

# Nutrition Action

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CENTER FOR SCIENCE IN THE PUBLIC INTEREST

## BIG FAT MYTHS

### Why advice to cut meat & dairy is under attack

BY BONNIE LIEBMAN

“Eat butter,” declared the *Time* magazine cover in June 2014. “Scientists labeled fat the enemy. Why they were wrong.”

“Butter, red meat not so bad for you after all?” asked CBS News in February.

“For decades, the government steered millions away from whole milk. Was that wrong?” asked

a front-page article in the *Washington Post* in October.

Foods that are high in saturated fat are making headlines. Is that because new research shows that they’re harmless? Or because those headlines grab eyeballs...and the meat industry is fighting new advice to eat less beef and pork?

*Continued on page 3.*



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MEMO FROM MFJ

# Slow progress? We'll take it!



When the food industry digs in, it can take years, or decades, to get things done. But progress is occurring, and I'm proud that the Center for Science in the Public Interest (*Nutrition Action's* publisher) has been part of it. Some examples:

■ **Soda pop.** In the 1980s and '90s, as consumption soared, I thought there might be no limit to how much soda Americans could drink.

In 1998, CSPI published "Liquid Candy," our initial blast at the soda monster. Since then, we have called on the Food and Drug Administration to require warning notices on sodas and to limit the sugar content of sugar drinks. (The FDA hasn't responded to either request.)

We also supported taxes on soft drinks and produced some hard-hitting videos taking on Big Soda. (See [bit.ly/HappinessStand](http://bit.ly/HappinessStand), [bit.ly/ShareHonesty](http://bit.ly/ShareHonesty), and [bit.ly/ChangeTheTuneOnSoda](http://bit.ly/ChangeTheTuneOnSoda).)

*The good news:* The industry is losing (see Nov. cover story). Per-capita consumption of carbonated soda has dropped by 25 percent since 1998, and Pepsi has dropped by an astounding 50 percent.

(Big Soda is responding by spending billions to promote pop in poor countries. Look for a CSPI report on that topic shortly.)

■ **Antibiotics.** In 1977, the FDA commissioner wanted to ban certain antibiotics that were used on "factory farms." The FDA feared that the profligate use of those drugs—our 1998 report called them the "Crown Jewels of Medicine"—would foster untreatable infections from antibiotic-resistant bacteria.

But some farmers and the animal-drug industry went to their friend, the powerful chair of the House Appropriations Committee, who threatened to cut the FDA's budget if the agency proposed a ban. Ever since, the industry has fought off effective laws...while more and more antibiotic-resistant bacteria are making us sick.

*The good news:* Consumer pressure has spurred a growing number of companies to stop producing or using poultry or red meat that is raised using antibiotics (see Nov., p. 9).

Meanwhile, we're waiting for the U.S. Department of Agriculture's response

to our petition to ban the sale of meat or poultry that is contaminated with antibiotic-resistant *Salmonella*.

■ **Sodium.** Ten years ago, CSPI petitioned the FDA to set limits on sodium in processed foods, a measure that the Institute

of Medicine endorsed five years later. The FDA said that it would publish voluntary targets for companies, but never has. So in October, we sued the FDA, asking the court to force the agency to respond to our petition.

*The good news:* Even without FDA action, there's progress. Though we still have a long way to go, Walmart, Kraft, and many other major companies have trimmed sodium in some of their foods.

So kudos to all the groups and individuals who never stopped campaigning for a healthier food supply.

Michael F. Jacobson, Ph.D.  
President  
Center for Science in the Public Interest



Our latest video exposing Big Soda's ad tactics.

The contents of NAH are not intended to provide medical advice, which should be obtained from a qualified health professional.

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## The Next Nutrition Action

The combined January/February issue should be in your mailbox by late January.

# BIG FAT MYTHS

Why advice to cut meat & dairy is under attack

“Attack on meat has industry seeing red,” ran the headline in *Politico* last February. “The defenders of meat—among the most powerful lobbyists—are planning to attack the panel’s suggestions on multiple fronts.”

The “attack on meat” was the suggestion that we eat a diet “lower in red and processed meat.” The “panel” was 14 scientists who were asked to review the evidence on diet and health for the government’s 2015 *Dietary Guidelines for Americans*.

But the meat industry didn’t have to take on the scientists alone. It got help from Nina Teicholz, a journalist and author of *The Big Fat Surprise: Why Butter, Meat & Cheese Belong in a Healthy Diet*, and from reporters on the lookout for man-bites-dog stories. Here are 10 myths their efforts have spawned.

## 1 Experts now say that saturated fat is harmless.

“Whole milk is okay. Butter and eggs too. What’s next — bacon?” ran the headline in the *Washington Post* in October.

Wait, what?

A few scientists quoted in another (front-page) *Washington Post* article may have said that whole milk is “okay.”

And Mark Bittman, former food columnist for the *New York Times*, may have announced last year that “Butter is Back.” But the expert panels that sift through the best data disagree.

“We recommended a limit on saturated fat and a dietary pattern that replaces it with unsaturated fat, especially polyunsaturated fat,” says Alice H. Lichtenstein, director of the cardiovascular nutrition laboratory at Tufts University.

She’s talking about the 2013 Lifestyle Interventions to Reduce Cardiovascular Risk report issued by the American Heart Association and the American College of Cardiology in collaboration

with the National Heart, Lung, and Blood Institute.<sup>1</sup> In February, a report from another panel of scientists—the Dietary Guidelines Advisory Committee—reached the same conclusion.<sup>2</sup>

“Butter is not back,” says Frank Hu, professor of nutrition and epidemiology at the Harvard T.H. Chan School of Public Health, who served on that panel.

“Saturated fat is still bad for heart disease risk,” notes Hu. “Evidence from studies on thousands of people shows that if you replace saturated fat with unsaturated fat, you reduce your risk of heart disease. If you replace saturated fat with refined carbs, you don’t reduce your risk.”<sup>3-6</sup>

And, despite the hubbub, that advice—to replace saturated with unsaturated fats—isn’t new. It was in the previous (2010) *Dietary Guidelines for Americans*.<sup>7</sup>

So why the fuss over the 2015 guidelines

report? “The meat lobby was upset that the committee’s report calls for diets that are ‘lower in red and processed meats,’” explained *Fortune* magazine. What’s more, the committee’s advice

was aimed at protecting both our health *and* the environment.

Enter the lobbyists. “The government’s new dietary guidelines ignite a huge food industry backlash,” ran the headline in the *Los Angeles Times*.

In October, government officials caved: the environment was out.

“This is about politics, not science,” responded Marion Nestle, professor of nutrition & food studies at New York University.

**Bottom line:** Most experts agree that we should replace saturated fats with foods rich in unsaturated fats like seafood, nuts, salad dressing, mayo, and oils like soy, canola, and olive.

## 2 Changing fats doesn’t lower the risk of dying.

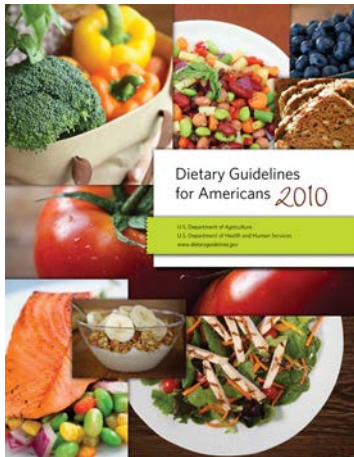
“It has a big impact on the diet of American citizens, and those of most Western nations, so why does the expert advice underpinning US government dietary guidelines not take account of all the relevant scientific evidence?” asked an “investigation” published in the *BMJ* (formerly the *British Medical Journal*) in September.<sup>8</sup>

The investigation’s author: journalist Nina Teicholz.

“It’s a bogus investigation,” says Harvard’s Frank Hu. “It’s riddled with errors and misleading statements. It’s mind-boggling that a top medical journal like the *BMJ* published such a poor-quality article.” (A number of scientists—including those at our Center for Science in the Public Interest—have urged the journal to retract the article.)

For example, Teicholz says that a 2012 Cochrane review “failed to confirm an association between saturated fats and heart disease.”<sup>9</sup>

However, Teicholz contradicts herself in a supplement that accompanied her article. “The overall conclusion



Why didn’t the 2010 *Guidelines* cause a fuss? Because they didn’t anger the meat lobby.



is therefore that while saturated-fat restriction appears to reduce heart attack risk, it does not reduce overall or cardiovascular mortality (death), which is arguably the more important end point," she opines.

Sloppy, yes. (The *BMJ* had to run a correction.) But is she right about death rates?

"There's almost no medical intervention that will affect overall mortality unless it has a huge effect on one or more very frequent causes of death," explains Martijn Katan, a cardiovascular disease expert and emeritus professor of nutrition at Vrije University in Amsterdam.

