(4 oz. cooked, unless noted)

	EPA + DHA (mg)
Atlantic salmon, farmed	2,430
Coho salmon, wild	1,200
Rainbow trout, wild	1,120
Sardines, canned (3 oz. drained)	1,010
Rainbow trout, farmed	990
Sockeye salmon, wild	970
Pink salmon, canned (3 oz. drained)	920
Mussels	890
White albacore tuna, canned in water (3 oz. drained)	730
Flounder or sole	340
Clams	320
Shrimp	310
Catfish, wild	270
Halibut	270
Chunk light tuna, canned in water (3 oz. drained)	230
Scallops	200
Atlantic cod	180
Haddock	180
Yellowfin tuna	140
Catfish, farmed	100
Pacific cod	90

Source: U.S. Department of Agriculture.

which was 1½ servings per week, participants who received omega-3s had a statistically significant 19 percent lower risk of major cardiovascular events—the primary endpoint—than those who received the placebo. In contrast, omega-3s had no impact on major cardiovascular events in those who entered the trial with higher fish consumption.

We saw the same thing with heart attacks. Among people who had a low fish intake, those who received omega-3s had a statistically significant 40 percent lower risk of heart attacks than the placebo group. Omega-3s had a negligible effect in people who ate more fish.

### Q: You wouldn't expect omega-3s to help in people who get enough?

**A:** Right, given that they may already have sufficient intake of the marine

omega-3s. Another intriguing finding was that African-Americans who received the omega-3s had a large, 77 percent reduction in heart attacks compared to those who received the placebo.

VITAL, which had 5,100 African-Americans, is one of the few large-scale randomized trials with a racially diverse study population.

But with both African-Americans and people with a low fish intake, we have to interpret the results cautiously because these are subgroup analyses.

### Q: What could explain the results in African-Americans?

**A:** We don't know yet. They had a lower risk regardless of their fish intake. And their fish intake was no different from that of other groups.

Although the results could be due to chance, they could be due to gene variants that haven't been identified or other causes. Some groups, like the Inuit in Greenland, have gene variants that influence the metabolism of omega-3s. We hope to look further at these issues.

### Q: Would you advise African-Americans to start taking omega-3s?

**A:** We're not ready to say that. But we are saying that those who appeared to have the greatest reduction in heart

attacks—African-Americans and people with low fish consumption—may want to talk with their healthcare provider about whether to take a fish oil supplement.

People have been told for decades to have two or more servings of fish per week, and many people are just not doing it. If people are allergic to fish or are vegetarians, they can take algae-based omega-3 supplements.

### Q: Did you see any adverse effects?

**A:** There was no increased risk of bleed-

ing or other significant side effects. But when we excluded the first two years of results—to account for latent cancers—we saw a 13 percent increased risk of cancer, which was close but not quite statistically significant. There was no increase in cancer deaths.

So the omega-3s seemed to have a good safety profile over the five years of treatment. Although more research is needed, it's likely that the benefits will outweigh the risks for someone with low fish consumption.

### Q: Why didn't omega-3s help in recent trials on people at high risk because of diabetes or high LDL cholesterol?

**A:** People with these conditions are often taking multiple medications—aspirin, statins, beta-blockers, and ACE inhibitors—that lower their risk, which could make it difficult to see the benefit of



Taking fish oil lowered the risk of cardiovascular events in people who ate less than 1½ servings of fish per week.

omega-3s. But with VITAL, we're talking about a usual-risk population. So it's different.

### Q: Is any brand of fish oil okay?

**A:** We used 1 gram—or 1,000 milligrams—a day of a very high quality FDA-approved medication called Omacor, which is known as Lovaza in the United States. We did extensive quality control tests, so we knew that the nutrient content was very stable over its shelf life and that there was no peroxidation or contamination.

In November, researchers reported the results of the REDUCE-IT trial, which tested Vascepa, a drug made by Amarin Pharma, which funded the study.

It's a "highly purified version of EPA... that's sometimes used for people with really high triglycerides," explained lead author Deepak Bhatt, professor of medicine at Harvard Medical School, at an [American Heart Association](#) meeting in November.

The 8,179 participants were taking statins to lower their LDL ("bad") cholesterol, but they still had high triglycerides (135 to 499).<sup>1</sup> Each had cardiovascular disease or diabetes plus at least one other risk factor.

After five years, "what we found in our overall study of patients...was a significant 25 percent reduction in cardio-



vascular events, including a 26 percent reduction in cardiovascular death, myocardial infarction, or stroke," said Bhatt.

Vascepa takers had a higher risk (3 percent) of being hospitalized for atrial fibrillation or flutter (irregular heart-beat) than placebo takers (2 percent).

One wrinkle: Some question whether the placebo—mineral oil—could have raised cardiovascular risks.

"An effect of the mineral oil remains a possibility, but my guess would be that it is largely if not wholly an effect of the high-dose EPA through mechanisms beyond merely lowering [triglycerides]," Rory Collins, a cardiovascular disease expert and professor of medicine and epidemiology at the University of Oxford, told [Forbes](#).

<sup>1</sup> *N. Engl. J. Med.* 2018. doi:10.1056/NEJMoa1812792.

If you use an over-the-counter fish oil supplement, look for one that has the USP or NSF seal or another indication of quality control. [See "Finding Fish Oil."]

## Vitamin D

### Q: Why did VITAL test vitamin D?

**A:** Observational studies had suggested that a low blood level of vitamin D is linked to an increased risk of cancer, cardiovascular disease, type 2 diabetes, and several other chronic diseases.

Also, some laboratory and clinical evidence had suggested that vitamin D may decrease inflammation and improve immune and cardiac function.

### Q: Did vitamin D help?

**A:** At 2,000 IU a day, we saw no reduction in cardiovascular events. Even in people who entered the trial with a low blood level of vitamin D—below 20 nanograms per milliliter—we did not see a signal for cardiovascular benefit.

### Q: And cancer?

**A:** We saw no significant reduction in new cancers, which was the primary endpoint. We did see a 17 percent reduction in cancer deaths, which was not statistically significant. But when we looked at people who had been in the trial for at least two years—to help account for the latency

period of cancer—we saw a statistically significant 25 percent reduction in cancer deaths. That was a secondary endpoint, though, so it's not conclusive.

### Q: Why might vitamin D lower the risk of cancer deaths but not new cancers?

**A:** If vitamin D makes tumors less invasive, less aggressive, and less likely to metastasize, you might see a reduction in cancer deaths over five years.

When earlier trials were pooled, they

suggested a reduction in cancer deaths but not new cancer cases. So that's quite interesting.

### Q: Is five years too short to know if something keeps cancer from starting?

**A:** Yes. If you're looking at the initiation of cancer, you would need to treat people for 15 or 20 years or even longer.

