

Nutrition Action

MARCH 2013 \$2.50

 HEALTH LETTER
 CENTER FOR SCIENCE IN THE PUBLIC INTEREST

WEIGHING THE OPTIONS

Do extra pounds mean extra years?

BY BONNIE LIEBMAN



“Study: A few extra pounds may cut risk of early death,” proclaimed *USA Today*. “A Few Extra Pounds Won’t Kill You—Really,” announced *The Wall Street Journal*. *The New York Times* ran an op-ed about “Our Absurd Fear of Fat.”

In January, the media jumped to report the man-bites-dog news that millions of Americans wanted to hear. Far fewer heard the criticisms of the headline-grabbing research.

“This study is really a pile of rubbish,” says Walter Willett, chair of the nutrition department at Harvard University’s School of Public Health. “If you believe these results, it would mean that you can put on 60 to 90 pounds and it will have no effect on your risk of death. Anyone who believes that is just completely nuts.”

Here’s the story behind the gain-weight-to-live-longer story.

Continued on page 3.

MEMO FROM MFJ

Sweet Nothings



When I first began my work on food safety and nutrition in 1970, people knew that tasty, familiar white sugar was just “junk” and “empty calories.” Sugar was derided because it was devoid of vitamins and min-

erals and it promoted tooth decay. But recent studies have begun to demonstrate that the large amounts of added (or refined) sugars—including cane and beet sugar, high-fructose corn syrup, plain corn syrup, and dextrose—in our diets are harming much more than our teeth. (See *NAH*, Jan./Feb. 2010 and Apr. 2012.)

Although levels have declined in the past decade, we still consume an awful lot of sugar. According to estimates by the U.S. Department of Agriculture, the average person takes in almost 400 calories’ worth of refined sugars a day, and many people consume far more. In fact, more than 35 million people get more than a quarter of their calories from refined sugars. Almost half of that sugar comes from liquid candy: soft drinks, sports drinks, energy drinks, fruit drinks, and the like.

Studies that track thousands of people for years find that those who consume more sugary drinks have a higher risk of weight gain, diabetes, heart disease, and gout. When scientists give people sugary drinks, they put on more weight than people who get calorie-free drinks. And when researchers give people hefty amounts of fructose—which constitutes about half of sugar and high-fructose corn syrup—they see a rise in deep belly fat and in

blood levels of triglycerides, glucose, insulin, and LDL (“bad”) cholesterol—all precursors of heart disease. Moreover, the more sugar (from foods and beverages) that people consume, the fewer nutrients they get.

The American Heart Association recommends that women consume no more than six teaspoons of added sugars a day and that men consume no more than nine. To put that into context, a can of Coke contains nine teaspoons of added sugars and a 6 oz. flavored yogurt has about five teaspoons.

But advice from health experts can do only so much in a society where cheap sugary drinks and foods are sold at every fast-food outlet, convenience store, coffee shop, gas station, drugstore, and supermarket.

Luckily, companies are developing safer, better-tasting, high-potency sweeteners made from natural sources like stevia leaves. Others are working on “sweetness enhancers” that make one

teaspoon of sugar taste like two.

The time has come for the Food and Drug Administration to re-evaluate the safety of sugary drinks. That’s what the Center for Science in the Public Interest, several dozen nutrition experts, seven local health departments, and 15 nonprofit organizations have asked the FDA to do.

I think—and some soft-drink industry officials agree—that the amount of sugar in beverages could be cut by 75 percent or more and they’d still taste great. I’ll drink to that!

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



People who drink more sugary beverages have a higher risk of weight gain, diabetes, heart disease, and gout.

STAFF	
EDITORIAL	
Michael F. Jacobson, Ph.D. <i>Executive Editor</i>	
Bonnie Liebman, M.S. <i>Director of Nutrition</i>	
Stephen B. Schmidt <i>Editor-in-Chief</i>	
Jayne Hurley, RD David Schardt <i>Senior Nutritionists</i>	
Kate Sherwood <i>Culinary Director</i>	
Emily Caras, RD Paige Einstein, RD <i>Project Coordinators</i>	
Jorge Bach <i>Art Director</i>	
CIRCULATION MANAGEMENT	
Bill Dugan	
Myriam Boucher	Debra Brink
Damon Dorsey	Louella Fennell
Greg Hildebrandt	James Nocera
Cecilia Saad	Chris Schmidt
Ken Waldmiller	
SCIENTIFIC ADVISORY BOARD	
Kelly D. Brownell, Ph.D. <i>Yale University</i>	
Greta R. Bunin, Ph.D. <i>Children's Hospital of Philadelphia</i>	
Caldwell B. Esselstyn Jr., M.D. <i>Cleveland Clinic Foundation</i>	
Stephen Havas, M.D., M.P.H., M.S. <i>Northwestern University Medical School</i>	
Norman M. Kaplan, M.D. <i>Southwestern Medical Center University of Texas, Dallas</i>	
JoAnn E. Manson, M.D., Ph.D. <i>Harvard Medical School</i>	
Susan Taylor Mayne, Ph.D. <i>Yale University</i>	
Julie Mares, Ph.D. <i>University of Wisconsin</i>	
J. Glenn Morris, Jr., M.D., M.P.H.&T.M. <i>Emerging Pathogens Institute University of Florida</i>	
Susan B. Roberts, Ph.D. <i>USDA Human Nutrition Research Center on Aging, Tufts University</i>	
Frank Sacks, M.D. <i>Harvard Medical School</i>	
Jeremiah Stamler, M.D. <i>Northwestern University Medical School</i>	
Regina G. Ziegler, Ph.D., M.P.H. <i>National Cancer Institute</i>	

Nutrition Action Healthletter (ISSN 0885-7792) is published 10 times a year (monthly except bi-monthly in Jan./Feb. and Jul./Aug.).

POSTMASTER: Send changes to *Nutrition Action Healthletter*, 1220 L Street, N.W., Suite 300, Washington, DC 20005.

Application to mail at Periodical postage rates approved at post office of Washington, DC, and at additional offices.

Subscriber Services

The cost of a one-year subscription or gift (10 issues) is \$24; two years are \$42. For bulk subscriptions, please write for details. To change your address, send us your subscriber number and your old and new address. If you don't want us to exchange your name, send us your name and mailing-label information. **Mail:** CSPI, 1220 L Street, NW, #300, Washington, DC 20005. **Fax:** (202) 265-4954. **E-mail:** circ@cspinet.org. **Internet:** www.cspinet.org. **Expiration date** is in the upper center of your mailing label. **Your subscriber number** precedes the expiration date.

GUARANTEE! We'll give you 2 FREE ISSUES of *Nutrition Action* if there's ever a problem with your subscription.