"For instance, wearing a seatbelt, treating disease with antibiotics, or using an ambulance to pick up people who have been in an accident obviously saves lives, but it doesn't show up in overall mortality rates because the number of deaths it saves is simply not large enough."

Likewise, "the number of fatal heart attacks during most studies is too small to see a difference in cardiovascular mortality," adds Katan.

**Bottom line:** Don't be swayed by ill-informed arguments about death rates.

### 3 Cutting sat fat didn't prevent heart disease in the biggest trial done.

"There have been at a minimum, three National Institutes of Health funded trials on some 50,000 people showing that a diet low in fat and saturated fat is ineffective for fighting heart disease, obesity, diabetes, or cancer," writes Teicholz. "Two of these trials are omitted from the [committee's] review."<sup>8</sup>

Yes, those two trials were omitted. But they didn't look at heart disease, obesity, diabetes, or cancer.<sup>10,11</sup>

The third (and biggest) trial, the Women's Health Initiative, was designed to see if a diet low in *all* fats could lower the risk of breast cancer. (It didn't.<sup>12</sup>)

"That's one of Teicholz's biggest errors," notes Lichtenstein. "Those women were not told to replace saturated fat

with unsaturated fat, and they didn't."

What's more, the trial didn't have anywhere near enough power to detect a drop in heart disease, as its investigators made clear.<sup>13</sup>

**Bottom line:** Ignore claims that large trials contradict advice on sat fat.

### 4 Advice to eat less meat is based on weak science.

The North American Meat Institute called it a "dramatic and alarmist overreach." (No surprise there.)

In late October, the International Agency for Research on Cancer an-



Sausage, bacon, and other processed meats are human carcinogens, says a major new report.

nounced that processed meats (like bacon, sausage, hot dogs, and cold cuts) are "carcinogenic to humans"—like cigarettes and asbestos, though not as potent—and that red meats (beef, pork, lamb, and veal) are "probably carcinogenic to humans."<sup>14</sup>

For every daily 2 oz. serving of processed meat (or 3 oz. serving of red meat), your risk of colorectal cancer climbs by about 18 percent, said the cancer experts (assuming that red meat also turns out to be carcinogenic).

The American Cancer Society and World Cancer Research Fund have been urging people to eat less red and processed meat for years.<sup>15,16</sup>

"Science does not support international agency opinion on red meat and cancer," responded the National

Cattlemen's Beef Association.

That's a shocker. It's the usual industry playbook: instill doubt about the science.

**Bottom line:** Eat less processed and red meat.

### 5 Only small LDL ("bad") cholesterol is harmful.

"It turns out that 'bad' cholesterol comes in two forms," explained the front-page article in the *Washington Post*.

"One consists of particles that are smaller and denser and these appear to be strongly linked to heart disease; the other type of 'bad' cholesterol consists of lighter, fluffier particles that appear to have lesser effects on heart disease.

"Saturated fats do raise the levels of 'bad' cholesterol, but seem to produce mainly the lighter, fluffier and less dangerous particle."

Only one problem: it's not true.

"Saying that small LDL are more harmful is a total distortion of the science," says Frank Sacks, professor of cardiovascular disease prevention at the Harvard T.H. Chan School of Public Health. "Large LDL are like lethal packets of cholesterol destroying the artery wall."<sup>17</sup>

Coincidentally, a chief proponent of the small-LDL-is-worse theory—Ronald Krauss, a professor of medicine at the University of California, San Francisco—has been funded by the dairy industry for decades.

Oddly, in 2011, Krauss published a study showing that full-fat dairy increases *small* LDL.<sup>18</sup> Oops.

**Bottom line:** Don't worry about LDL size. High levels of LDL increase your risk of heart disease.

### 6 Eating saturated fat raises "good" cholesterol.

"While consumption of saturated fats tends to raise levels of 'bad' cholesterol in the blood, they also tend to raise the levels of 'good' cholesterol levels, too, and that may have compen-

## WHAT TO EAT



Odds are, you're not eating saturated fat—or any other kind of fat—for

dinner. You're eating *food*.

Which foods? The scientists advising the government on the 2015 *Dietary Guidelines* recommended dietary patterns that are:

**Rich** in vegetables, fruit, whole grains, seafood, legumes, and nuts

**Moderate** in low- and non-fat dairy products and (for adults) alcohol

**Lower** in red and processed meat

**Low** in sugar-sweetened foods and beverages and refined grains

News flash: Much of that advice has been the same since the first *Guidelines* came out in 1980.

sating effects," explained the front-page *Washington Post* article.

But does raising HDL ("good") cholesterol prevent heart disease?

"We used to think so," says Katan. "But all the recent evidence—on drugs that raise HDL or on people who have genetically low HDL—hasn't supported the idea that changing HDL will change your risk."

The case isn't closed, he adds. For example, the drugs may raise HDL via the wrong pathway. But it's also possible that HDL is just an innocent bystander.

"High HDL could be an indicator of people doing healthy stuff like running, staying slim, or not smoking," says Katan.

In any case, one thing is clear.

"Certainly, the evidence for HDL is nothing like the evidence for LDL," says Katan. "LDL's impact on heart disease risk is one of the most consistent findings in all of biomedical research."

**Bottom line:** Lowering LDL cuts the risk of heart disease. It's not clear if raising HDL protects the heart.

## 7 The saturated fat in dairy doesn't raise cholesterol.

"Repeated research on milk, not funded by the industry but by public institutions, has provided evidence that the fats in milk are, for some reason, different," claimed the front-page *Washington Post* article.

"In 2013, New Zealand researchers led by Jocelyne R. Benatar collected the results of nine randomized controlled trials on dairy products. In tallying the tests on 702 subjects, researchers

could detect no significant connection between consuming more dairy fat and levels of 'bad' cholesterol. (Four of the nine studies included in the tally were funded by the industry. Those results were consistent with those of the trials funded by government entities.)"

That would be impressive...if it were true.

In fact, five of the nine studies urged people to eat low-fat dairy, so it's no surprise that their bad cholesterol didn't climb.<sup>19</sup> Only one study—Benatar's—tested high-fat dairy *and* had no industry funding or industry co-author.

And in her study, people who were told to eat more high-fat dairy had *higher* LDL than those who didn't change their diets.<sup>20</sup>

"When studies are funded by the dairy industry, the results are predictable," says Katan. "They almost always have an answer that is useful for dairy marketing."

How can industry funding influence the results?

"There are a number of ways to work toward the answer that you want," explains Katan. "It depends on what kind of question exactly you ask, how many people are in your study, your statistical analyses, how carefully you do the study. If you have a small number of people and a sloppy study, you'll get a zero answer."

That may explain why the studies cited by Benatar found zero effect.

"For some 70 years now, studies have very consistently found that saturated fat raises cholesterol and polyunsaturated fats lower it," says Katan. "There have been hundreds of trials, very high quality, done without influence by the

industries like the meat and dairy industry that have a stake in the results."

Dairy fat may indeed be different, but so far, the evidence is skimpy.

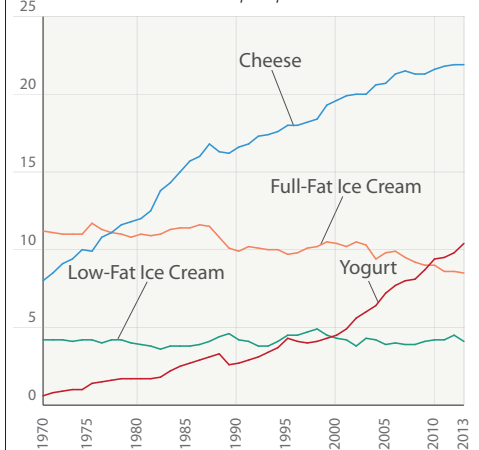
"If you want to say that dairy or that certain dairy foods have negligible effect on cholesterol, you need extraordinary evidence for such a claim," notes Katan. "The evidence that we have is very weak and fragmentary. It doesn't meet the regular standards in the field of diet and blood lipids."

There's a sense of *déjà vu*, he adds. "It's a pattern with the dairy industry, that every five or ten years they'll come out with some new intriguing component of dairy which their research shows is good for you and neutralizes the known effects of saturated fat.

"After a while the component is tested by independent researchers and shown to be not effective. And then it's just a matter of time before the dairy

## CHEESE CRAZE

Pounds per person



We've been "clearing our plates of meat, eggs and cheese," wrote Teicholz in the *New York Times* in February. (The *Times* had to run a correction.)

Source: U.S. Department of Agriculture.

industry comes up with something else. It's not great science."