So it's virtually impossible to do a randomized trial testing an intervention



Supplement Facts	
Serving Size 2 Softgels	
Servings Per Container 30	
Amount Per Serving	% DV
Calories 35	
Calories from Fat 25	
Total Fat 3 g	5%**
Saturated Fat 1 g	5%**
Polyunsaturated Fat 1 g	
Monounsaturated Fat 0.5 g	
Cholesterol 25 mg	8%**
Total Carbohydrate 1 g	less than 1%**
Protein less than 1 g	
Fish Oil Concentrate 2400 mg	*
Total Omega-3 Fatty Acids 720 mg	*
Omega-3 EPA (Eicosapentaenoic Acid) 360 mg	
Omega-3 DHA (Docosahexaenoic Acid) 240 mg	
Omega-3 Other 120 mg	
*Daily Value (DV) not established.	

Two softgels of this supplement have 2,400 mg of fish oil, but only 600 mg of EPA + DHA.

## Finding Fish Oil

Confused by fish oil labels? No wonder.

■ **Check the milligrams of EPA and DHA, not the total amount of fish oil or omega-3.** The VITAL trial gave people 840 milligrams of EPA + DHA (460 milligrams of EPA plus 380 mg of DHA) every day. Some supplements—like Solgar Triple Strength—have similar amounts.

■ **Check the serving size.** Does the label list the EPA and DHA in one, two, or three pills?

■ **Expect major brands to be free of mercury.** [ConsumerLab.com](#), which tests supplements for its subscribers, has never found mercury in fish oil supplements. It has found the contaminant PCBs at low levels. (You'd likely get more from eating fish.)

■ **You can buy vegetarian EPA + DHA made from algae.** Most have about twice as much DHA as EPA. VITAL's fish oil had roughly 20 percent more EPA than DHA. Skip brands with only DHA. Ditto for ALA, a non-marine omega-3.



**Two cereals...same vitamin D?** Nope. One cup of Cheerios, which uses the current Nutrition Facts label, has 10% of the old Daily Value (400 IU). A 1¼-cup serving of Special K, which uses the new Nutrition Facts label, has 10% of the new Daily Value (800 IU). And it lists vitamin D in micrograms. (One mcg equals 40 IU.) Got that?

that operates early in cancer initiation. But that isn't where the research suggested a benefit for vitamin D.

**Q: Vitamin D may act at later stages?**

**A:** Yes. We thought that we might be able to see an effect of vitamin D on cancer because previous research suggested that it worked at these later stages—proliferation of the tumor, invasiveness of the tumor. And VITAL did see those signals, but it wasn't a conclusive finding.

We're planning two more years of follow-up to see if the effect strengthens or if it weakens over time. And we hope to follow the participants for another four or five years after that.

**Next Steps**

**Q: What can you say to people who were hoping for more definitive answers?**

**A:** We need to accept that trial findings are sometimes complex and nuanced. Even though VITAL was a very large randomized trial in people at usual risk for cardiovascular disease and cancer, it's still one trial, and its findings need to be confirmed.

**Q: How long would a new trial take?**

**A:** Eight to ten years from the time you apply for funding until the results are reported. So it's reasonable to ask what to do until then.

We encourage people to eat fatty fish because it contains both omega-3s and

vitamin D and replaces less-healthy foods. If you're already taking vitamin D or omega-3s at doses similar to those used in VITAL, there's no clear reason to stop.

The supplements appeared safe at these doses, and we have promising signals for a heart attack benefit with

omega-3s and for a reduction in cancer deaths with vitamin D. But we do caution against megadosing with either supplement.

**Q: What if you're not taking omega-3s?**

**A:** If you have low fish consumption or are African-American, talk with your healthcare provider about whether to take a supplement.

**Q: And vitamin D?**

**A:** People who have bone health problems and those who are more likely to have low blood levels of vitamin D may want to have their vitamin D tested and talk with their healthcare provider about taking a supplement.

That includes people who get minimal sun exposure and who aren't eating foods containing or fortified with vitamin D. It also includes people who have malabsorption syndromes like Crohn's disease, ulcerative colitis, or those who have had gastric-bypass surgery.

**Q: What else will VITAL look at?**

**A:** Over the next year, we hope to publish results on over a dozen additional outcomes, including diabetes, memory loss, bone fractures, falls, infections, asthma, depression, macular degeneration, and autoimmune conditions such as thyroid disease, rheumatoid arthritis, and lupus. 🐾

<sup>1</sup> *N. Engl. J. Med.* 2018. doi:10.1056/NEJMoa1811403.  
<sup>2</sup> *N. Engl. J. Med.* 2018. doi:10.1056/NEJMoa1809944.  
<sup>3</sup> *N. Engl. J. Med.* 2018. doi:10.1056/NEJMe1814933.

**The Bottom Line**



**Omega-3s**

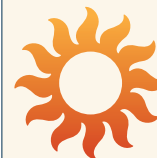
■ In the [VITAL trial](#), 840 milligrams a day of EPA + DHA did not significantly lower the risk of a "composite" of major cardiovascular events or of cancer in people at ordinary risk of those diseases.

■ EPA + DHA did lower the risk of heart attacks, especially in people who ate less than 1½ servings of fish per week and in African-Americans, but those results need confirmation in new studies.

■ In most recent trials, EPA + DHA did not lower the risk of cardiovascular events in people with or at high risk of heart disease (due to diabetes, high LDL cholesterol, etc.).

■ In 2017, the [American Heart Association](#) said that EPA + DHA supplements are "reasonable" only in people who already have heart disease or heart failure. The [AHA advises](#) everyone to eat seafood once or twice a week.

■ In the [REDUCE-IT trial](#), EPA alone lowered the risk of heart attack, stroke, and cardiovascular deaths in people with high triglycerides and either cardiovascular disease or diabetes.



**Vitamin D**

■ In the [VITAL trial](#), 2,000 IU a day of vitamin D did not lower the risk of major cardiovascular events or of cancer.

■ Those getting vitamin D for at least two years had a lower risk of dying of cancer than those getting a placebo. That finding needs confirmation in new studies.

■ It's tough to reach the recommended intake for vitamin D—600 IU a day up to age 70 and 800 IU if you're older—from food. Salmon has 500 to 750 IU, but most fortified foods have only 40 to 100 IU per serving.

■ Your body can make vitamin D from sunlight, but not if you're wearing sunscreen (you should). Your best bet: take a daily multivitamin or a vitamin D supplement with 600 to 1,000 IU.



# Quick Studies

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

## Popular Probiotic Flunks a Test



**C**an *Lactobacillus rhamnosus* GG (LGG), the bacteria found in Culturelle and many other probiotics, help curb the diarrhea and vomiting that doctors call acute gastroenteritis?

Researchers randomly assigned 943 preschool children and infants who were diagnosed with acute gastroenteritis at emergency rooms to take either a placebo or LGG (10 billion colony-forming units) twice a day for five days.

After two weeks, the probiotic takers had no less diarrhea or vomiting than the children who got the placebo. It's not clear if the results apply to adults.

**What to do:** Interested in probiotics? Keep in mind that few large clinical trials like these have tested their claims. As for LGG, in smaller trials, either LGG or *Saccharomyces boulardii* (a yeast found in supplements like Florastor) reduced the risk of diarrhea linked to antibiotics in children.