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

The use of information from **Nutrition Action Healthletter** for commercial purposes is prohibited without written permission from CSPI.

© 2013 by Center for Science in the Public Interest.

For permission to reuse material, go to copyright.com and search for Nutrition Action.

The Center for Science in the Public Interest (CSPI) is the nonprofit health-advocacy group that publishes *Nutrition Action Healthletter*. CSPI mounts educational programs and presses for changes in government and corporate policies.

Subscribe or renew



Photo: © PTTimages/fotolia.com.

WEIGHING THE OPTIONS

Do extra pounds mean extra years?

Diabetes. Cancer. Heart disease. Stroke. Extra pounds raise the risk of nearly every health threat facing Americans. Yet in January, the *Journal of the American Medical Association (JAMA)* published—and publicized—a new fatter-people-live-longer study.

“It’s extremely frustrating,” says Michael Thun, vice president emeritus for surveillance and epidemiology research at the American Cancer Society. “It perpetuates a myth.” Here’s how.

THE NEW META-ANALYSIS

At first glance, the new *JAMA* study seems impressive.¹

“When we assembled all 97 studies, we had almost three million participants,” explained the lead author of the meta-analysis, Katherine Flegal, senior research scientist at the National Center for Health Statistics of the Centers for Disease Control and Prevention in Hyattsville, Maryland, in a video on the *JAMA* Web site.

“When people talk about things being controversial, they tend to cite only one or two studies,” noted Flegal. “This is the first study that assembles all the literature together in one place.”

How could such a large, comprehensive meta-analysis be wrong?

Flaw #1. The meta-analysis should have excluded current or former smokers.

Overweight people have a higher risk of diabetes, heart disease, and cancers of the breast, colon and rectum, esophagus, kidney, pancreas, and uterus. So why would the normal-weight people in the meta-analysis be more likely to die than the overweight?

For starters, any group of normal-weight—or underweight—people is likely to include many smokers, who tend to be thinner. They can make the people in those groups appear more likely to die.

To address the problem, most of the studies in Flegal’s analysis tried to statistically “adjust” for smoking.

“But adjusting for smoking just doesn’t take care of the problem,” says JoAnn Manson, chief of preventive medicine at Brigham and Women’s Hospital in Boston. Why?

To fully adjust for smoking, researchers need to compare the risk of dying among

people with *equal* exposure to cigarette smoke. But few studies ask enough about smoking habits to do that.

“Most studies have limited information on how many cigarettes people smoke, how many years they’ve smoked, and how deeply they inhale, and few studies update the information over time,” explains Manson, who is also professor of medicine at Harvard Medical School.

What’s more, “some people who say that they’re former smokers may have relapsed and are actually current smokers,” she adds. “Many people who use smoking as a weight-control tool keep going back and forth.”

Solution: look only at people who have never smoked.

“Once you look at never-smokers, it becomes clearer that overweight people have a higher risk of dying,” notes Manson. (See “Factoring Out Smokers & the Sick,” p. 4.)

Flegal argues that some of the studies in her meta-analysis did look at never-smokers, and it didn’t matter. “The results adjusted for smoking and the results for never-smokers showed almost no difference,” she says.



Unless studies exclude smokers, they can make people in the normal-weight and underweight groups appear more likely to die.

But most of those studies were too small to see a difference, counters Manson, who notes that larger studies do show a difference.²⁻⁵

“Also, it’s almost a moot point to ask, ‘What’s the best body weight for a smoker?’” she points out. “Smoking is such a hazardous, powerful risk factor that it dwarfs the effect of anything else. Smokers should focus on quitting, not on their weight.”

Fortunately, the number of smokers is shrinking.

“Only 20 percent or less of the population now smokes,” notes Manson.

“The key question from a public-health standpoint is whether being overweight or obese influences health and longevity for the 80 percent of Americans who are nonsmokers. And you can’t have an answer that’s skewed by biased, confounded results in smokers, who account for a disproportionately large percentage of the deaths.”

Flaw #2. The meta-analysis should have excluded the sick.

Smokers are one problem. People who are thinner because they have hidden cancer, emphysema, dementia, or other illnesses can also end up in the normal-weight group.

“Although the new meta-analysis pulls together many studies, it has the same problem of including people who are sick and have weight loss caused by disease,” says the American Cancer Society’s Michael Thun.

“That moves high-risk people into the normal-weight range, and consequently it makes overweight look beneficial. But that is essentially a methodologic artifact.”

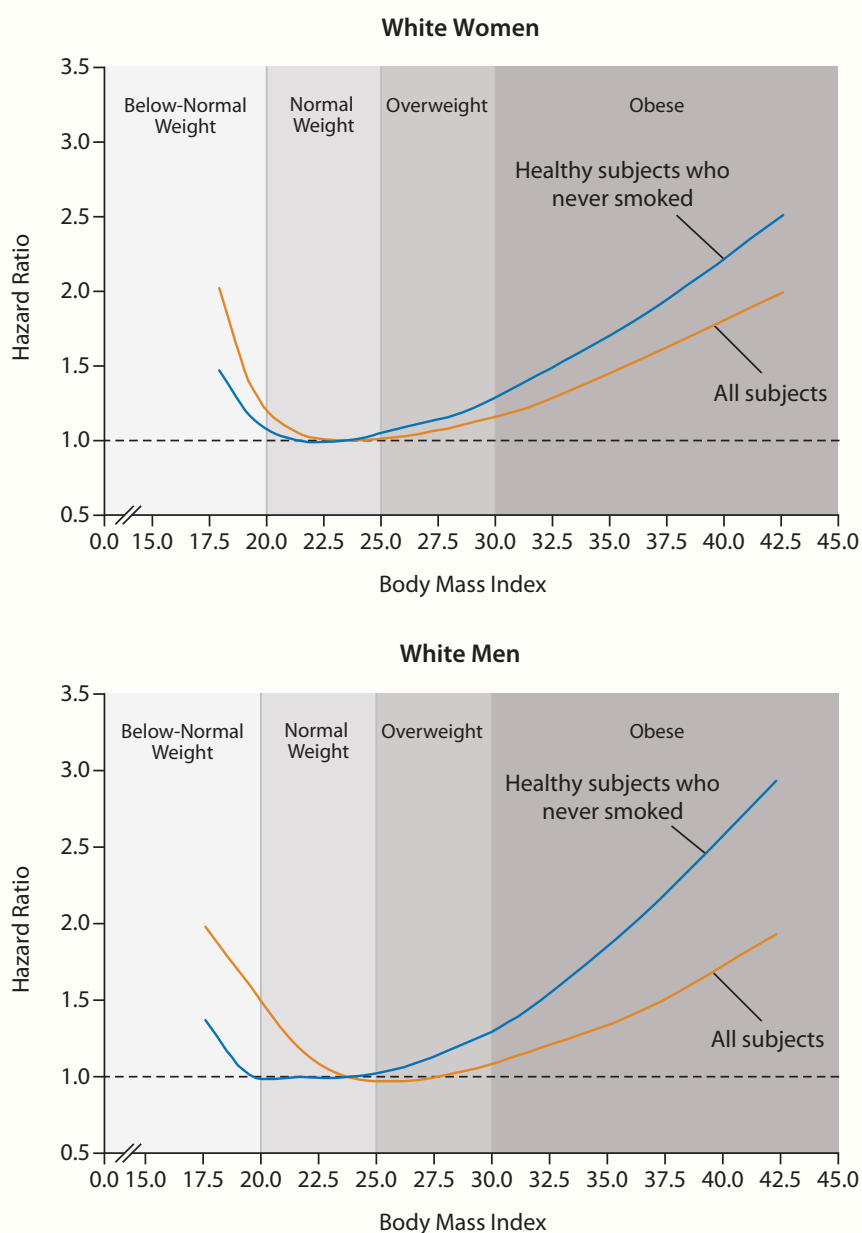
To scientists, the problem is called “reverse causation.” It’s not that being thinner causes you to get sick and die. It’s