**Bottom line:** The best studies don't justify a switch from low-fat to high-fat dairy.



## 8 Dairy eaters don't get heart disease.

In a study of roughly 2,800 U.S. adults, explained the front-page *Washington Post* article, researchers using a blood sample “could detect how much dairy fats each had consumed. And over the eight year follow up period, those who had consumed the most dairy fat were far less likely to develop heart disease compared to those who had consumed the least.”<sup>21</sup>

Case closed? Not quite. Some studies disagree. When researchers tested blood samples from women in the Nurses' Health Study, those with the highest markers of dairy fat had more than twice the risk of heart disease.<sup>22</sup>

What's more, it's not clear that what researchers measure in blood reflects how much dairy people consume.

“Interpreting studies on dairy biomarkers is complicated,” explains Harvard's Frank Hu. “The measurement is difficult because the amounts are so low, and they're not stable over time.”

Nor are biomarkers highly correlated with what people say they eat.<sup>23</sup>

And it's always possible that people who eat more dairy do other things that protect their health.

“In the Western world, people who drink a lot of milk are the more health-conscious, better-educated people who also do other things like physical exercise and staying slim, etc.,” says Katan. “The less privileged drink soft drinks.”

**Bottom line:** Studies haven't proven that dairy fat is good for your heart.

## 9 The real enemy is carbs, not saturated fat.

“Two meta-analyses have concluded that a moderate to strict low carbohydrate diet is highly effective for achieving weight loss and improving most heart disease risk factors in the short term (six months),” wrote Teicholz in the *BMJ*.

Well, sort of.

“Significant weight loss was observed with any low-carbohydrate or low-fat

diet,” concluded one of the meta-analyses. “This supports the practice of recommending any diet that a patient will adhere to in order to lose weight.”<sup>24</sup>

“That's also essentially what the dietary guidelines report said,” says Tufts' Alice Lichtenstein. “Find any diet that cuts calories that you can live with in the long run.”

And it's also the advice of experts at the Obesity Society, the American Heart Association, the American College of Cardiology, and the National Heart, Lung, and Blood Institute, who did a rigorous review of the science.<sup>25</sup>

(As for the other meta-analysis, it showed that blood pressure and



Most restaurant entrées—like this BBQ Chicken Chopped Salad at California Pizza Kitchen—have at least 1,000 calories.

some other cardiovascular risk factors improve *when obese participants lose weight*.<sup>26</sup> That's what weight loss does, no matter which diet you use.)

**Bottom line:** We eat too many refined carbs (mostly sugars and white flour), but a low-carb diet is no magic bullet.

## 10 Diet advice made us fat.

“Scientists have to reckon with the fact that the obesity epidemic basically began with the first dietary guidelines,” Teicholz told CBS News in February. “You can't look at that and not think we've done something terribly wrong.”

*Seriously?*

So we didn't get fat because restaurants served us super-sized cheeseburgers, fries, shakes, pizza, fried chicken, burritos, cheese nachos, choc-

olate-dipped waffle ice cream cones, movie theater popcorn (by the bucket), cookies, cupcakes, doughnuts, and soda?

Advice from the government has had more impact than the billions that Coca-Cola, Pepsi, Gatorade, McDonald's, Taco Bell, KFC, Pizza Hut, and Dunkin' Donuts have spent on advertising?

It's not just fast food. A typical entrée at sit-down restaurants like Applebee's, California Pizza Kitchen, Chili's, Maggiano's Little Italy, Outback Steakhouse, T.G.I. Friday's, and Uno Pizzeria & Grill has about 1,000 calories. So do entrées at non-chain restaurants.<sup>27</sup> At The Cheesecake Factory, many entrées have 2,000 calories.

Food industry executives must love hearing Teicholz and others blame the obesity epidemic on advice like the *Dietary Guidelines for Americans*.

As if.

Here's the kicker: If the guidelines were so powerful, why didn't their advice (since 1980) to eat less sugar keep us from binging on it?

**Bottom line:** Big Food, not diet advice, led to the obesity epidemic. 🍌

<sup>1</sup> www.nhlbi.nih.gov/health-pro/guidelines/in-develop/cardiometabolic-risk-reduction/lifestyle.

<sup>2</sup> health.gov/dietaryguidelines/2015-scientific-report.

<sup>3</sup> *Cochrane Database Syst. Rev.* 2015. doi:10.1002/14651858.CD011737.

<sup>4</sup> *PLoS Med.* 2010. doi:10.1371/journal.pmed.1000252.

<sup>5</sup> *Am. J. Clin. Nutr.* 89: 1425, 2009.

<sup>6</sup> *J. Am. Coll. Cardiol.* 66: 1538, 2015.

<sup>7</sup> health.gov/dietaryguidelines/2010.

<sup>8</sup> *BMJ* 2015. doi:10.1136/bmj.h4962.

<sup>9</sup> *Cochrane Database Syst. Rev.* 2012. doi:10.1002/14651858.CD002137.pub3.

<sup>10</sup> *JAMA* 278: 1509, 1997.

<sup>11</sup> *Arterioscler. Thromb. Vasc. Biol.* 20: 1580, 2000.

<sup>12</sup> *JAMA* 295: 629, 2006.

<sup>13</sup> *JAMA* 295: 655, 2006.

<sup>14</sup> *Lancet Oncol.* 2015. doi:10.1016/S1470-2045(15)00444-1.

<sup>15</sup> aicr.org/continuous-update-project/colorectal-cancer.html.

<sup>16</sup> *CA Cancer J. Clin.* 62: 30, 2012.

<sup>17</sup> *J. Clin. Endocrinol. Metab.* 88: 4525, 2003.

<sup>18</sup> *J. Nutr.* 141: 2180, 2011.

<sup>19</sup> *PLoS One* 2013. doi:10.1371/journal.pone.0076480.

<sup>20</sup> *Eur. J. Prev. Cardiol.* 21: 1376, 2014.

<sup>21</sup> *J. Am. Heart Assoc.* 2013.

doi:10.1161/JAHA.113.000092.

<sup>22</sup> *Am. J. Clin. Nutr.* 86: 929, 2007.

<sup>23</sup> *J. Am. Heart Assoc.* 2013.

doi:10.1161/JAHA.113.000393.

<sup>24</sup> *JAMA* 312: 923, 2014.

<sup>25</sup> www.nhlbi.nih.gov/health-pro/guidelines/in-develop/obesity-evidence-review.

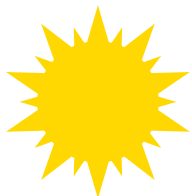
<sup>26</sup> *Obes. Rev.* 13: 1048, 2012.

<sup>27</sup> *JAMA Intern. Med.* 173: 1292, 2013.



# VITAMIN D

From A to Z



## Why we need it

Vitamin D helps us absorb calcium. People with low levels of D in their blood lose bone more rapidly as they age and are more likely to fracture a bone. Vitamin D can also help build muscle, which may lower the risk of falls in older people.

the risk of falls in older people.



## What are researchers looking at

The VITAL Trial is giving 2,000 IU a day or a placebo to 20,000 healthy older men and women, to see if D can lower the risk of cardiovascular disease, diabetes, memory loss, depression, atrial fibrillation, cardiac function, bone health, fractures, falls, knee pain, asthma, thyroid disease, and autoimmune conditions like rheumatoid arthritis and lupus.

tions like rheumatoid arthritis and lupus.



## Too little? Too much?

### How much adults need every day:

People 70 and younger: 600 IU  
People over 70: 800 IU

**Safest maximum daily intake:**  
4,500 IU

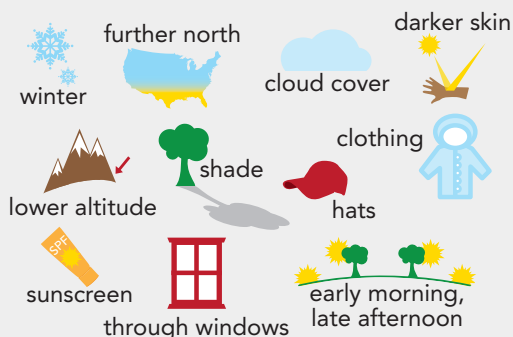


## Getting your D's

Other than salmon and other fatty fish, most foods aren't naturally rich in vitamin D. Many foods (milk, most cereals, and margarine, for example) are fortified with D, so check the labels. (They list D as a percent of the Daily Value,

which is 400 IU.) There are two forms of vitamin D: D3 is manufactured from the lanolin in sheep's wool, and D2 comes from plants. They're equal in potency.