[N. Engl. J. Med. 379: 2002, 2076, 2018.](#) [Cochrane Database Syst. Rev. 12: CD004827, 2015.](#)

## Which Comes First?

**D**oes order matter when you add two foods to a bowl?

Researchers told 90 college students to add yogurt, then muesli, to a bowl on one occasion, and to add muesli, then yogurt, on another. On average, the students added more muesli—or yogurt—when they added it first.

**What to do:** When you fill a bowl, start with the ingredient you want to eat more of.

[Appetite 2018. doi:10.1016/j.appet.2018.11.010.](#)



## Waist or Weight?

**A** woman's waist may better predict her risk of type 2 diabetes than her weight.

Researchers tracked roughly 136,000 postmenopausal women for nearly 15 years. Waist size predicted diabetes risk even better than weight. Women with a waist between 31 and 35 inches had a

59 percent higher risk than those with a smaller waist. A woman with a waist over 35 inches had three times the risk compared to a woman with a waist under 31 inches.

A large waist was even worse for women with Asian ancestry. Their risks were roughly 2½ times higher in the 31-to-35-inch range and nearly 4½ times higher if over 35 inches.

**What to do:** Keep tabs on your waist, not just your weight. 🍌

[Diabetes Care 2018. doi:10.2337/dc18-1413.](#)

## Prostate Cancer & Exercise



**V**igorous exercise may lower the risk of advanced or lethal prostate cancer.

Researchers tracked more than 49,000 men aged 40 to 75 for 26 years. Those who reported doing the most vigorous exercise had a 30 percent lower risk of advanced prostate cancer and a 25 percent lower risk of lethal prostate cancer than men who did the least. The "most" group did the equivalent of 25 minutes a day of running.

What's more, men who did the most vigorous exercise had a 29 percent lower risk of having tumors with a fusion of two genes—TPMRS2 and ERG—than those who did the least. That could help researchers figure out how exercise might protect the prostate.

**What to do:** If you can, jog, run, bicycle, swim laps, row, climb stairs, do calisthenics, or play tennis, squash, or racquetball. This study can't prove that vigorous activities like those lower the risk of advanced or lethal prostate cancer, but they can keep your heart in shape.

[Eur. Urol. 2018. doi:10.1016/j.eururo.2018.09.041.](#)



An

# APP

for *That?*

## How to pick a food-tracking app

BY LINDSAY MOYER & JOLENE MAFNAS

**1. Don't expect the app to know your true calorie needs.** Many apps ask for your age, height, weight, physical activity, etc., then use an equation to estimate how many calories you need. But what *you* burn could be higher or lower (because you have more muscle, a lower metabolic rate, etc., than what the equation assumes).

The only way to know your true calorie needs: check the scale to see if your weight is changing.

**2. Be skeptical of nutrient goals.** Most apps compare your day's totals for saturated fat, sodium, and other nutrients to the Daily Values on food labels. That's fine. But when there is no DV, some apps set their own meaningless target. Limits on *total* sugars, for example, may leave too little room for the naturally occurring sugars in fruit or milk. (Most experts advise cutting back only on the sugars that are *added* to foods.)

**3. Select verified data.** Search for a common food, like lasagna, and you may see dozens of entries for it (different brands, recipes, etc.) in the app. Pick one that is "verified"—it will often have a check or other symbol next to it. An unverified entry may be incorrect or incomplete because any user could have added it to the app's database. A cholesterol-free egg salad? That's gotta be wrong.

**4. Use the barcode scanner for packaged foods.** Nearly all apps can focus your phone's camera on a packaged food's UPC barcode. Scan it. Odds are, the (correct) Nutrition Facts will pop up. Give the numbers a once-over to make sure the food isn't mismatched before you log it.

How many calories did you eat today? Are you getting enough calcium? Keeping a lid on sodium? Smartphone (or tablet) apps like MyFitnessPal put the Nutrition Facts for millions of foods at your fingertips. Log each food you eat, then sit back and let the app do the math. Over time, companies claim, that adds up to healthier habits and fewer extra pounds. But the numbers aren't always correct...or complete.

**5. Tack on any extras.** If you type in a food like "broccoli" or "rice," you're likely to see numbers for the item with *nothing* added. Don't forget to add any oil, spreads, dressings, mayo, and—if you're tracking sodium—salty seasonings.

**6. Pick restaurant foods wisely.** A search for Pad Thai or Kung Pao Chicken or Chicken Parmesan returns plenty

**7. Watch portion sizes.** Many people eat more than the serving that apps (or labels) suggest. The next time you have cereal, pasta, ice cream, peanut butter, hummus, etc., whip out the measuring cup or spoon so you can adjust the serving size in your app.

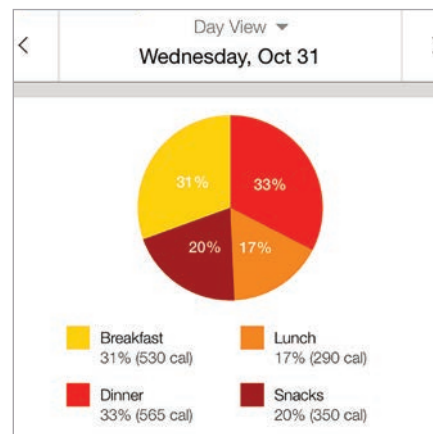
**8. Know what's missing.** Some unverified foods are missing numbers for everything but calories. A salad without potassium? Unlikely. An ice cream without sugars? Umm...no.

To reliably count more than calories, try apps like Nutritionix Track or Cronometer, which have less missing data (and tell you when they do).

**9. Don't double-count your activity.** Most apps ask if your activity level is sedentary, moderate, intense, etc., to estimate your baseline calorie needs. Then they let you log workouts—or even sync with step trackers like Fitbit—to track the calories you burn.

But if you counted your daily walk to work and weekend bike rides to estimate your usual activity level *and* you logged each walk or ride, you're double-counting. So stick to "sedentary" unless you have a job—like construction—that keeps you active all day.

And remember: "calories burned" is a ballpark figure, not an exact science, even with a Fitbit or Apple Watch.



Apps can tally a day's calories and more.

of entrées in the 300-to-600-calorie range.

No way. At a sit-down restaurant—chain or not—expect most entrées to have at least 1,000 calories. Good thing many apps already have data from big chains. Your best bet for non-chains: look for a similar dish from a chain.

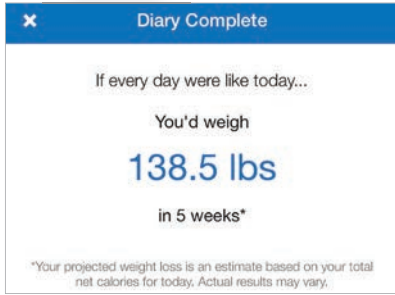
**10. Don't pay.** "Premium" versions of apps set you back \$30 to \$50 a year for extra features that you may not need. Experiment with the free versions first.

See page 9 for our take on two of the most popular apps (MyFitnessPal and Lose It!) and two of the most reliable (Nutritionix Track and Cronometer).





## MyFitnessPal



Don't rely on "projected weight loss."