Factoring Out Smokers & the Sick

Who is least likely to die? When researchers led by the National Cancer Institute looked at the risk of dying among 1.46 million adults (orange lines), the risk was lowest for people who were near the border between normal and overweight.

However, when the scientists looked only at people who were “healthy”—that is, they had not been diagnosed with cancer or heart disease—and who had never smoked (blue lines), normal-weight people had a *lower* risk than the overweight or obese. (Many people who are underweight have a higher risk of dying because they have an illness other than diagnosed cancer or heart disease. Only 2 percent of the women and 0.5 percent of the men in the study were underweight.)



Source: *New England Journal of Medicine* 363: 2211, 2010.

that being sick makes you thinner.

“Originally, we thought that this is mainly an issue of cancer, but it’s also true for chronic lung disease, chronic liver disease, congestive heart failure, and many diseases that are ultimately fatal,” explains Harvard’s Walter Willett. “Part of the natural history of these diseases toward the end is weight loss.”

And the new meta-analysis couldn’t look at those illnesses because many of the studies it compiled didn’t look.

“If some of the thin people are sick, and they’re thin because they’re sick, that’s going to make the health outcome of being thin look worse than it really is,” says David Katz, director of the Yale University Prevention Research Center.

Flaw #3. The meta-analysis should have looked at different ages.

“This meta-analysis had no ability to look at younger and older age groups separately,” says Willett.

That matters because many older people lose weight before they die, but the weight loss didn’t *cause* them to die.

“Clinicians have known for hundreds of years that it’s a really bad sign when older people start to lose weight,” says Willett.

“They get into this vicious circle of losing lean muscle mass, and then because they lose strength, they don’t exercise as much, and then they lose more lean mass. It’s really a downward spiral.”

You’d expect a good study to look separately at younger and older people, but Flegal’s meta-analysis didn’t because many of the studies it compiled didn’t.

“If you mix younger and older people together, your data is going to be heavily weighted by people dying at older ages,” says Willett.

In fact, an older person’s weight loss may be caused by a middle-aged paunch.

“A typical course is that at age 50 someone may develop diabetes that’s very much related to being overweight, but they don’t die immediately of diabetes,” Willett explains. Instead, diabetes raises the risk of heart disease.

“By age 65 they may have a heart attack or kidney failure, and they usually don’t die of that either. But maybe five or 10 years later, the cardiovascular disease shows up as congestive heart failure.”

In the early stages of heart failure, people may gain weight because they retain fluid. “But toward the later stages, they lose lean mass and lose weight,” says Willett.

“So if your study is picking up thinner people at age 65 or 70, that won’t reflect the excess weight that was the underlying cause of their death.”

THE BIGGER PICTURE

Better Studies Were Ignored

What frustrates many experts isn’t just that the new meta-analysis was flawed. It’s that better studies didn’t make a splash.

One of the best, a huge collaboration led by the National Cancer Institute (NCI), was released in 2010 in the *New England Journal of Medicine*.²

“The investigators from 19 different studies submitted their original data to the NCI,” says Willett, one of 33 co-authors. “The NCI had the active involvement of many of the top epidemiologists around the country. The collaboration provided a very powerful and very detailed look at this issue.”

Katherine Flegal, who led the new *JAMA* meta-analysis, was invited to contribute data she had gathered earlier from the National Health and Nutrition Examination Survey, or NHANES.

“But she refused to participate,” says Willett.

Her data wouldn’t have mattered much, though, because NHANES has only around 37,000 participants. The NCI collaboration included 1.46 million people who were tracked for roughly 10 years.

“The NCI study showed very clearly that people who are overweight have higher risks of dying than those in the lean group,” notes Willett.

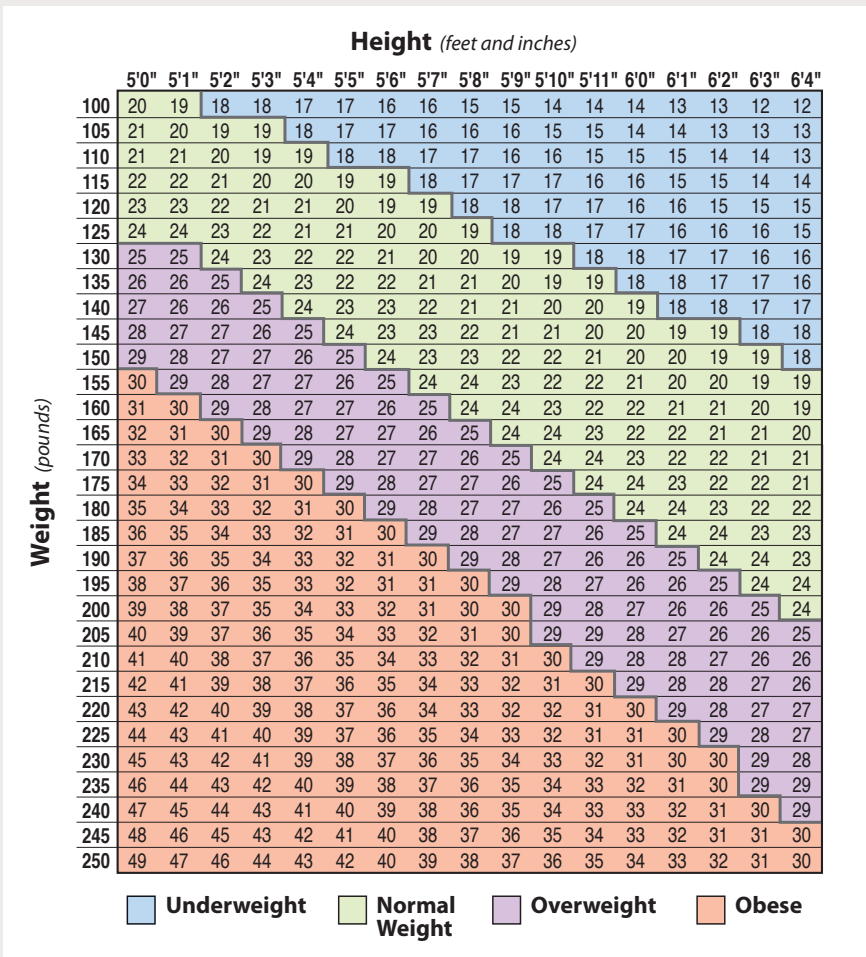
Other large studies have come up with the same results. For example, in 2006, the National Cancer Institute published an analysis on 527,000 men and women in the National Institutes of Health-AARP study.³ And in 1999, the American Cancer Society (ACS) published data on one million participants in its Cancer Prevention Study.⁴ Both found that normal-weight people were least likely to die.