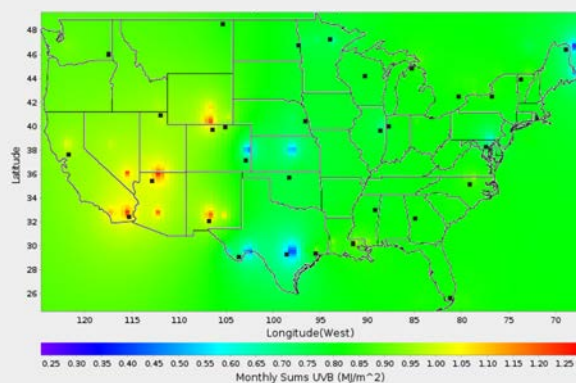
## When sunlight makes less D



## Follow the Sun

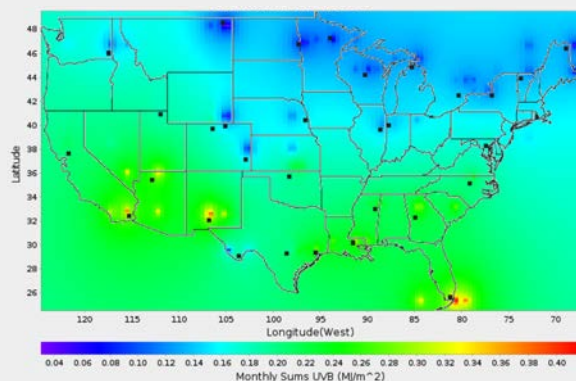
Ultraviolet (UVB) radiation from the sun penetrates uncovered skin and converts a compound in the skin into what eventually becomes vitamin D. But your skin's ability to make vitamin D depends on where you live and what time of year it is. Here's how the intensity of UVB changes from north to south and from summer to winter.

### June



As long as you're in a green, yellow, or red area—in other words, pretty much anywhere on the map—your body will easily make vitamin D when uncovered skin is exposed to the sun's UVB radiation in June.

### November



If you're in a blue or turning-blue area—anywhere except the South and Southwest—in November, you're not going to get much UVB sunlight to make vitamin D. By the end of December, the entire country—with the exception of South Florida and a few pockets in the Southwest—is solid blue.

Source: USDA UV-B Monitoring and Research Program at Colorado State University ([uvb.nrel.colostate.edu/UVB](http://uvb.nrel.colostate.edu/UVB)).

Note: The small blue dots represent locations of measuring stations.



## Colon Conundrum

In 1999, researchers found that calcium supplements lowered the risk of precancerous colon polyps. Not so, says a new trial by some of the same researchers. Scientists randomly assigned 2,259 people with a history of polyps to take calcium (1,200 milligrams a day), vitamin D (1,000 IU a day), both, or a placebo. After three to five years, there was no difference in the number of polyps among the four groups. The authors couldn't explain the contradictory calcium findings, though they noted that a higher dose or longer trial might have found benefits for vitamin D.

On the upside, people who took calcium had a significantly lower risk of heart attacks. The number of heart attacks was small, and the study wasn't designed to look at heart attacks, but the results are reassuring in view of claims that calcium supplements harm the heart.

**What to do:** Until we know more, shoot for the recommended daily intakes of calcium (1,000 to 1,200 mg a day from food *and* supplements combined) and vitamin D (600 IU if you're 70 or younger and 800 IU if you're older). To lower your risk of colon cancer, lose (or don't gain) excess weight, exercise, and cut back on processed and red meats.

*N. Engl. J. Med.* 373: 1519, 2015.

## Wine: No Magic Bullet

Wine may help explain why a Mediterranean diet may protect the heart. But no long-term trials have ever tested whether encouraging people to drink wine would lower their risk factors for heart disease. Until now, that is.

Scientists studied 224 Israelis with type 2 diabetes who typically drank one alcoholic beverage or less per week. Each was randomly assigned to drink a 5 oz. glass of red wine, white wine, or mineral water—all provided by the study—each night with their (presumably Mediterranean) dinner.

After two years, not much changed. The researchers found no difference in weight, blood pressure, liver function, or medications taken.

HDL ("good") cholesterol levels in-

creased in the red wine drinkers—but not the white wine drinkers—compared to those who got water. (It's not clear that raising HDL lowers the risk of heart disease.)

In contrast, fasting blood sugar levels dropped in the white wine drinkers—but not the red wine drinkers—compared to those who got water. However, no wine lowered hemoglobin A1c, a long-term measure of blood sugar.

Were wine drinkers happier? They reported sleeping better, but no better quality of life.

**What to do:** If you don't drink alcohol, don't try to lower your risk of heart disease by starting.

*Ann. Intern. Med.* 163: 569, 2015.

## Marriage Penalty?

Has your spouse gained weight lately? You could be next.

Researchers tracked nearly 3,900 married couples who were 45 to 65 years old when they entered the Atherosclerosis Risk in Communities Study.

Participants whose spouses became obese during the 25-year study were roughly twice as likely to become obese as those whose spouses didn't become obese. Having a spouse who started out obese, and who stayed that way throughout the study, didn't increase risk.

**What to do:** If your wife or husband is gaining weight, watch what you eat and how much you exercise.

*Am. J. Epidemiol.* 2015. doi:10.1093/aje/kwv112.

## Sitting & Blood Flow



Sitting for hours on end may make your blood vessels less flexible.

Researchers had 11 healthy young men sit for six hours without getting up or moving their legs. Sitting reduced blood flow and shear stress in the lower legs and forearms. Shear stress can help blood vessels relax and may help keep them healthy.

What's more, small blood vessels in the participants' arms and legs were less able to relax at the end of the six-hour sit.

The good news: The flexibility of the blood vessels in their legs (though not their arms) was completely restored after a 10-minute walk.

**What to do:** Get up out of your chair and take a brief walk every hour or so. 🚶

*Exp. Physiol.* 100: 829, 2015.





# URINE TROUBLE

## CURBING ACCIDENTAL LEAKS

BY DAVID SCHARDT

**R**oughly one out of every three women over the age of 40 say that they have experienced urinary leakage at some time in their lives. Many men—especially those with an enlarged prostate—have as well. If you have occasional problems, here's what could help.

### WOMEN

"I have to admit it to myself...I have some sort of incontinence issue," a woman in her late 40s recently wrote on [experienceproject.com](http://experienceproject.com), a website where people have anonymously shared more than 36 million life experiences.

"I can hold urine in my bladder—some days better than others...This has affected where I will go and what I will do...I am tired of living in this prison and just want to be free."

More than a third of women say they've experienced urine leakage at one time or another.<sup>1</sup> For many, it's a daily nuisance.

"Incontinence is more common in women, and it becomes more likely as we get older," says Diane Newman, co-director of the Penn Center for Continence and Pelvic Health at the University of Pennsylvania Medical Center.

"One of the biggest obstacles in dealing with incontinence is the perception that it's inevitable and irreversible."

Less than half the women with the condition seek medical help.<sup>1</sup> But there are things you can do to help prevent or lessen incontinence, says Newman.

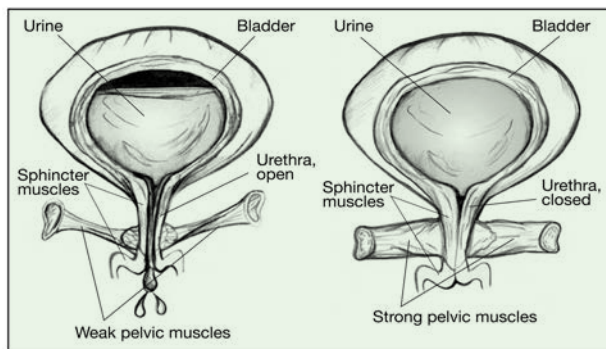
"How well we manage our body weight, how we manage our bowels, the kind of exercise we engage in, and what we drink can make a difference."

### DO THE KEGEL

When you urinate, the muscles in the wall of your bladder contract, which forces urine out of the bladder and into

the urethra, the tube that carries urine out of the body. But before urine can start to flow, sphincter muscles that surround the urethra need to relax.

If your bladder muscles suddenly contract, or if your sphincter muscles aren't strong enough to hold back the flow, urine could leak. That's especially true if your pelvic floor muscles—part of the scaffolding that supports your bladder—are weak (see illustration).



Weak pelvic muscles let the bladder sag out of position. That can stretch the opening to the urethra, letting urine leak out.

"If weakened pelvic floor muscles can't handle the sudden pressure from a cough, a sneeze, a laugh, or some kinds of exercise, urine gets pushed out of the bladder," says Janet M. Shaw, an exercise scientist at the University of Utah. "That's called stress incontinence."

What weakens pelvic muscles? "They stretch a lot during pregnancy, and especially during childbirth," notes Shaw. That can stretch the opening where the bladder empties into the urethra. It's one reason women are more susceptible to leakage.

"Doing exercises to strengthen the pelvic floor muscles helps many women with incontinence," says Shaw. "It's like other muscles. If you exercise them, you can keep them strong."

To do those exercises—known as Kegels—squeeze your muscles as though you're trying to hold in urine or gas, and hold them tight for 10 seconds. Ideally, aim for three sets of 10 repetitions a day.

It's not always weak muscles that are to blame. Abnormal nerve signals can cause your bladder muscles to involuntarily contract. If that happens, you feel a strong, sudden need to urinate. If your sphincter muscles aren't strong enough to hold back the flow, urine escapes.