### Pros:

- Syncs data with many health and fitness apps for free.
- Lots of chain-restaurant data. Locates nearby restaurants.

### Cons:

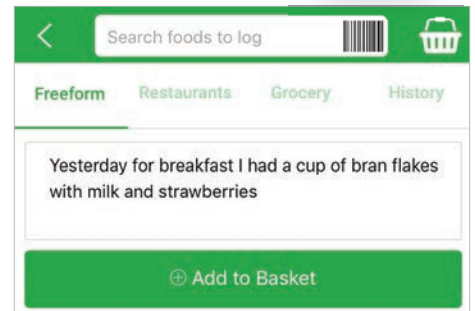
- Calorie estimates for non-chain restaurants can be wildly inaccurate. A glass of white wine at one restaurant had numbers for just one ounce (25 calories). A mushroom pasta entrée had numbers for just the mushrooms (45 calories). If only.
- Estimates of how much weight you'd gain or lose if you continued a given day's eating habits are overly simplistic. For a better estimate, go to [nidk.nih.gov/bwp](http://nidk.nih.gov/bwp).
- It warns you when you exceed its default total fat limit, even if you're eating mostly healthy fats.

**All data verified?** No. Only some entries (✓) are verified for accuracy, and even that's no guarantee.

**All entries complete?** No. Many contain all the nutrients on the Nutrition Facts label, but some unverified entries are missing nutrients.



## Nutritionix Track



**All data verified?**

Yes. (Note: Nutritionix employs a former *Nutrition Action* staffer.)

**All entries complete?**

Yes, typically for calories, total fat, saturated fat, cholesterol, sodium, carbs, fiber, sugar, and protein. "Common foods" entries list more nutrients.

### Pros:

- "Common foods" makes it easy to pick a reliable entry for generic foods and many non-chain and ethnic restaurant dishes. (Make sure to match the serving to your portion.)
- "Freeform" feature lets you type or say what you ate (including recipes), rather than searching for it.

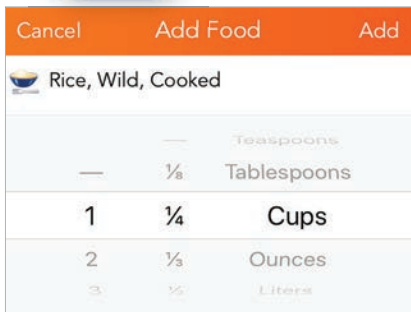
### Cons:

- You may need to adjust "Freeform" foods and serving sizes to match what you eat.
- Can't average nutrients over time. (They're working on it.)

You can type or say your foods in "Freeform."



## Lose It!



Swipe up or down to adjust servings.

### Pros:

- Serving sizes are easy to adjust. The serving-size guide (click the question mark) helps you estimate your portion.
- If you prefer a bigger screen and a keyboard, the desktop version (at [loseit.com](http://loseit.com)) has many of the same features as the mobile app.

### Cons:

- Pushes the company's genetic test kit for personalized nutrition advice. (That science is still in its early stages. See May 2018, p. 3.)
- The "Snap It" tool, which matches your photos to foods, can be unreliable. Snap It thought our farro was pine nuts. Big difference. (In fairness, the feature is still in beta testing.)

**All data verified?** No. Only some entries (✓) are "reviewed for accuracy and completeness."

**All entries complete?** No. Some unverified entries have just calories.



## Cronometer

**All data verified?** Yes.

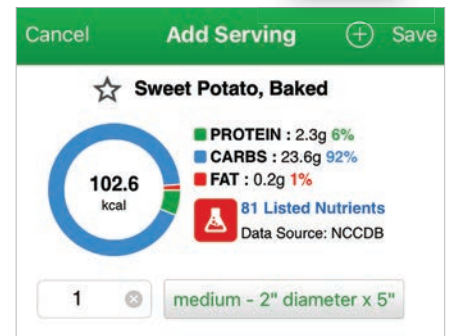
**All entries complete?** Yes. And there's an icon for the source of each nutrient listed: a laboratory flask means a detailed analysis including many vitamins and minerals. A barcode means a packaged or restaurant food with a typical Nutrition Facts label.

### Pros:

- It's your best (free) bet for the most vitamins and minerals.
- Many entries come from a comprehensive database that's used by scientists who study diet and health.
- Averages your nutrient data over days, weeks, or months (which is what matters).

### Cons:

- The number of nutrients can be overwhelming, and some (like amino acids) are unnecessary for almost everyone.
- Occasional pop-up ads are distracting. 🍌



A red flask icon means many nutrients.

# Tainted Supplements

Are you taking hidden drugs?

BY BONNIE LIEBMAN



**Z**ero Xtreme, In Shape, Easy 2 Slim, and Adipotrim XT promised to help people burn fat or lose weight. Rhino 7, Fifty Shades 6000, and Grande X offered men “TIME, SIZE, STAMINA.”

All were sold as supplements with natural ingredients. In fact, Food and Drug Administration tests showed that they also contained prescription drugs, including some that the FDA has taken off the market. They may be the tip of an iceberg.

## Supplement or Drug?

“Take one Rhino 7 capsule one hour before sex to help energy, libido, and sexual performance,” directed the label.

Rhino 7’s “natural formula” was labeled as a “proprietary blend” of goji extract, cinnamon bark, licorice, ginseng, superoxide dismutase, and other ingredients.



One of 317 weight-loss supplements that were found to contain a banned drug.

In October 2017, the [FDA announced](#) that Gadget Island, Inc., was voluntarily recalling Rhino 7, along with three similar supplements—Fifty Shades, Grande X, and Papa Zen—after the agency found that each was laced with sildenafil (Viagra), tadalafil (Cialis), or similar

drugs that are used to treat erectile dysfunction.

That was no surprise. Between 2007 and 2016, the FDA found 746 supplements that contained hidden drugs.<sup>1</sup> Nearly half were Viagra-like drugs in supplements for men.

“A combination of consumer demand and unscrupulous manufacturers has created a huge market for dangerous sexual enhancement supplements,” says Pieter Cohen, an associate professor of medicine at Harvard Medical School who researches supplement safety.

Another major offender: weight-loss supplements containing sibutramine, an appetite suppressant that’s no longer allowed in prescription drugs.

“The FDA took [sibutramine off the market in 2010](#) because a large study reported an increased risk of strokes and heart attacks in people taking it,” says Cohen.

Some weight-loss supplements also contained phenolphthalein (a laxative that the FDA took off the market in 1999 because it might cause cancer), Prozac (an antidepressant), or other drugs.

Steroids or steroid-like ingredients also showed up in many muscle-building supplements, though they appeared less often after 2011.

Are we seeing the tip of an iceberg? “We don’t know because the FDA doesn’t routinely test supplements for

adulterants, even potentially dangerous ones such as these prescription drugs,” says Cohen.

“And the FDA doesn’t say how many different brands it tested to find the 700-plus adulterated brands, so we don’t



The FDA found Viagra-like drugs in some 350 “sexual enhancement” supplements.

know what percentage of all supplement brands have these drugs.”