Flegal left much of that data out of her meta-analysis. But adding another million people might not have influenced her results. That’s because she insisted on including smokers and sick people.

“Only the results from healthy never-smokers provide a valid measure of the effect of weight on survival,” explains the ACS’s Michael Thun. “Otherwise, the results are confounded by the effect of illness on weight.”

Rate Your Weight

Your body mass index (BMI) gauges your weight in relation to your height. To see which BMI group you fall into, find where your height and weight intersect. Although a BMI between 18.5 and 24.9 is considered normal, the risk of diabetes, high blood pressure, and breast and uterine cancers starts to climb within that range.



Note: BMI shouldn’t be used to evaluate the weight of children, the frail elderly, serious body-builders, or pregnant or breastfeeding women. If your extra weight comes from muscle, not fat, you may have a high BMI even though you’re healthy. Frail or older people may be unhealthy even though they have a low or normal BMI.

Source: adapted from the National Institutes of Health, *NHLBI Clinical Guidelines on Overweight and Obesity*, June 1998 (www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf).

And Flegal’s study won the media battle.

“Flegal did an end run around the NCI’s collaboration with this meta-analysis,” says Willett. “And it got all the publicity because it was new and it raised doubts about previous work.

“It feeds into the whole stream of news that confuses the public,” he adds. “Even the average physician doesn’t understand these issues in depth.”

Living Longer Isn’t Living Well

If something raises your risk of dying, that may sound like the whole ball of wax, but it’s not.

“All around the world, life expectancies in developed countries are going up, but health expectancy is lagging way behind,” says Yale’s David Katz, referring to a recent report funded by the Bill & Melinda Gates Foundation called “The



Global Burden of Disease Study 2010.”⁶

“Modern medicine and modern technology are remarkably good at staving off death, and as we rely more and more on interventions and technology, we have this tendency to look at forestalling death as the goal,” adds Katz. “But if you’re not living well, you’re not really living.”

“The number of years we spend with serious and debilitating chronic disease keeps going up as we live longer,” says Katz. “We’re living longer but less well. The *JAMA* meta-analysis was blind to that.”

Americans may be living longer than we used to, but not as long—or as well—as people in 16 other affluent countries

major drivers of our poorer health is diabetes,” says Katz. “And the major driver of diabetes all around the world is obesity and even mild degrees of overweight.”

And who wants to get cancer, even if it doesn’t kill you? People who are overweight have a higher risk of cancers of the breast, colon and rectum, esophagus, kidney, pancreas, and uterus. Evidence suggests that that may also be true for cancers of the gallbladder, liver, cervix, and ovary, as well as multiple myeloma, non-Hodgkin lymphoma, and aggressive forms of prostate cancer.⁸

“In 2003, we estimated that 90,000 deaths due to cancer could be prevented

borne by Medicare and Medicaid.

Odds are, the worst is yet to come.

“One of the most ominous aspects of the obesity epidemic is that it has taken diseases that were bad enough when they happened later in life and converted them more and more into pediatric problems,” notes Katz.

“When I went to medical school, I was taught about juvenile-onset diabetes and adult-onset diabetes. Those names are now obsolete because what used to be adult-onset diabetes now happens routinely in kids.”

Today it’s called type 2 diabetes, he adds. “And there’s absolutely no doubt that the reason for that transformation is childhood obesity.”

That trend doesn’t show up in a study of current death rates.

“These kids are still too young,” says Katz. “Over the last decade we’ve watched more and more 7- and 8- and 10-year-olds develop what used to be adult-onset diabetes. But they’re only 20 years old now. They’re sick, but they’re not dying yet. It’s a young generation burdened with a serious chronic illness.”

Will they die prematurely? “Probably, but we’re not going to know that for another 40 or 50 years,” says Katz.

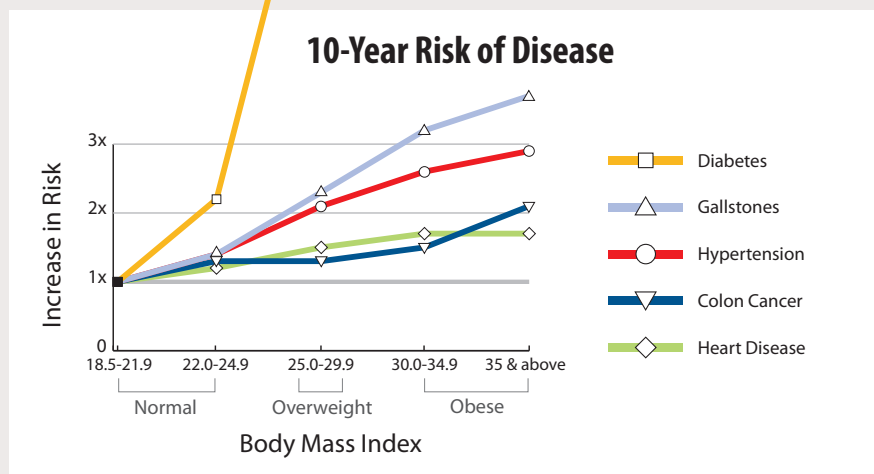
“The meta-analysis is blind to a loss of years of life among kids who are developing serious chronic disease at a very young age because they haven’t grown yet to an age where there’s a risk of dying.”

Alive...but Unhealthy

Whether or not they’re more likely to die, the overweight have a higher risk of diabetes, gallstones, high blood pressure, heart disease, and colon cancer, according to a study that tracked 77,000 women from the Nurses’ Health Study.