That's called *urgency* incontinence or an overactive bladder.

### WATCH YOUR WEIGHT

"Weight gain and obesity are major risk factors for developing incontinence," explains Newman. In part, that's because the extra weight puts added pressure on and weakens the pelvic floor muscles.

During the five-year Study of Women's Health Across the Nation, more than half of the 2,702 participants, who ranged in age

from 40 to 55, reported developing at least monthly incontinence. The more they weighed, the greater their odds of incontinence and the worse it was.<sup>2</sup>

The good news: Losing excess weight helps restore bladder control in women.

"The most recent study shows that women can improve their symptoms by losing 5 percent to 10 percent of their body weight," notes Newman.

In the Program to Reduce Incontinence by Diet and Exercise (PRIDE), researchers recruited 338 overweight or obese women who reported having at least 10 incontinence episodes a week.



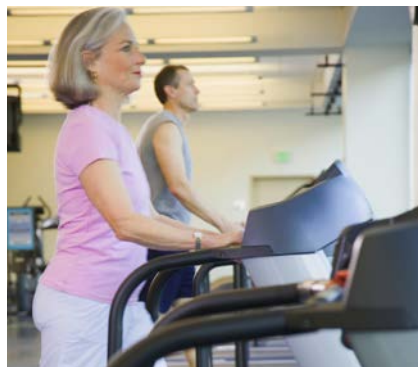
Two-thirds were randomly assigned to a weight-loss diet of 1,200 to 1,800 calories a day, weekly group meetings, and brisk walking or similar exercise. The other third—the control group—were offered classes about the benefits of weight loss, exercise, and healthy eating, but weren't given a weight-loss diet.

After six months, the women on the diet and exercise program lost an average of 18 pounds and reported 11 fewer episodes of incontinence per week. Those in the control group lost 4 pounds and reported 6 fewer episodes.<sup>3</sup>

## EXERCISE

“Women who do regular moderate exercise like walking may have a lower risk of stress incontinence,” says the University of Utah’s Janet Shaw.

For 15 years, Harvard researchers tracked more than 36,000 women aged 54 to 79 in the Nurses’ Health Study. Those who were the most active (they walked at a moderate pace or did the equivalent for about 10 hours a week) were roughly 20 percent less likely to leak urine at least once a week than those who were the least active (they did exercise equal to moderate walking for 2 hours or less a week).<sup>4</sup>



Brisk walking or other moderate exercise may help reduce incontinence.

Exercise also helped the younger women in the Nurses’ Health Study II, though their risk of incontinence was smaller.<sup>5</sup>

“If you’re doing a healthy amount of moderate activity, you’re probably also contracting your pelvic floor muscles,” Shaw explains. “That’s because those muscles tend to co-contract with the abdominal muscles.”

And better-toned pelvic floor muscles should mean less urine leakage with physical effort, coughing, or sneezing.

Even so, “activities that involve repetitive impact, like volleyball, basketball, running, and jumping rope, can cause urinary leakage, even in young, fit women,” says Shaw. That can happen when sudden pressure overwhelms the sphincters.

## CAFFEINE

There is no solid evidence that caffeine causes urinary symptoms, but if you’re a Starbucks regular, it might.

In the Nurses’ Health Study, women who consumed more than 450 milligrams of caffeine a day—a grande coffee at Starbucks has 260 mg—were about 35 percent more likely to have urge incontinence over a four-year period than women who consumed less than 150 mg.<sup>6</sup>

And in an Australian clinical trial, men and women with urge incontinence who cut their customary caffeine intake—from about 250 mg a day to about 100 mg—for 30 days reported three fewer episodes of urgency every 24 hours. Those who didn’t cut caffeine reported only one fewer episode.<sup>7</sup>

“Limiting caffeinated coffee to less than two cups a day may help prevent or improve urinary symptoms, especially for high-caffeine consumers,” says Mary Townsend, an instructor in medicine at Brigham and Women’s Hospital in Boston. But people should be careful not to reduce fluid intake too much.

“That can actually cause urinary symptoms by increasing urine concentration, and can be dangerous, particularly in older people,” cautions Townsend.

## EMPTY POCKETS, NOT BLADDERS

Thinking about taking a supplement to help control your bladder? Here’s the evidence behind two popular ones.

■ **For women.** Azo Bladder Control, an extract of pumpkin seeds and soybeans, “helps control the need to go to the bathroom,” “helps reduce occasional urgency,” and “supports a good night’s sleep,” claims its marketer.

What the company doesn’t mention is that the only good study of Azo, which was funded by the Belgian firm that produces the extract, showed that it doesn’t work very well.<sup>1</sup>

In the trial, 83 South Korean women who had been suffering from urinary urgency and frequent urination for more than three months were randomly assigned to take Azo or a placebo every day.

After 12 weeks, the Azo takers felt just as much urgency to urinate as those taking the placebo. They did make slightly fewer trips to the bathroom each day (8 vs. 9½),

though. And they got up to urinate an average of one less time every three nights. But one study by a company with a stake in the outcome isn’t much to go on.

Even if it turns out that Azo helps a little, is that worth \$18 for the first two weeks’ worth of pills, then \$25 a month after that?

■ **For men.** “Saw palmetto does not increase urine flow, decrease nightly urination, or shrink the prostate,” says the University of Minnesota’s Timothy Wilt. Wilt co-authored a recent Cochrane Collaboration review of 32 clinical trials of the herb.<sup>2</sup>

However, the reviewers couldn’t say whether their conclusions applied to the proprietary extracts that are in some brands of saw palmetto, since good studies of those supplements have never been done.



<sup>1</sup> J. *Functional Foods* 8C: 111, 2014.

<sup>2</sup> *Cochrane Database Syst. Rev.* 2012. doi:10.1002/14651858.CD001423.pub3.



## BACK TO THE FUTIS

**E. coli** bacteria cause six to eight million urinary tract infections every year, mostly in women. And more and more of those bugs are shrugging off the antibiotics that we use to treat them.

“We don’t understand where people are picking up these antibiotic-resistant strains,” says Lance Price, professor of environmental and occupational health at the George Washington University School of Public Health. “But if we’re serious about tackling this problem, then we need to investigate food as a possible source.”

More than a decade ago, researchers investigating a cluster of urinary tract infections in California discovered that they were linked to a unique drug-resistant strain of *E. coli* that was also found in raw chicken sold there.<sup>1</sup>

“That started the idea that maybe poultry products were a source of exposure to the *E. coli* that caused those urinary tract infections,” says Price.

Some researchers have dubbed the infections FUTIS (FOO-tees), for “foodborne urinary tract infections.”

In 2012 Price and his co-workers collected samples of raw turkey, chicken, and pork from all nine major grocery chains in Flagstaff, Arizona. They also obtained blood and



Could drug-resistant bacteria from food be causing urinary tract infections?

urine samples from UTI patients in the city’s only hospital.<sup>2</sup>

Then they compared the genetic fingerprints of the *E. coli* and *Klebsiella pneumoniae* (another bug that can cause UTIs) that were in the food with the fingerprints of the *E. coli* and *Klebsiella* that were in the patients.

Bingo! There were matches for both bacteria.

“It’s very compelling evidence that *E. coli* are bleeding over from the food supply and causing UTIs,” says

Price. “And the fact that we were able to find pairs of *Klebsiella* strains that were so closely related in food and in sick patients suggests that food is also probably an important source of *Klebsiella*-caused UTIs.”

What’s probably happening, says Price, is that people are contaminating their kitchens with bacteria from raw poultry and meat. “Then they inadvertently get those bacteria in their mouths, and the bacteria colonize the gut and then eventually make their way out of the gut and over to the urinary tract.”

How can you protect yourself? Keep a separate cutting board for raw meat, poultry, and seafood, and wash your hands and all surfaces thoroughly after handling them.

<sup>1</sup> *Clin. Infect. Dis.* 40: 251, 2005. <sup>2</sup> *Clin. Infect. Dis.* 61: 892, 2015.

## MEN

When men have trouble in the urination department, it’s usually because of BPH, says Kevin McVary, chair of the division of urology at the Southern Illinois University School of Medicine.

BPH (benign prostatic hyperplasia) is an enlarged prostate. It can pinch off the flow of urine, causing an increase in urinary urgency and frequency. It can also cause incontinence.

Before men resort to drugs or surgery, McVary suggests trying lifestyle changes.

“Some of the things you do for your heart are the same things you do for your prostate,” he says. “Lose weight, exercise, and don’t smoke. Pretty simple.”

McVary concedes that his prescription has never been tested in a clinical trial. “I’ve been trying unsuccessfully for years to persuade the National Institutes of Health to fund a project like this,” he says, “but they reply that no one is dying from an enlarged prostate.”