Even more troubling: many of those drug-spiked supplements may still be for sale.<sup>2</sup>

“The FDA is supposed to make sure that these products are removed from the market,” says Cohen. “But it often did nothing at all. More than half the time, the FDA didn’t even announce a recall of the products.”

In some cases, the FDA might have requested a recall and the company refused, he notes. But the agency could have done more than ask.

“The FDA has other tools and options to encourage a company to pull a product off the market,” explains Cohen. “It could send warning letters, send inspectors to

the firms, or do mandatory recalls.”

Why does that rarely happen?

“It’s inexplicable,” says Cohen. “When it comes to supplements, the FDA’s job is to identify adulterated and potentially hazardous ones. These would jump out as on the top of that list.”

The FDA “is committed to doing everything within its resources and authorities to identify and remove unsafe products from the market,” the agency told the *Washington Post* in October.

But Cohen disagrees.

“The FDA spent the resources to do the chemical analyses to determine that the supplements were adulterated with drugs,” he says. “So there’s no reason for it not to make sure that consumers aren’t exposed to these drugs.”

(Google “[FDA tainted supplements](#)” for its list.)

## Untested Drugs

Selling sex supplements for men is a thriving business.

“Some men want to avoid the embarrassment or cost of seeing a doctor to get a prescription,” says Cohen. “Others may think that supplements are safer than drugs.”

Worse yet, “some men may buy these supplements because a doctor told them to avoid Viagra or Cialis.”

That’s because Viagra-like drugs can cause dangerously low blood pressure in men who are taking nitroglycerin or other medications that contain nitrates. But low blood pressure isn’t Cohen’s only worry.

“If these supplements just had the regular dose of Viagra, the only concern would be about low blood pressure if you combine it with nitrates,” he explains.

“However, companies are adding more than 80 different versions of Viagra-like drugs, many of which have never been tested in humans.”

Viagra inhibits a family of enzymes called phosphodiesterase-5 (PDE-5). That’s what makes it effective in treating erectile dysfunction. Different versions of

Viagra-like drugs may inhibit PDEs that affect other organs.<sup>3</sup> “And those other versions could have unknown or unpredictable side effects,” says Cohen.

Another example: amphetamine-like stimulants in weight-loss or sports supplements.

“A few years ago, we looked at replacements for ephedra, a stimulant that was banned back in 2004,” says Cohen. “Since then, companies have started adding synthetic stimulants that were never tested in humans or never approved in the United States.”

Between 2013 and 2016, the FDA told

**GIZMODO** VIDEO REVIEW SCIENCE IO9 FIELDGUIDE EARTHER DESIGN PALEOFUTURE

### Lamar Odom's "Natural" Erection Supplement Probably Contained Actual Viagra

Diane Kelly  
10/16/15 1:34pm • Filed to: SEX

47.5K 70 15

In 2015, former NBA star [Lamar Odom \(right\)](#) collapsed in a Nevada brothel after using cocaine. He also reportedly had taken up to 10 doses of Reload over three days. The FDA found hidden Viagra in Reload in 2013.

companies to stop using stimulants like 1,3-DMAA, oxilofrine, and BMPEA. The labels listed an ingredient called *Acacia rigidula*.

“That was a code name for a synthetic amphetamine analog, BMPEA,” says Cohen. “It’s an untested drug that short-circuited the FDA approval process. So consumers are exposed not just to pharmaceutical drugs but also to experimental ephedra replacements.”

When Cohen tested 12 brands of weight-loss and sports supplements in 2017, most still had oxilofrine.<sup>4</sup> “On top of that, we saw DMBA, which wasn’t originally in these supplements.”

## Don’t Ask, Don’t Tell

Wouldn’t we know if tainted supplements were harming people? Not necessarily.

“There’s no effective system to detect harms from supplements,” says Cohen. “It’s a passive system where people are supposed to report adverse events to the FDA using a form on the web. But it rarely happens.”

That’s partly because neither consumers nor doctors connect the dots. “Most consumers don’t tell their docs that they’re taking these supplements, and most doctors don’t ask,” says Cohen.

And even if they did ask, “doctors wouldn’t necessarily make the connection because they’re thinking, ‘Oh, a botanical mixture couldn’t have caused a stroke.’ So it doesn’t get reported to the FDA.”

The real answer, says Cohen, is changing the law to make sure that all supplements are safe and their claims are honest.

“First off, I would recommend that companies not be allowed to claim that something works when there is no human data to support it. Companies would have less incentive to put these drugs into supplements if they couldn’t advertise them for weight loss or sexual enhancement.”

Second, he says, the law could require companies to let the FDA know what they’re selling before it hits the market.

“If everything were registered with the FDA—not approved, but registered—the agency could quickly turn off or invalidate a registration if a supplement were adulterated with a drug.

“So then if you’re trying to purchase the supplement, it wouldn’t even ring up. It would say, ‘This registration has been withdrawn by the FDA.’” 🍌

<sup>1</sup> *JAMA Netw. Open* 1: e183337, 2018.

<sup>2</sup> *JAMA Netw. Open* 1: e183329, 2018.

<sup>3</sup> *JAMA Intern. Med.* 173: 1169, 2013.

<sup>4</sup> *JAMA Intern. Med.* 2018. doi:10.1001/jamainternmed.2018.4846.



# The Healthy Cook

## Pass the Plants



BY KATE SHERWOOD

Want a delicious plant-based meal on the table in 30 minutes? Here are two one-dish dinners that you're going to love. 🍴

Got a question or suggestion? Write to Kate at [healthycook@cspinet.org](mailto:healthycook@cspinet.org).

### Savory Tofu & Broccoli

 SERVES 2

- 1 14 oz. package extra-firm tofu
  - 2 Tbs. mayonnaise
  - 1 Tbs. reduced-sodium soy sauce
  - 1 tsp. dijon mustard
  - ½ tsp. toasted sesame oil
  - ½ tsp. honey
  - 4 cups chopped broccoli
  - 1 Tbs. + 1 Tbs. peanut oil
  - 1 bunch scallions, chopped
1. Cut the tofu into ½-inch-thick triangles. Blot with a paper towel.
  2. Make the sauce: In a medium bowl, whisk together the mayonnaise, soy sauce, mustard, sesame oil, and honey.
  3. Stir-fry the broccoli in 1 Tbs. of the peanut oil until tender-crisp, 2-5 minutes. Stir in the scallions and stir-fry for 1 minute more. Divide into two bowls.
  4. Add the remaining 1 Tbs. of oil to the pan. Sauté the tofu until browned on both sides, 2-5 minutes. Add the tofu to the bowls. Drizzle with the sauce.