Diabetes is the greatest threat. Obese women are 18 times more likely than lean women to get the disease. The most obese women are 30 times more likely (not shown).

Results are similar for the 46,000 men who were tracked as part of Harvard’s Health Professionals Follow-Up Study, except that extra weight raises the risk of heart disease and stroke more in men than in women.



Source: *Archives of Internal Medicine* 161: 1581, 2001.

like Australia, Canada, Japan, and many Western European nations, according to “U.S. Health in International Perspective: Shorter Lives, Poorer Health,” a recent report from the Institute of Medicine of the National Academy of Sciences.⁷

And excess weight is key. “One of the

each year in the United States if men and women could maintain normal weight,” says the American Cancer Society’s Michael Thun.⁹ The medical-care costs of obesity are a “staggering” \$147 billion, according to the Centers for Disease Control and Prevention.¹⁰ Much of that cost is

Waist Matters More than Weight as We Age

Could extra pounds be unhealthy when you’re younger, but healthy when you’re older?

Not if the excess weight is fat. “Even in older age groups, people with excess body fat have a higher risk of diabetes, heart disease, stroke, and cancer,” says Harvard’s JoAnn Manson.

But older people may have excess body fat even if they’re normal weight.

“In older individuals, weight doesn’t reflect fatness as reliably because you lose muscle as you age,” says Manson. In other words, a normal-weight 50-year-old may be muscular, while a normal-weight 80-year-old may have a big belly.

And belly fat matters. “A higher waist circumference still predicts a higher risk of dying,” notes Manson.

“It’s not that once you get to age 70, you can gain as much weight as you want. We know that’s not right. Anyone

who says that is ignoring biology and an enormous body of previous evidence.”

Flip-Flops Confuse People

Flegal’s meta-analysis “is misleading and should be ignored,” says Willett.

“My colleague Meir Stampfer has made the point that if you’re an insurance company that’s only interested in predicting who’s going to die, then these are results that you might want to know,” he adds.

“But if you’re interested in your own health and well-being, then you should be interested in the effect of weight on disease, not the effect of disease on weight.”

According to the meta-analysis, a woman who is 5’5” and normal weight (115 to 145 pounds) would be better off being overweight (150 to 175 pounds). Similarly, a man who is 5’10” and normal weight

(130 to 170 pounds) would be better off being overweight (175 to 205 pounds). (See “Rate Your Weight,” p. 5.)

“Anybody who’s taking care of patients who have had heart attacks or major conditions knows that if you’re overweight, you end up with complications,” says Willett.

“On face value, it doesn’t make sense.

In our data, the likelihood of surviving a heart attack or breast cancer is not better if you’re overweight.”

In fact, you’re less likely to survive cancer if you’re overweight or obese, according to a recent report from the Institute of

Medicine.¹¹

And even if there were no flaws in the recent meta-analysis, how could health experts encourage people to gain weight but stop before they cross the line from overweight to obese? “Being overweight puts you at risk of becoming obese,” says Thun.

What’s more, flip-flops lead the public to start to wonder if scientists get *anything* right.

“We’re doing a lot of harm by treating science like a ping-pong ball,” says Katz. “I feel very strongly that that needs to stop.” 🍌

¹ JAMA 309: 71, 2013.

² N. Engl. J. Med. 363: 2211, 2010.

³ N. Engl. J. Med. 355: 763, 2006.

⁴ N. Engl. J. Med. 341: 1097, 1999.

⁵ N. Engl. J. Med. 333: 677, 1995.

⁶ Lancet 380: 2224, 2012.

⁷ www.iom.edu/Reports/2013/US-Health-in-International-Perspective-Shorter-Lives-Poorer-Health.aspx.

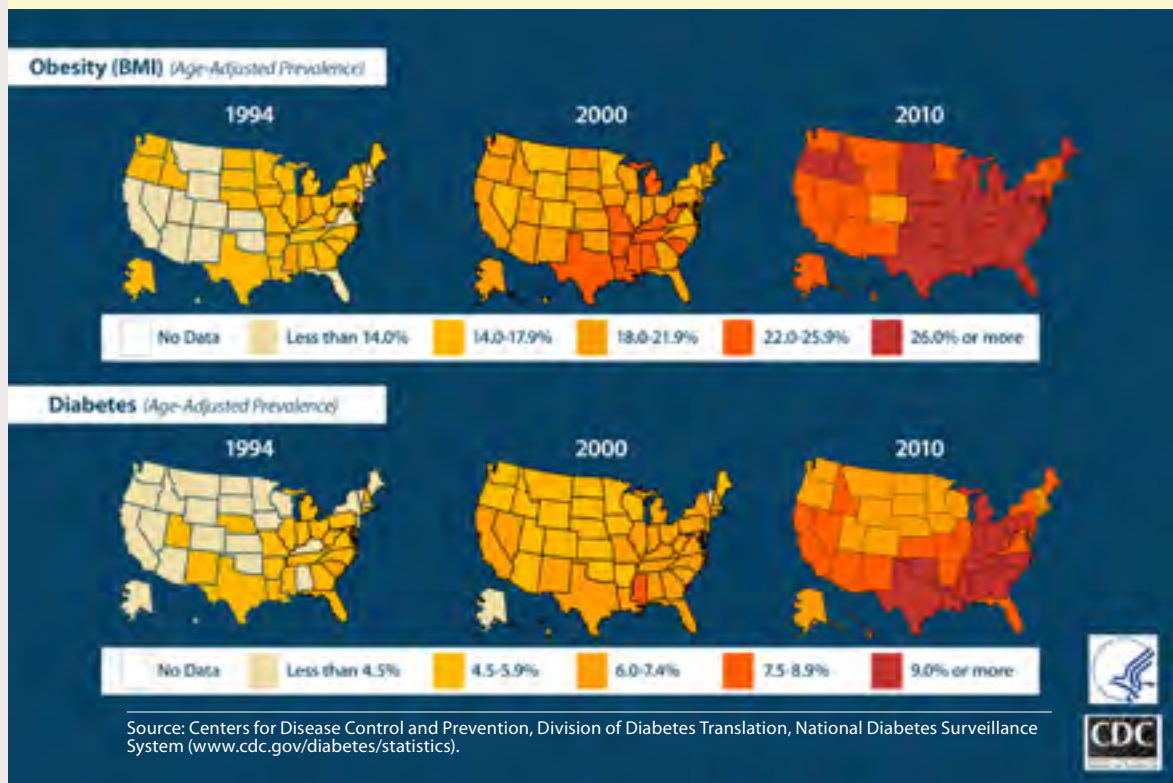
⁸ www.cancer.org/research/cancerfactsfigures/cancer-preventionearlydetectionfactsfigures/index.

⁹ N. Engl. J. Med. 348: 1625, 2003.