There *is* evidence, however, from studies that ask people about their weight and exercise habits, then follow them for years.

The Health Professionals Follow-Up Study tracked more than 18,000 men for 22 years. Those who were overweight were 11 to 25 percent more likely to have urinary tract symptoms than those who weren’t. And those with a waist larger than 38 inches were 23 percent more likely than those with a waist smaller than 33 inches.<sup>8</sup>

Does losing weight improve symptoms, like it does in women?

“We don’t have direct evidence, but we do know that symptoms improve in men who have weight-loss surgery,” says McVary.<sup>9</sup>

“There’s also something about exercise that prevents the development or mitigates the level of symptoms,” he adds. “The guys who exercise seem to do better.”

When researchers looked at eight studies on more than 35,000 men, they reported that those who did regular moderate or heavy exercise were 26 percent less likely to develop lower urinary tract symptoms than sedentary men. Doing light physical activity didn’t help.<sup>10</sup>

Why does exercise matter? One possibility: “Men who exercise have lower

levels of inflammation, which causes less prostate growth and less deposition of collagen in the bladder,” explains McVary. A fibrous bladder makes urinating more difficult. 🍌

<sup>1</sup> *Nurse Pract.* 34: 33, 2009.

<sup>2</sup> *Am. J. Epidemiol.* 165: 309, 2007.

<sup>3</sup> *N. Engl. J. Med.* 360: 481, 2009.

<sup>4</sup> *Obstet. Gynecol.* 109: 721, 2007.

<sup>5</sup> *J. Urol.* 179: 1012, 2008.

<sup>6</sup> *J. Urol.* 185: 1775, 2011.

<sup>7</sup> *Br. J. Nurs.* 11: 560, 2002.

<sup>8</sup> *J. Urol.* 191: 715, 2014.

<sup>9</sup> *BJU Int.* 115: 466, 2015.

<sup>10</sup> *Eur. Urol.* 53: 1228, 2008.

## THE BOTTOM LINE

- **Lose** (or don’t gain) excess weight.
- **Shoot for** 30 to 60 minutes a day of moderate-to-vigorous exercise.
- **Strengthen** your pelvic muscles (men as well as women) with Kegel exercises. (See [www.nutritionaction.com/kegels](http://www.nutritionaction.com/kegels).)
- **For more** on incontinence: [niddk.nih.gov/health-information/health-topics/urologic-disease/urinary-incontinence-women](http://niddk.nih.gov/health-information/health-topics/urologic-disease/urinary-incontinence-women).



# Souped Up

BY KATE SHERWOOD

Big on taste, heavy on veggies, light on calories; that's my kind of soup. Here are three.

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



## SIMPLE WHITE BEAN SOUP

- 2 Tbs. extra-virgin olive oil
- $\frac{3}{4}$  lb. carrots, diced
- 8 cloves garlic, minced
- $\frac{1}{2}$  tsp. dried oregano
- pinch of red pepper flakes
- 1 15 oz. can no-salt-added diced tomatoes
- 2 15 oz. cans no-salt-added white beans (not drained)
- 1 tsp. kosher salt
- freshly ground black pepper

In a large heavy pot, heat the oil over medium heat until hot. Sauté the carrots until they start to brown, 3-5 minutes. ● Stir in the garlic and cook until it just starts to brown, about 1 minute. Stir in the oregano and red pepper flakes. Add the tomatoes and 2 cups of water. Simmer until the carrots are tender, 8-10 minutes. ● Stir in the beans with their liquid and heat through. Season with up to 1 tsp. of salt and black pepper to taste. ● Makes about 8 cups.

Per serving (1 cup): calories 150 | total fat 4.5 g  
sat fat 0.5 g | carbs 21 g | fiber 6 g | protein 6 g  
sodium 310 mg



## ULTRA VEGETABLE SOUP

- 4 Tbs. extra-virgin olive oil, divided
- 1 large onion, diced
- 2 red or yellow bell peppers, diced
- $\frac{1}{2}$  lb. carrots, diced
- 2 stalks celery, diced
- 1 15 oz. can no-salt-added diced tomatoes
- 1 bay leaf
- 3 sprigs thyme
- $\frac{1}{2}$  lb. zucchini, diced
- 1 cup basil leaves, loosely packed
- 1 clove garlic, minced
- $\frac{1}{4}$  cup grated parmesan
- $\frac{1}{4}$  tsp. kosher salt

In a large heavy pot, heat 2 Tbs. of the oil over medium heat until hot. Sauté the onion and peppers until they start to brown, 5-7 minutes. ● Stir in the carrots, celery, tomatoes, bay leaf, thyme, and 5 cups of water. Simmer until the vegetables are tender, 10-15 minutes. ● Stir in the zucchini and simmer until tender, 4-5 minutes.

● Combine the basil, garlic, parmesan, and remaining 2 Tbs. of oil in a small food processor. Pulse until minced. ● Remove the soup from the heat. Discard the bay leaf and thyme sprigs. Stir the basil mixture into the soup, and season with up to  $\frac{1}{4}$  tsp. of salt. ● Makes about 9 cups.

Per serving (1 cup): calories 110 | total fat 7 g  
sat fat 1.5 g | carbs 10 g | fiber 3 g | protein 3 g  
sodium 360 mg



## ROASTED CARROT-GINGER SOUP

- $1\frac{1}{2}$  lbs. carrots, cut into chunks
- $\frac{1}{2}$  lb. fennel bulb, cut into chunks
- 1 large onion, cut into chunks
- 3 large cloves garlic
- 2 Tbs. extra-virgin olive oil
- 1 tsp. freshly grated ginger
- 1 tsp. kosher salt

Pre-heat the oven to 425°F. ● On a large, rimmed, foil-lined baking sheet, toss the carrots, fennel, onion, and garlic with the oil. Roast until the vegetables are brown in spots, 15-20 minutes. ● While the vegetables are roasting, bring 6 cups of water to a boil in a large heavy pot. When the vegetables are done, add them to the pot and simmer, covered, until very tender, 10-12 minutes. ● Remove from the heat. Purée until smooth with an immersion blender or in small batches in a blender. Stir in the ginger, and season with up to 1 tsp. of salt. ● Makes about 8 cups.

Per serving (1 cup): calories 80 | total fat 3.5 g  
sat fat 0.5 g | carbs 11 g | fiber 3 g | protein 1 g  
sodium 310 mg





# M'm! M'm! Good?

## What's Hot in the Soup Aisle

BY JAYNE HURLEY & BONNIE LIEBMAN



**W**ith soup sales flat, companies are looking for a bounce. Some are making their offerings sound fresh. Some are ditching cans for cartons, pouches, and refrigerated tubs. Some are turning out “chef inspired” flavors like Portobello Mushroom & Madeira Bisque and Roasted Chicken & Chardonnay. And some are even marketing “fresh-brewed” soups that you can make in your Keurig coffeemaker.

The problem: many soups still have half a day’s sodium in every cup. And cream is plastering the gourmet-soup shelves. Just what our bellies and arteries need!

The information for this article was compiled by Lindsay Moyer and Camilla Peterson.

### Down the Aisle

Here are some tips to help you sort through soups:

■ **Check the serving size first.** On Nutrition Facts labels, a serving of soup is just one cup. But in a 2010 survey we commissioned, nearly two out of three consumers said that they typically ate an entire *can* of Campbell’s Chunky or Condensed Soup at one sitting. If that’s you, remember to multiply the calories, sodium, and other numbers.

Most single-serve microwavable bowls and cups also hold more than one cup. So that bowl of Campbell’s Chunky Sausage & Pepper Rigatoni Soup, for example, has 370 calories, not the 200 that are listed on the label.

■ **Look for less sodium.** Just one cup of most Campbell’s or Progresso soups has 600 to 900 milligrams of sodium (40 to 60 percent of a day’s worth). Look for our Best Bites (no more than 300 mg) or Honorable Mentions (no more than 410 mg). Check the bottom of the page for some of our taste faves.

Healthy Choice, Progresso Heart Healthy, and others that make “healthy” claims can’t top 480 mg per cup.

Most flavors of Campbell’s Healthy Request, Healthy Choice, Progresso Heart Healthy, and Trader Joe’s Low Sodium, and about half of Progresso’s Lights, replace some of their salt (sodium chloride) with potassium chloride. That’s a plus, since potassium can lower

blood pressure, and most of us don’t get enough. (See “2 Little?” Sept. 2015, p. 9.)

■ **Watch the sat fat.** Most soups (like our Best Bites and Honorable Mentions) have no more than 2½ grams of saturated fat per cup. Exceptions: bisque, Thai, and some other soups that are made with butter, cream, cheese, or coconut milk can hit 9 grams (half a day’s worth) or more. Tip: saturated fat is more likely to show up in frozen or refrigerated soups like Panera’s.