PER SERVING (3 cups): calories 510 | total fat 36 g | sat fat 5 g | carbs 23 g | fiber 9 g | total sugars 7 g | added sugars 1 g | protein 27 g | sodium 510 mg



### Spiced Chickpeas & Butternut

 SERVES 2

- 2 cups chopped butternut squash
  - 1 onion, chopped
  - 1 Tbs. + 1 Tbs. olive oil
  - 1 15 oz. can no-salt-added chickpeas, drained
  - 2 tsp. curry powder
  - ¼ tsp. + ¼ tsp. kosher salt
  - 2 Tbs. tahini
  - 2 Tbs. fresh lemon juice
  - 1 small clove garlic, minced
  - a few cilantro leaves
1. Preheat the oven to 450°F. On a large sheet pan, toss the squash and onion with 1 Tbs. of the oil. Roast until the squash is tender, 20-25 minutes.
  2. On a sheet pan, toss the chickpeas with the remaining 1 Tbs. of oil, the curry powder, and ¼ tsp. of the salt. Roast for 15 minutes.
  3. Make the sauce: In a medium bowl, whisk together the tahini, lemon juice, garlic, remaining ¼ tsp. of salt, and 1 tsp. of water.
  4. Divide the vegetables and chickpeas into two bowls. Drizzle with the sauce and top with cilantro.

PER SERVING (2 cups): calories 520 | total fat 24 g | sat fat 3 g | carbs 62 g | fiber 14 g | total sugars 8 g | added sugars 0 g | protein 17 g | sodium 540 mg



# SOME LIKE IT HOT



## What's new in the hot cereal aisle

BY LINDSAY MOYER & JOLENE MAFNAS

**1. Look for all (or nearly all) whole grain.** That's easy. The grain in most hot cereals (like oats) is whole. Exceptions: grits and Cream of Wheat or Rice. We counted bran—like oat bran or wheat bran—as whole because you're getting the fiber-rich part of the grain.

**2. Skip or skimp on added sugars.** Another easy one. Plenty of hot cereals made of oats or other whole grains are unsweetened. You can tell that from their ingredient list (no sugar, honey, etc.). Those are our Best Bites (see chart on p. 15). A few brands even jazz themselves up with nuts, seeds, or dried fruit. If they haven't, add your own.

Want a tad more sweetness? We couldn't set a limit on *added* sugars for our Honorable Mentions because most packages don't yet carry the new Nutrition Facts label, which lists added sugars. But we know from early adopters that all but 0 to 3 grams of the *total* sugars in hot cereals is typically added. (That's no surprise, since many products have more sugar than fruit.) And total

**R**emember when hot cereal mostly meant oats? Now it's also quinoa, amaranth, buckwheat, bulgur, kamut, chia seeds, pumpkin seeds, almond butter, you name it. Even cold "overnight" oats are hot.

And labels sport a flurry of hearts or claims about protein, probiotics, fiber, vitamins, and more. Confused? Here's how to find the best hot cereals.

sugars is on the current label.

So we set the limit for Honorable Mentions at no more than 1½ teaspoons (7 grams) of total sugars per serving.

Some lightly sweetened finds:

■ **Quaker Simple & Wholesome Organic Date & Almond.** The new "multigrain hot cereal" (oats, barley, and amaranth) is dotted with plenty of chopped dates for sweetness, so only half a teaspoon of its sugar is added.

■ **Purely Elizabeth Superfood Oats.** "Superfood" means that Liz adds fine-but-not-super quinoa and amaranth to her oats. The **Cranberry Pumpkin Seed** gets a touch of added sugar from the apple juice concentrate in its dried cranberries. Other flavors have no added sugars.

■ **Trader Joe's Oatmeal cups.** Our favorite: the **Tart Cherry, Chia & Pumpkin**

**Seed** adds only enough sugar to sweeten its cherries. Stow a cup of it—or the **Strawberry Raspberry**—in your desk drawer for those rush-out-the-door mornings.

■ **Wild Friends Oats and Nut Butter cups.** "One of our favorite ways to eat our nut butter is adding it to a warm bowl of oatmeal," says **Wild Friends**. Mmm. Simply knead the nut butter packet and drizzle it over the single-serve cup of hot oats.

Expect more calories—around 350 per cup—than other oatmeals, thanks to the nut butter. We liked the **Peanut Blueberry** and **Almond Cranberry**. Each has just 2 or 3 grams of added sugars (enough to sweeten its dried berries).

Or hold a spoonful of your own nut butter on the surface of any hot oatmeal until it starts to melt, then drizzle it in.

**3. Check the sodium.** Most flavored varieties add salt. We flagged hot cereals with more than 100 milligrams of sodium per serving with a salt shaker (⚡) in our chart. If you're watching every milligram, start with a plain hot cereal and rely on your own fruit and nuts for flavor.

Illustration: Jorge Bach/CSPi. Photos: Purely Elizabeth (bottom center), Jolene Mafnas/CSPi (all others).



Bob sure knows how to blend a hot cereal.



Chia seeds and quinoa add satisfying crunch.



Apples, cinnamon, pecans. What a trio!



Sweet dates and nutty almonds. A real find.



This one has it all: oats, wheat, quinoa, & flax.





Oat bran: a creamy way to get some soluble fiber.

## Fiber Facts

“As part of a heart-healthy diet, the soluble fiber in oatmeal can help reduce cholesterol,” says **Quaker Quick 1-Minute Oats**.

True, but oats are no magic bullet. You’d need to eat 5 to 10 grams of viscous (gel-forming) soluble fiber every day to lower your LDL (“bad”) cholesterol by about 5 percent. A cup of cooked oatmeal has 4 grams of fiber, 2 of which are the soluble kind. Oat bran has

3 grams of soluble fiber. (Tip: oat bran is a perfect whole-grain substitute for Cream of Wheat.)

The catch: some companies pump up their oatmeals with extra processed fibers that *don’t* lower cholesterol. **Quaker High Fiber Instant Oatmeal**, for example, provides “40% of your daily fiber needs” (10 grams). But that’s largely thanks to added maltodextrin. **Think Thin Protein & Fiber Hot Oatmeal** adds chicory root.

The Food and Drug Administration counts both ingredients as fiber, but the agency hasn’t approved either to lower cholesterol or—as many people expect—to keep you feeling full for longer or to help you stay regular.



Do oats need probiotics or protein isolate? Nope.

Think Thin adds *Bacillus coagulans* GBI-30, 6086. So do **Earnest Eats Protein Probiotic Oatmeal** and **Bakery on Main Organic Oats & Happiness with Probiotic Cultures**. The probiotic, a patented strain of a hardy microbe surrounded by a tough spore—that’s why it can survive the microwave—is showing up in everything from muffins and granola to ice cream.

Should you count on probiotic oats to keep your “belly healthy”? The evidence for *B. coagulans* GBI-30, 6086, which was partly funded by the probiotic’s manufacturer, is unimpressive (see Jul./Aug. 2017, p. 10).

And don’t be wowed by Think Thin’s protein. The added soy protein isolate boosts the protein to 10 grams per 200-calorie serving (about ¾ cup cooked). You’d get 10 grams of protein from a cup of cooked plain oats plus a half cup of skim milk...for about the same calories.

## Probiotic Push

“Help keep your body and belly healthy,” says **Think Thin Protein & Probiotics Hot Oatmeal**. “Maximize your day with the hottest trifecta of protein, probiotics and fiber.”