¹⁰ www.cdc.gov/obesity/adult/causes/index.html.

¹¹ www.iom.edu/Reports/2012/The-Role-of-Obesity-in-Cancer-Survival-and-Recurrence.aspx.

Obesity Rises...Diabetes Follows



The Epidemic Arrives. As the percentage of adults who are obese has climbed (upper row), the percentage of adults who have been diagnosed with diabetes has followed (lower row).

The Bottom Line

- As your weight increases, so does your risk of heart disease, cancer, diabetes, stroke, and death.
- If you’re older, your waist may matter more than your weight. A large waist (at least 35 inches in women or 40 inches in men) is a risk factor for diabetes, heart disease, and some cancers at any age.
- No matter what you weigh, eat a healthy diet built around vegetables, fruit, beans, whole grains, seafood, poultry, low-fat dairy, and modest amounts of oils, nuts, and other unsaturated fats.
- Shoot for 30 to 60 minutes of exercise each day.



The pigments in berries may protect the heart.

Berry Good

Blueberries and strawberries may protect the heart, thanks to naturally occurring red, blue, or purple pigments called anthocyanins.

Researchers tracked 93,600 women who were 25 to 42 years old when they entered the Nurses' Health Study. After 18 years, the risk of heart attack in those who got the most anthocyanins from their food (at least 25 milligrams a day) was

32 percent lower than the risk in those who got the least (2.5 mg a day or less).

Sixty percent of the anthocyanins consumed by the women came from blueberries (which average about 530 mg per cup) and strawberries (35 mg per cup). However, the pigments are also found in blackberries (355 mg per cup), cherries (175 mg per cup), raspberries (115 mg per cup), red cabbage (115 mg per cup), red grapes (45 mg per cup), and black plums (35 mg each), among other foods, according to the U.S. Department of Agriculture.

What to do: Make colorful fruits and vegetables part of your daily diet. Although this study doesn't prove that anthocyanin-rich foods prevent heart attacks, other research demonstrates that eating roughly 10 servings of fruits and vegetables a day can help lower your blood pressure. To protect your waistline, stick with whole fruit, not juice.

Circulation 127: 188, 2013 and (for anthocyanin levels) *J. Agric. Food Chem.* 54: 4069, 2006.

Your Brain on Fructose

High-fructose corn syrup and table sugar are roughly half fructose and half glucose. But fructose (which is found only in sugars) and glucose (found in sugars and digested starches) may have different effects on the brain.

Researchers took MRI images of the brains of 20 normal-weight volunteers before and after they drank a beverage that contained 75 grams (300 calories' worth) of either fructose or glucose.

Glucose reduced cerebral blood flow—which reflects brain activity—in key areas of the brain that regulate appetite and reward, while fructose did not. Likewise, glucose increased the participants' feelings of fullness and satiety, but fructose did not.

What to do: Cut back on *all* added sugars. This study doesn't prove that fructose leads people to overeat, but it adds to the evidence that sugary beverages promote obesity.

JAMA 309: 63, 85, 2013.

Milk & the Prostate

Only whole milk—not low-fat or fat-free—may be linked to a higher risk of fatal prostate cancer.

Researchers tracked 21,660 men in the Physicians' Health Study for 28 years. Those who drank at least one serving of whole milk a day were twice as likely to die of prostate cancer than those who rarely consumed whole milk. Men who drank at least one serving of fat-free or low-fat milk had a 19 percent higher risk of localized or low-grade prostate cancer, but no higher risk of advanced, high-grade, or fatal cancer.

What to do: Drink low-fat or fat-free milk instead of whole. While this kind of study can't prove that whole milk boosts the risk of fatal prostate cancer, the saturated fat in whole milk raises LDL ("bad") cholesterol and adds calories that most people don't need.

J. Nutr. 2012. doi:10.3945/jn.112.168484.

Fish Oil & the Heart

The omega-3 fats in fish oil (EPA and DHA) don't appear to keep the heart rhythm regular, as earlier studies had suggested.

Argentine and Italian researchers randomly assigned 586 people with an irregular heartbeat (atrial fibrillation) to take either 1 gram of fish oil (containing 850 to 880 milligrams of EPA plus DHA) or a placebo every day. Neither the scientists nor the patients knew who was taking what.

After one year, there was no difference in irregular heartbeats between the two groups.

What to do: Follow your doctor's advice if you have atrial fibrillation, which is linked to a higher risk of stroke. Just don't expect fish oil pills to stabilize your heartbeat.

J. Am. Coll. Cardiol. 61, 2013. doi:10.1016/j.jacc.2012.11.021.

Vitamin D & Knee Pain

If you have arthritis, don't count on vitamin D to ease the pain in your knees. In earlier studies, arthritis progressed more slowly in people with higher levels of vitamin D in their blood. But a disappointing new study found that the vitamin has no benefit.

Scientists randomly assigned 146 people with arthritis in their knees to take either vitamin D (2,000 IU) or a placebo every day. After two years, there was no difference in knee pain, cartilage loss or thickness, or any other measure.

What to do: Don't bother taking vitamin D for arthritis. Instead, exercise more, lose excess weight, and avoid high-impact activities. To protect your bones, though, aim for the current recommended vitamin D intakes: 600 IU a day up to age 70 and 800 IU a day if you're over 70. 🍷

JAMA 309: 155, 2013.



FOOD FEARS

Which ones *should* you worry about?

BY DAVID SCHARDT

Don't eat this, don't do that. Every week, it seems, someone announces that this or that food or cooking technique is harmful. Here's a guide to which fears you should—and which ones you needn't—be concerned about.

Farmed salmon is contaminated



Go for wild salmon whenever possible.

"We found that farmed salmon contained seven to 10 times higher levels of PCBs, dioxins, and pesticides than wild salmon," said David Carpenter of the State University of New York at Albany nine years ago, after he and colleagues analyzed 700 farmed and wild salmon samples that had been bought in 2002.

Farmed salmon absorb PCBs and other industrial chemicals from the fishmeal and fish oil they're fed. In Carpenter's study, salmon farmed in Canada, Chile, Norway, and Scotland had 20 to 50 parts per billion (ppb) of PCBs, compared with 1 to 17 ppb in wild salmon. (Most of the farmed salmon sold in the U.S. comes from Canada and Chile. It's typically called Atlantic salmon, even if it's raised in the Pacific Ocean.)

Using Environmental Protection Agency guidelines, Carpenter advised consumers to eat farmed salmon no more than once a month (see *Nutrition Action*, June 2004).

Are the fish cleaner now? No one has tested enough salmon to know. "I'm not aware of other studies that have systematically analyzed farmed salmon for contaminants since our work," says Carpenter, who is now director of his university's Institute for Health and the Environment.