■ **Don’t be impressed by veggie claims.** “½ cup of vegetables per serving,” says the Progresso Vegetable Classics Tomato Basil Soup label. A half cup of vegetables isn’t something to crow about, even if the U.S. Department of Agriculture considers it a “serving.” Ditto for a quarter cup of tomato paste.

Instead, look for soups made of puréed nutrient-rich butternut squash, carrots, or sweet potatoes. Or add baby kale or spinach or frozen veggies yourself. Or see page 12 for three recipes that will get you hooked on making your own from scratch.

Now *that’s* “M’m M’m good.”



Amy hits the mark with her 7 Organic Light in Sodium soups.



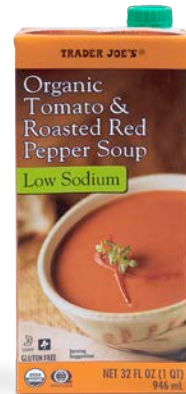
Doctor’s orders: Bump up the beans and veggies. Trim the salt.



Light in sodium, not flavor.



You’ll never miss the salt in Campbell’s 30+ Healthy Request flavors.



Mmm. And talk about velvety!



Tastes like you made it yourself. Worth hunting for.

Photos (l to r): Amy’s Organic, Dr. McDougall’s, Imagine Organic, Lindsay Moyer/CSPI (Campbell’s, Trader Joe’s, Tabatchnick).



## Fresh-ish

A “delicious line of soups brewed at the touch of a button with your Keurig brewer,” says Campbell’s new Fresh-Brewed Soup Homestyle Chicken Broth & Noodle Soup Mix. “Perfect to

A “snack” with half a day’s sodium.

enjoy anytime as a satisfying snack!”

Yup. Anytime you want a cup of dehydrated chicken broth, MSG, white-flour noodles, disodium inosinate, and other savory ingredients with 750 milligrams (half a day’s worth) of sodium, just toss that K-Cup pod of broth into your Keurig. (And run a hot water brew cycle when you’re done so you don’t get chicken-flavored coffee tomorrow morning!)



## Natural-ish

“Made with Goodness! No Artificial Flavors, Colors or Preservatives,” boasts Annie’s Organic Tomato Soup.

Yes, it’s organic. But its ingredients aren’t much different from Campbell’s Condensed Tomato Soup, except that Annie—owned by General Mills—replaces high-fructose corn syrup with cane sugar and adds some more salt. That’s what you call goodness?

Campbell’s Homestyle Soups also have “no preservatives added.” Duh. They’re preserved by canning. Still, kudos to Campbell for promising to cut artificial colors and flavors from all of its soups by August 2018. And its new Organic line cuts the sodium (to a still-not-great 650 mg or so per cup), and, of course, shuns pesticides that may harm the environment.

Don’t be impressed by the “no preservatives.”

## Gourmet-ish

With sales lagging, some companies are gambling on “gourmet” soups to heat up the soup aisle:

■ **Panera.** Now you can get 14 refrigerated Panera soups at the supermarket. Oh dear.

Cheese, cream, or cream cheese sends the sat fat in the Autumn Squash, Baked Potato, Broccoli Cheddar, Creamy Tomato, Lobster Bisque, New England Clam Chowder, and Shrimp & Roasted Corn Chowder into the 7-to-19-gram range, and bumps the calories to 200 to 350 per cup.

Sodium hovers around 800 milligrams. Only the Organic Vegetarian Chili keeps a lid on sat fat *and* sodium with a bowl of beans and vegetables rather than the white-flour noodles you’d get in the Chicken Noodle.

■ **Campbell’s Reserve.** “Our exceptional soups are inspired by chefs who are passionate about creating bold and complex flavors,” say Campbell’s eight frozen Reserve soups. Chefs are passionate about modified food starch, maltodextrin, wheat starch, and pasteurized process American cheese? Who knew? Cream, cheese, and/or sausage plus about 800 mg of sodium isn’t so inspired.

■ **Campbell’s Slow Kettle Style.** Campbell must think its customers are slow. Maybe they won’t notice that the Nutrition Facts apply to about half of what looks like a single-serve container. They may not figure out that an entire container of Tomato & Sweet Basil Bisque delivers 550 calories and a day’s worth of sat fat and sodium.

■ **Legal Sea Foods.** Looking for a (roughly) 300-calorie cup of salted cream, water, and an occasional bite of seafood? Here’s your chance.

■ **Fishpeople.** These shelf-stable soups get points for seafood that’s “wild caught & sustainably harvested in America.” Too bad the Fishpeople are friends with the Cream-people. Most of the pouches pack around 300 calories and 12 grams of sat fat. Time to meet the Cardiologistpeople?



Cheese and cream means 13 grams of sat fat in just 1 cup.



## BPA-free-ish?

BPA (bisphenol A) is a chemical that’s used in the linings of some cans, in polycarbonate plastic bottles and containers, and in the tops of some bottles, jars, and microwaveable soup containers.

Pouches or cartons might lower your BPA exposure. But whatever your soup comes in, heat it in glass or on the stovetop.

It’s an estrogen “mimic,” and in 2010 the National Institute of Environmental Health Sciences expressed “some concern” about BPA’s “effects on the brain, behavior, and prostate gland in fetuses, infants, and children at current exposure levels.”

The problem: many researchers argue that BPA-free cans are no better because companies won’t disclose what they’re using instead, haven’t thoroughly tested their replacements, or are using replacements (like BPS) that are just as bad.

To avoid BPA (and its cousins), steer clear of cans, along with plastic containers with recycling code “7” on the bottom (they *may* be made of polycarbonate). Switching to soups in pouches, cartons, or cardboard containers might lower your exposure. But always microwave the contents in a glass bowl (or heat them in a pot on the stove), to lower the odds that any chemicals in the package end up in your food. 🍲



# Taking Stock

**Best Bites** (✓✓) have no more than 300 milligrams of sodium per serving.

**Honorable Mentions** (✓) have no more than 410 mg. Both contain no more than 2½ grams of saturated fat. Within each section, soups are ranked from least to most sodium, then least to most sat fat, then least to most calories. **Soups in red have at least 9 grams of saturated fat.**

	Calories	Saturated Fat (g)	Sodium (mg)
<b>Multi-Serve</b> (about 1 cup prepared, unless noted)			
✓✓ Health Valley Organic No Salt Added <sup>1</sup>	110	0	70
✓✓ Trader Joe's Organic Low Sodium <sup>1</sup>	90	1.5	125
✓✓ Imagine Organic Light in Sodium Creamy—except Garden Tomato <sup>1</sup>	90	0	180
✓✓ Fig Food Co. Organic—Creamy Mushroom, Gran Farro e Fagioli, or Mexican Bean & Rice <sup>1</sup>	150	0	260
✓✓ Pacific Organic Light in Sodium Creamy Butternut Squash	90	0	280
✓✓ Dr. McDougall's Lower Sodium—regular or Organic <sup>1</sup>	110	0	290
✓✓ Amy's Organic Light in Sodium—Butternut Squash, Lentil, or Minestrone <sup>1</sup>	120	0.5	290
✓ Imagine Organic Light in Sodium Creamy Garden Tomato	90	0	310
✓ Trader Joe's Carrot Ginger	80	0	320
✓ Imagine Organic Creamy Butternut Squash	80	0	340
✓ Fig Food Co. Organic—except Creamy Mushroom, Gran Farro e Fagioli, or Mexican Bean & Rice <sup>1</sup>	140	0	340
✓ Amy's Organic Light in Sodium—except Butternut Squash, Lentil, or Minestrone <sup>1</sup>	130	1	340
✓ Pacific Organic Light in Sodium—except Creamy Butternut Squash <sup>1</sup>	110	1.5	380
✓ Healthy Choice—Chicken Noodle, Chicken Tortilla, or Chicken with Rice <sup>1</sup>	110	0.5	390
✓ Trader Joe's Sweet Potato Bisque	130	0	410
✓ Campbell's Healthy Request—Chunky, Condensed, or Homestyle <sup>1</sup>	100	0.5	410
✓ Health Valley Organic Cream of Celery	100	1	410
Healthy Choice—except Chicken Noodle, Chicken Tortilla, or Chicken with Rice <sup>1</sup>	130	0.5	470
Panera—Chicken Noodle, Chicken Tortilla, Organic Tomato Bisque, or Organic Vegetarian Chili <sup>1,R</sup>	130	1	470
Campbell's Condensed Tomato	90	0	480
Dr. McDougall's—regular or Organic <sup>1</sup>	110	0	480
Pacific Organic Reduced Sodium <sup>1</sup>	120	0	480
Progresso Heart Healthy <sup>1</sup>	100	0.5	480
Simply Balanced (Target)—Butternut Squash, Thai-Style Curry Chicken, or Organic Rustic Bean & Vegetable <sup>1</sup>	90	1	480
Imagine 25% or 30% Less Sodium—regular or Organic <sup>1</sup>	120	1	530
Back to Nature Ancient Grains <sup>1</sup>	160	0	540
Progresso Light <sup>1</sup>	80	0.5	570
Wolfgang Puck Organic Creamy Tomato	250	10	630
Lipton Soup Secrets <sup>1</sup>	60	0	650
Campbell's Organic <sup>1</sup>	130	1	650
Legal Sea Foods <sup>1,R</sup>	270	11	650
Campbell's Condensed 25% Less Sodium <sup>1</sup>	90	1	660
Amy's—regular or Organic <sup>1</sup>	140	1	660
Panera—Autumn Squash, Creamy Tomato, or Shrimp & Roasted Corn Chowder <sup>1,R</sup>	230	8	660
Annie's Organic <sup>1</sup>	110	1	670
Pacific Organic <sup>1</sup>	130	2	670
Progresso—Rich & Hearty, Traditional, or Vegetable Classics <sup>1</sup>	120	1	710