## Peddling Antioxidants

“Instant oatmeal with ANTI-OXIDANTS,” says **Quaker Blueberry Cranberry Oatmeal**. “A good source of vitamins A, C, and E.”

Yes, Quaker adds 10 percent of a day’s vitamins A, C, and E to its oatmeal. Big whoop! Studies that give people much higher doses of those and other antioxidants have largely come up empty.

What’s more, the packets supply more added sugar (two teaspoons) than dried blueberries or cranberries. Ditto for the **Green Apple Fig**, which has more sugar than dried fig or apple pieces.

But at least both varieties deliver *some* of the fruits they promise. Quaker’s instant **Strawberries & Cream** still has strawberry-flavored apples colored with red dye instead of dried strawberries. And the “blueberries” in its instant **Blueberries & Cream** are dyed blueberry-flavored figs.



Oats laced with antioxidants are just another way to sell oats.

## Some Like it Cold

“Prepare at night,” says **Quaker Overnight Oats**. “Enjoy in the morning.”

Overnight oats are in. You add your milk to the “fill line,” then cover, refrigerate overnight, and simply stir (don’t heat!) in the a.m. For creamier oats, add two or three tablespoons of plain yogurt, says the label.

But most of Quaker’s half-dozen varieties, like the **Raisin Walnut & Honey Heaven** or the **Cherry Almond & Vanilla**, are too sugary for a Best Bite or Honorable Mention. (Both have 2½ teaspoons of added sugars.) And it’s too bad the **Unsweetened with Chia Seeds** has no fruit.

Solution: divide your own mix of rolled oats, fruit, and nuts or seeds into jars or reusable containers. At around \$2 a pop for Quaker’s cups, you’ll save money, too.

Or take a cue from the Swiss and start with a bag of muesli. Most have little or no added sugars. We love **Bob’s Red Mill Old Country Style** or **Fruit & Seed**, which is jam-packed with almonds, raisins, pumpkin seeds, cranberries, blueberries, and cherries. Yum! 🍌



Grab a tasty muesli...or make your own blend.



# Hot Stuff

**Best Bites** (✓✓) are all—or nearly all—whole grain (we counted bran as whole), contain no added sugars, have no more than 100 milligrams of sodium per serving, and are free of sucralose and acesulfame potassium. They also have no more than 3 grams of saturated fat (not shown). **Honorable Mentions** (✓) can contain more sodium and up to 1½ teaspoons of total sugars. Cereals are ranked from least to most total sugars, then most to least fiber, most to least protein, and least to most calories.

## Multi-Serve (about ½ to 1 cup cooked)

	Calories	Total Sugars (tsp.)	Fiber (g)	Protein (g)
✓✓ Bob's Red Mill Organic High Fiber (45 g)	150	0	10	8
✓✓ Oat bran, any brand (40 g)	100	0	6	7
✓✓ Hodgson Mill Hearty Multi Grain (40 g)	150	0	6	7
✓✓ Bob's Red Mill 7 Grain (41 g)	140	0	6	6
✓✓ Wheatena (40 g)	150	0	6	4
✓✓ Purely Elizabeth Superfood Oats—except Cranberry Pumpkin Seed (40 g) <sup>1,G</sup>	160	0	5	7
✓✓ Earnest Eats Superfood Oatmeal Cocoa Cashews Pepitas (42 g) <sup>G</sup>	190	0	5	7
✓✓ Hodgson Mill Cracked Wheat (40 g)	130	0	5	6
✓✓ Bob's Red Mill Organic 6 Grain (40 g)	140	0	5	6
✓✓ Bob's Red Mill 5 Grain (35 g)	120	0	5	5
✓✓ Hodgson Mill Bulgur Wheat (40 g)	140	0	5	5
✓✓ Quaker Simple & Wholesome Organic Multigrain (40 g)	140	0	4	5
✓✓ Oats, plain, any brand or type (40 g)	150	0	4	5
✓✓ Bob's Red Mill 8 Grain (41 g) <sup>G</sup>	150	0	3	5
✓✓ Engine 2 Organic Rip's Power-Up Bowl Original (40 g) <sup>G</sup>	160	0	3	5
✓✓ Cream of Wheat Whole Grain 2½ Minute (33 g)	110	0	3	4
✓✓ Arrowhead Mills Organic Quinoa Rice & Shine (42 g) <sup>G</sup>	150	0	2	4
✓✓ Trader Joe's Organic Rice & Quinoa (42 g) <sup>G</sup>	150	0	2	4
✓✓ Arrowhead Mills Organic Rice & Shine (42 g) <sup>G</sup>	150	0	2	3
✓✓ Bob's Red Mill Brown Rice Farina (41 g) <sup>G</sup>	150	0	2	3
✓✓ Cream of Wheat 2½ Minute (33 g)	110	0	1	4
✓✓ Quaker Old Fashioned Grits (41 g)	150	0	1	4
✓✓ Bob's Red Mill Organic Creamy Buckwheat (41 g) <sup>G</sup>	140	0	1	3
✓✓ Cream of Rice (45 g) <sup>G</sup>	160	0	0	2
✓ Purely Elizabeth Superfood Oats Cranberry Pumpkin Seed (40 g) <sup>G</sup>	160	0.5	5	7
✓ Earnest Eats Superfood Oatmeal—except Cocoa Cashews Pepitas (42 g) <sup>1,G</sup>	180	0.5	5	6
✓✓ Engine 2 Organic Rip's Power-Up Bowl Double Berry (40 g) <sup>G</sup>	160	0.5	5	5
✓ Bob's Red Mill Fruit & Seed Muesli (32 g)	130	0.5	3	5
✓✓ Quaker Raisin Date Almond Muesli (54 g)	210	1	5	7
✓✓ Bob's Red Mill Old Country Style Muesli (35 g)	140	1	4	4
✓ Bob's Red Mill Tropical Muesli (28 g) <sup>G</sup>	120	1	3	3

## Single-Serve (1 package, oatmeal, unless noted)

✓✓ Nature's Path Organic Original Instant (50 g)	190	0	6	8
✓✓ Quaker Overnight Oats Unsweetened with Chia Seeds (50 g)	190	0	6	6