"Unfortunately, we really don't have hard information to show that commercial interests have done much to clean up farmed salmon," he adds.

Environmental organizations oppose most salmon farming. The Monterey Bay Aquarium, for example, warns that large amounts of wild fish are needed to feed farmed salmon and that waste from farmed salmon pollutes the oceans.

THE BOTTOM LINE: Until more studies are done, err on the side of caution and don't eat farmed salmon more than once a month.

Unwashed bagged greens aren't safe



Washing bagged washed greens could make them *less* safe.

U.S. companies recalled salad greens at least eight times in 2012, usually because of contamination with *Listeria* bacteria.

Luckily, there were no reported illnesses from the contamination. *Listeria*, which can multiply at refrigerator temperatures,

can cause miscarriages in pregnant women and potentially deadly blood poisoning or meningitis in older adults and those with compromised immune systems.

So should you wash bagged greens that say "washed" on the label? "No. Rewashing bagged salad greens that were washed before being packaged is very unlikely to create a safer salad," says Food and Drug Administration produce-safety expert Michelle Smith. "Once disease-causing bacteria become attached to leafy greens, it's difficult to remove them by rinsing with water."

In fact, "the greater likelihood is that you'll make a safe product unsafe because of cross-contamination with bacteria from your fingers, cutting boards, countertops, or the sink," adds Smith.

If the bag doesn't say "washed," though, you *do* need to wash the greens thoroughly.

What about slimy leaves?

"Spoilage is not just a quality issue," says Smith. "It can also be a food-safety issue. Once spoilage organisms start to attack, a vegetable or fruit becomes more susceptible to pathogens because its skin or surface begins to break down, allowing easier entry of pathogens." And once inside the plants' cells, the germs can chow down...and flourish.

THE BOTTOM LINE: Don't rewash bagged washed greens. As for spoilage, "I would look carefully at the leaves from the top of the bag as I pull them out," says Smith. "If they are starting to spoil, I would discard the entire bag. If the bulk of the lettuce appears sound and there are a few spoiled leaves at the bottom of the bag, I might use what's at the top and discard the slimy leaves and any leaves they may have touched."



Microwave popcorn ruins lungs



Pop, *let cool*, open, enjoy.

“Popcorn lung” is an irreversible scarring of the smallest airways in the lungs. It’s caused by inhaling vapors of a buttery-tasting chemical that some manufacturers may be adding to their microwave popcorn.

Diacetyl is a natural compound found in cheese, butter, yogurt, and wine. It’s not harmful when swallowed, but it can damage the lungs if large amounts are inhaled. Nearly all “popcorn lung” victims worked in popcorn or flavoring manufacturing facilities, where they breathed in the chemical every day. The most severe cases needed lung transplants.

Several consumers also claim to have the disease, including a middle-aged man in Colorado who inhaled the buttery steam from the two bags of popcorn he microwaved every day for 10 years “because it smells good.” His \$7 million award is being appealed by the supermarket chain that sold him the popcorn.

“Generally, flavor manufacturers have reduced the amount of diacetyl they use, and, in some instances, diacetyl has been replaced with other, similar flavoring substances,” says John Hallagan of the Flavor and Extract Manufacturers Association.

How can you tell if your favorite microwave popcorn contains diacetyl? You can’t.

“FDA food-labeling regulations don’t require the specific declaration of individual flavoring substances,” notes Hallagan, “so butter-flavored microwave popcorn labels will simply list them as ‘natural,’ ‘artificial,’ or ‘natural and artificial’ flavors.”

THE BOTTOM LINE: If you eat butter-flavored microwave popcorn and want to lower any potential risk of inhaling flavoring compounds, says Kathleen Kreiss of the Centers for Disease Control and Prevention (CDC), “allow the bag to cool before you open it, and use a kitchen exhaust hood if you have one.”

Meat glue is dangerous

If you’ve attended a wedding reception or conference where every piece of beef looked exactly the same, you’ve probably ingested one of two enzymes that some call “meat glue.”



Meat glue may raise food-poisoning risk.

Transglutaminase, which is produced by bacteria, and beef fibrin, which is extracted from cow’s blood, can seamlessly bind one piece of meat to another to make small pieces look like steak. The enzymes have been used for years to minimize waste and turn out uniform portions. What’s wrong with that?

The enzymes themselves are harmless. What’s dicey is the fate of any disease-causing bacteria that might be on the outside of meat that ends up “glued” in the inside.

Normally, bacteria on the surface of steaks and roasts are killed when the meat is seared, roasted, or grilled. “But using meat glue can move that surface inside, where it might not be cooked thoroughly enough to kill bacteria,” says Sarah Klein, an attorney and food-safety advocate at the Center for Science in the Public Interest, *Nutrition Action’s* publisher.

Meat-glue manufacturers claim that no food-poisoning outbreaks have been blamed on rare or undercooked glued meat. “Foodborne outbreaks have been linked to eating steak,” counters Klein, “but the victims usually don’t know if what they were eating was fabricated with the enzymes.”

You’re most likely to find transglutaminase and beef fibrin in food served at events like conferences and weddings, at casinos, on cruise ships, and by some high-end chefs. You probably won’t run into them at the supermarket.

THE BOTTOM LINE: Klein’s advice: “If you’re eating at a wedding, conference, or other function, it’s safest to order your beef medium or well done.”

Raw bean sprouts are likely to make you sick



Warm and humid: ideal growing conditions for sprouts...and bacteria.

The Kroger supermarket chain announced in October that it would no longer sell raw bean sprouts because they are too often contaminated with disease-causing bacteria. Wal-Mart stopped selling sprouts two years ago.

“There have been at least 35 outbreaks from contaminated sprouts since the mid-1990s,” says the Food and Drug Administration’s Michelle Smith. The primary culprits: *Salmonella* and *E. coli*.

Unsprouted seeds can be contaminated by dirty water, animals, or improperly composted manure in the field or during distribution or storage. A single *Salmonella* bacterium on a seed can easily grow to an infectious dose during the two to seven days it takes for the seed to sprout, notes the FDA.

“Rinsing the sprouts can remove dirt and some bacteria, but not the bacteria that have become firmly attached,” says Smith. “In the nutrient-rich, wet environment that sprouts are grown in, bacteria can enter root hairs and other plant structures where they can’t be washed off.” The only way to kill any bacteria that may be present is to stir-fry, boil, or thoroughly cook sprouts in some other way.

THE BOTTOM LINE: If you eat sprouts, make sure they’re thoroughly cooked, not added at the end for crunch.

Arsenic in rice causes cancer



Limiting rice helps limit arsenic.

Last September, *Consumer Reports* magazine found “troubling” levels of inorganic arsenic in almost every rice-containing food it tested.