	Calories	Saturated Fat (g)	Sodium (mg)
Panera Chicken, Kale & Sweet Potato <sup>R</sup>	110	0.5	730
Wolfgang Puck Organic—except Creamy Tomato <sup>1</sup>	140	2.5	740
Campbell's Homestyle Light <sup>1</sup>	80	0.5	770
Campbell's Homestyle <sup>1</sup>	130	1.5	770
Campbell's Go Creamy Red Pepper	220	9	780
Panera Lobster Bisque <sup>R</sup>	350	19	780
Campbell's Condensed—except Tomato <sup>1</sup>	90	1	800
Pacific Organic Condensed <sup>1</sup>	100	2	800
Campbell's Chunky <sup>1</sup>	150	1.5	810
Campbell's Go—except Creamy Red Pepper <sup>1</sup>	170	2.5	810
Panera Black Bean <sup>R</sup>	220	0.5	830
Campbell's Reserve <sup>1,F</sup>	220	5	830
Panera—Baked Potato, New England Clam Chowder, or Broccoli Cheddar <sup>1,R</sup>	250	12	930
Bertolli Ricotta & Lobster Ravioli Meal Soup (about 1½ cups) <sup>F</sup>	360	7	1,090

**Single-Serve** (1 container, about 1-2 cups prepared, unless noted)

✓✓ Tabatchnick Low Sodium <sup>1,F</sup>	120	0	80
✓✓ Campbell's Ready to Serve Low Sodium <sup>1</sup>	160	2.5	80
✓✓ Tabatchnick Organic Split Pea <sup>F</sup>	150	0	150
✓✓ Tabatchnick—Cabbage, Tomato with Basil, or Wilderness Wild Rice <sup>1,F</sup>	80	0.5	200
✓ Dr. McDougall's Lower Sodium <sup>1</sup>	160	0	360
✓ Tabatchnick Organic—except Split Pea <sup>1,F</sup>	190	0	380
✓ Campbell's Healthy Request—Soup on the Go <sup>1</sup>	100	0.5	410
Thai Kitchen Instant Rice Noodle Soup <sup>1</sup>	170	0.5	530
Fishpeople—except Bouillabaisse or Chili Blanco <sup>1</sup>	310	12	530
Dr. McDougall's Asian <sup>1</sup>	120	0	540
Lipton Cup-a-Soup <sup>1</sup>	60	0.5	540
Amy's Organic Broccoli Cheddar <sup>F</sup>	310	12	570
Fishpeople—Bouillabaisse or Chili Blanco <sup>1</sup>	210	1	590
Dr. McDougall's <sup>1</sup>	220	0	630
Progresso Bistro Cups <sup>1</sup>	220	4.5	650
Amy's Organic Corn & Potato Chowder <sup>F</sup>	230	6	650
Healthy Choice <sup>1</sup>	190	0.5	680
Campbell's Fresh-Brewed <sup>1</sup>	70	0.5	750
Campbell's Healthy Request—Chunky or Homestyle <sup>1</sup>	210	1.5	770
Campbell's Soup on the Go <sup>1</sup>	130	1.5	830
Thai Kitchen Rice Noodle Soup Bowl <sup>1</sup>	250	0	960
Annie Chun's <sup>1</sup>	270	0	1,060
Simply Asia Rice Noodle Soup Bowl <sup>1</sup>	260	0	1,070
Nissin Cup Noodles—Beef or Chicken <sup>1</sup>	280	5	1,400
Campbell's Slow Kettle Style—Angus Beef & Dumplings, Baked Potato, or bisques <sup>1</sup>	450	13	1,500
Campbell's Slow Kettle Style—except Angus Beef & Dumplings, Baked Potato, or bisques <sup>1</sup>	310	2.5	1,520
Campbell's Chunky <sup>1</sup>	320	4	1,520
Maruchan Ramen—Beef or Chicken <sup>1</sup>	380	7	1,620
Nissin Top Ramen—Beef or Chicken <sup>1</sup>	380	7	1,670
Nongshim Spicy Chicken Bowl Noodle	380	6	1,780
Nissin Souper Meal—Beef or Chicken (3 cups) <sup>1</sup>	560	12	2,640

✓✓ Best Bite. ✓ Honorable Mention. <sup>1</sup>Average. <sup>R</sup>Refrigerated. <sup>F</sup>Frozen.

**Daily Limits** (for a 2,000-calorie diet): **Saturated Fat:** 20 grams. **Sodium:** 1,500 milligrams.

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

## RIGHT STUFF

### PLANT STRONG



Gotta love those whole grains...everything but the time it takes to cook them.

No prob! **Engine 2 Plant-Strong's** four frozen cooked **Organic Grain Medleys**—available only at Whole Foods—couldn't be

easier. Just place in a glass bowl with a tablespoon or two of water, cover, and microwave for about 3 minutes (or cook on the stovetop for 7 minutes). That's a tad shorter than the usual hour for wheat berries or half hour for farro.

What comes next is up to you, because Engine 2 adds no seasoning. (Who needs Uncle Ben's Ready Whole Grain Medleys, with their 700 milligrams or so of sodium per cup?)

■ **Ancient Grains Blend** (quinoa, farro, red lentils, brown rice, black barley): Pair with vegetable or chicken curry. Or mix with spinach, tomatoes, shredded carrots, and red cabbage and toss with your favorite vinaigrette.

■ **Wild Rice Blend** (wild rice, black barley, brown rice, scallions, celery): Toss with sautéed garlic and mushrooms with a sprinkle of soy sauce and balsamic vinegar. Or add chunks of roasted butternut squash, apples, and onions.

■ **Fiesta Blend** (brown rice, black beans, sweet corn, red bell and poblano peppers): Mix with salsa and serve with grilled chicken.

■ **Morning Blend** (wheat berries, farro, black barley, golden raisins): Add low-fat milk, nuts, cinnamon, and fresh fruit. Mmm.

engine2foods.com — (512) 542-0878

## FOOD PORN

### MASSIVE HOG ATTACK



"You would never attempt the **Triple Hog Dare Ya** at home," says **Applebee's** TV ad. "With premium ingredients like

Black Forest ham, slow cooked pork, and bacon, topped with melted cheddar and crispy onions. It's *massive*."

If there's one thing Americans need, it's massive sandwiches. The Triple Hog has 1,010 calories plus 19 grams of saturated fat (a day's worth) and 2,650 milligrams of sodium (a 1½-day supply). It's essentially two McDonald's Big Macs.

But who wants a lonely sandwich for lunch or dinner? So Applebee's throws in a side of fries or house-made potato chips. With Classic Fries, you're talking 1,450 calories. Woo hoo!

The Triple Hog Dare Ya is part of Applebee's new Handhelds menu—"bold twists on old favorites," as the chain's online menu puts it. That Applebee's. Always looking for a new twist.

Each Handheld sandwich has roughly 1,000 calories (plus around 450 for the fries or chips). That includes the Brew Pub Philly ("a new take on cheesesteak"), the Maple Bacon Chicken Piadini, and the Kickin' Turkey Stacker.

"Brace yourself for the boldest flavor ever to hit your mouth," says another Applebee's TV ad.

Not to mention your other body parts.

applebees.com — (888) 592-7753

## dish OF THE MONTH



### Beets with Mustard Vinaigrette

Arrange 1 lb. sliced cooked beets on a plate. Whisk 2 tsp. dijon mustard, 1 Tbs. red wine vinegar, and 1 Tbs. minced shallots with 2 Tbs. extra-virgin olive oil. Drizzle over the beets. Sprinkle with 2 Tbs. chopped salted pistachios. Serves 4.

## quick tip

Love sprouts in your stir-fries? Don't toss them into the pan at the last minute. Add them early enough so that they cook thoroughly. Raw or lightly cooked sprouts can harbor bugs like *Salmonella* and *E. coli*.