	Calories	Total Sugars (tsp.)	Fiber (g)	Protein (g)
✓ Cream of Wheat Whole Grain Instant (45 g)	150	0	5	6
✓✓ Nature's Path Organic Qi'a Superfood Cinnamon Pumpkin Seed (38 g) <sup>G</sup>	150	0	5 <sup>F</sup>	6
✓✓ Dr. McDougall's Organic Superfood (37 g) <sup>1,G</sup>	150	0	5	5
✓✓ Nature's Path Organic Qi'a Superfood Superseeds & Grains (38 g) <sup>G</sup>	150	0	4	6
✓✓ Nature's Path Organic Homestyle Instant (40 g) <sup>G</sup>	170	0	4	6
✓✓ Trader Joe's Unsweetened Instant (40 g) <sup>G</sup>	160	0	4	5
✓✓ Quaker Original Instant (28 g)	100	0	3	4
✓✓ Arrowhead Mills Organic Quinoa & Oat Instant (28 g) <sup>G</sup>	110	0	3	4
✓✓ Umpqua Oats Not Guilty Blueberry Apple Unsweetened (62 g)	250	0.5	8	9
✓ Trader Joe's Strawberry Raspberry cup (57 g)	220	1	6	9
✓ Purely Elizabeth Superfood Oats with granola (57 g) <sup>1,G</sup>	240	1	6	9
✓ Wild Friends Oats and Nut Butter cups (76 g) <sup>1</sup>	350	1	3	12
✓ Quaker High Fiber Instant (45 g)	160	1.5 <sup>S</sup>	10 <sup>F</sup>	4
✓ Purely Elizabeth Vibrant Oats Raspberry Pitaya (57 g) <sup>G</sup>	230	1.5	7	9
✓ Trader Joe's Tart Cherry, Chia & Pumpkin Seed cup (57 g)	230	1.5	6	9
✓ Think Thin Protein & Fiber Original Sprouted Grains (54 g)	200	1.5	5 <sup>F</sup>	10
✓ Quaker Simple & Wholesome Organic Multigrain Date & Almond (45 g)	170	1.5	4	5
✓ Dr. McDougall's Organic Lower Sugar Maple Brown Sugar Instant (38 g)	140	1.5	3	4
✓ Quaker 50% Less Sugar Instant (39 g) <sup>1</sup>	160	1.5	3	4
✓ Quaker Peanut Butter & Banana Instant (44 g)	170	2	4	6
✓ Quaker Peanut Butter & Honey Instant (44 g)	170	2	4	5
✓ Think Thin Protein & Probiotics (55 g) <sup>1,G</sup>	200	2.5	6 <sup>F</sup>	10
✓ Earnest Eats Protein Probiotic Coconut Warrior (71 g) <sup>G</sup>	310	2.5	5	15
✓ Bakery on Main Organic Oats & Happiness with Probiotic Cultures (54 g) <sup>1,G</sup>	220	2.5	5 <sup>F</sup>	7
✓ Nature's Path Organic Flax Plus Instant (50 g)	210	2.5	5	6
✓ Nature's Path Organic Maple Nut Instant (50 g)	210	2.5	4	5
✓ Quaker Instant with Antioxidants (46 g) <sup>1</sup>	170	2.5	4	4
✓ Quaker Steel Cut Quick 3-Minute (47 g) <sup>1</sup>	180	2.5	3	4
✓ Quaker Blueberries & Cream Instant (35 g)	130	2.5	2	3
✓ Quaker Protein Instant (62 g) <sup>1</sup>	240	3	5	10
✓ Quaker SuperGrains Instant (57 g) <sup>1</sup>	210	3	5 <sup>F</sup>	7
✓ Quaker Maple & Brown Sugar Instant (43 g)	160	3	3	4
✓ Quaker Strawberries & Cream Instant (35 g)	130	3	2	3
✓ Dr. McDougall's Stay Full Organic (71 g) <sup>1</sup>	300	3.5	9 <sup>F</sup>	8
✓ Quaker Overnight Oats—except Unsweetened with Chia Seeds (71 g) <sup>1</sup>	280	3.5	6	7
✓ Nature's Path Organic Apple Cinnamon Instant (50 g)	210	3.5	4	5
✓ Quaker Real Medleys (69 g) <sup>1</sup>	270	4	5	7

✓✓ Best Bite. ✓ Honorable Mention. <sup>1</sup> Average of the entire line or the varieties listed. <sup>G</sup> Gluten-free. <sup>F</sup> Number includes added processed fiber. <sup>S</sup> Contains sucralose. <sup>100</sup> Contains more than 100 mg of sodium.

**Daily Values** (for a 2,000-calorie diet): **Added Sugars:** 50 grams (12 tsp.). **Fiber:** 28 grams. **Sodium:** 2,300 mg. **Protein Daily Target:** 85 grams.

Source: company information. The use of information from this article for commercial purposes is strictly prohibited without written permission from CSPI.



## RIGHT STUFF

### Beany Rotini



There's a new kid on the pasta-made-of-beans block, and its name is **Barilla**.

Who wouldn't want pasta made out of fiber-rich, protein-packed bean or lentil flour rather

than ordinary white flour? Until today, maybe you. Many legume pastas are crumbly and taste, well, like beans.

Not Barilla. The **Red Lentil Rotini** or **Penne** and **Chickpea Rotini** or **Casarecce** don't quite match the springy texture of a traditional white pasta made of semolina wheat. But they're the closest yet.

It's no coincidence that Barilla picked rotini, penne, and casarecce. Short shapes are less likely to crumble than long, thin strands like spaghetti.

Just add your favorite pesto, garlic sauce, or marinara, and you're in business.

If you're looking for extra protein, you'll walk away with 13 grams (lentil) or 11 grams (chickpea) per serving—about 1 cup of cooked pasta, which has just under 200 calories. You'd get 7 grams of protein in ordinary white pasta and 8 grams in whole wheat.

And talk about fiber. To be a "good source," foods need 2½ grams per serving. These babies have 6 to 8 grams. Plus, they're richer in potassium than wheat.

And if you're gluten-free...so are these pastas.

Bring on the robeani!

[barilla.com](http://barilla.com)—(800) 922-7455

## FOOD PORN



### Belly Up



Pork bellies are *in*. And **The Cheesecake Factory** never disappoints.

Thank heavens the chain stepped up to the plate with its

**Pork Belly Sliders**—four mini-burgers with "slices of slow roasted smoked pork belly with barbecue sauce, cole slaw and fried pickles."

Naturally, they're on the appetizer menu. After all, who wouldn't want to start their meal with the equivalent of one, two, three, or four Big Macs?

Yes, a single slider has 520 calories and 10 grams (half a day's) saturated fat, plus 900 milligrams of sodium, all on a not-so-mini, white flour, Wonder Bread-like bun.

Split the plate with your date, and you're talking 1,000+ calories each. What better way to get ready for one of the Factory's 1,500-calorie entrées before you dig into a 1,200-calorie slice of cheesecake?

Or try the **Roadside Sliders** (each is equal to a McDonald's Hamburger) or **Southern Fried Chicken Sliders** (each with the calories of a McDonald's Cheeseburger). Heaven forbid you should leave the restaurant without at least one burger.

"Everybody loves sliders," the chain's chief culinary officer told [Vegas Player Magazine](#) in July. "These are more upscale."

Leave it to The Cheesecake Factory to give new meaning to the word "upscale."

[thecheesecakefactory.com](http://thecheesecakefactory.com)—(818) 871-3000



## DISH of the month

### Red Onion Topper

Sauté 1 sliced red onion in 1 Tbs. olive oil until browned. Season with 2 Tbs. red wine vinegar, ½ tsp. honey, ¼ tsp. black pepper, and ⅛ tsp. salt. Enjoy on roasted vegetables, salads, sandwiches, chicken, or fish.

## quick tip

Swap half your pasta for sautéed vegetables. Try tomatoes, spinach, broccoli, and garlic. With a sprinkle of grated parmesan and black pepper, you may not even need sauce.