Arsenic is found in a wide range of foods,

including fruits and vegetables, chicken, and grains. Rice takes up arsenic from soil and water more readily than other grains do.

In the *Consumer Reports* tests, a quarter cup of uncooked white rice ranged from roughly 1 microgram to 7 micrograms of inorganic arsenic, while brown rice ranged from 4 mcg to 10 mcg. (Brown rice tends to have more arsenic than white rice because the metal concentrates in the bran.) Rice cakes ranged from 2 mcg to 8 mcg per serving, while hot and ready-to-eat rice cereals ranged from 2 mcg to 7 mcg.

Arsenic is a known human carcinogen.

“Ingestion of inorganic arsenic in drinking water can cause cancer of the skin, bladder, lung, liver, and kidney,” says Allan Smith, director of the Arsenic Health Effects Research Program at the University of California, Berkeley.

That’s based on studies in people who were exposed to large amounts of arsenic for many years. In Bangladesh, people who drank tap water that contained 50 to 149 micrograms of arsenic per liter for 20 to 30 years, for example, were 44 percent more likely to die of cancer than those who drank water with less arsenic.¹

Americans are exposed to much lower levels. How concerned should we be? There isn’t enough data to set a limit on inorganic arsenic in food, says the Institute of Medicine of the National Academy of Sciences.

The U.S. Environmental Protection Agency limits the total amount of arsenic in drinking water to 10 micrograms per liter. (A liter is roughly a quart.) But some 2 percent of U.S. drinking water has more than twice that much. (Check with your water utility for arsenic levels in your community’s drinking water. To get rid of arsenic at home, you’ll need an under-the-sink reverse osmosis filter. A pitcher or faucet filter won’t do.)

THE BOTTOM LINE: The less arsenic you ingest, the better. *Consumer Reports* recommends that adults eat no more than 1½ to 2 cups of cooked (brown or white) rice a week. (For arsenic levels by brand, see consumerreports.org/cro/magazine/2012/11/arsenic-in-your-food/index.htm.)

You can remove about half the arsenic in your rice by rinsing it, cooking it in six parts water to one part rice until it reaches eating texture, then pouring off the extra water.²

¹ *Epidemiology* 20: 824, 2009.

² *J. Environ. Monitor.* 11: 41, 2009.

Nonstick cookware fumes are toxic



Nonstick coatings appear to be safe.

“Beware: Your Non-Stick Cookware is Heating Up Your Risk of Getting Cancer and Other Health Hazards!” warns Joseph Mercola, who runs the popular Web site mercola.com.

The villain: PFOA, a compound that the U.S. Environmental Protection Agency is studying as a suspected human carcinogen. Some companies use PFOA to help their nonstick coatings spread evenly over the cookware during manufacturing. Most is burned off before the cookware leaves the factory.

“Companies that rely on PFOA were saying that none of it is released during the use of their nonstick cookware,” says Kurunthachalam Kannan of the New York State Department of Health. “But PFOA emissions are difficult to measure, and not many facilities have the equipment to do it.”

With funding from Consumers Union, Kannan and his coworkers found that new nonstick cookware heated to 356° F to 444° F *did* emit PFOA, both into the air and into water that was being heated in the cookware. But the amounts were “very little,” varied dramatically from brand to brand, and declined with each use of some brands. (The study didn’t name any of the brands tested.)¹

“The highest level was around 100 times lower than published animal studies suggest are levels of concern,” concluded consumerreports.org.

Some people also worry that nonstick coatings, when heated, can break down and release toxic particles and fumes. But that breakdown occurs only when the cookware is heated beyond normal, to more than 500° F. At that temperature, foods begin to scorch and smoke and plastic handles can start to melt.

As for PFOA, virtually all Americans have it in their bloodstream, but very little likely comes from cookware. The chemical is widely used in stain- and water-resistant coatings for carpets, upholstery, and clothing, and in food packaging and fire-resistant foams and paints.²

THE BOTTOM LINE: There’s no need to throw out your nonstick cookware. Just keep the burner below high. 🍳

¹ *Environ. Sci. Technol.* 41: 1180, 2007.

² *Arch. Intern. Med.* 172: 1397, 2012.



...AND THEY'RE FULL OF FIBER

BY KATE SHERWOOD

There's no better way to work more fiber into your diet than to eat lentils and beans. And there's no more *delicious* way than to add these three simple dishes to your repertoire. 🍴

Got a question or suggestion? Write to Kate at healthycook@cspinet.org.

Red Lentil Curry

Serves 4 | Total Time: 30 minutes 



- 1 cup red lentils
- ½ tsp. turmeric powder, optional
- 1 Tbs. unsalted butter
- 2 Tbs. canola oil
- 1 large onion, thinly sliced
- 1 inch piece ginger
- 1 Tbs. chili powder
- 1 15 oz. can no-salt-added diced tomatoes
- ½ tsp. kosher salt
- ½ cup cilantro leaves

Try tossing a bag of baby spinach into the pot just before serving. Then top each bowl with a dollop of plain yogurt.

In a medium pot, combine the lentils and turmeric with 4 cups of water. Bring to a boil, then reduce the heat and simmer until tender, 15-20 minutes. • Meanwhile, in a large skillet over medium heat, melt the butter with the oil. Sauté the onion until browned, about 10 minutes. • Cut half of the ginger into fine matchsticks for garnish and grate the rest. Stir the grated ginger and the chili powder into the onions. Stir in the tomatoes and simmer until the lentils are done. • Stir the lentils into the skillet and simmer for 5 minutes. Season with up to ½ tsp. of salt and garnish with the ginger matchsticks and cilantro leaves.

Per Serving (1 cup): Calories: 270 | Sodium: 300 mg | Total Fat: 8 g
Sat Fat: 2 g | Carbs: 38 g | Protein: 15 g | Fiber: 9 g

Chickpeas with Arugula-Lemon Pesto

Serves 4 | Total Time: 5 minutes 



- 1 Tbs. lemon juice
- 1 clove garlic
- 2 cups arugula
- 1 cup fresh basil
- 3 Tbs. extra-virgin olive oil
- freshly ground black pepper
- 1 15 oz. can no-salt-added chickpeas, drained
- ½ tsp. kosher salt
- 8 butter lettuce leaves

This bright, peppery pesto is also delicious tossed with a combination of white beans, string beans, and tuna. Or mix it into 2 cups of cooked whole wheat couscous or bulgur.

Combine the lemon juice, garlic, arugula, basil, oil, and pepper in a food processor. Process until the herbs and garlic are finely chopped. • In a medium bowl, toss the chickpeas with the pesto and season with up to ½ tsp. of salt. • Serve on the lettuce leaves.

Per Serving (¾ cup): Calories: 210 | Sodium: 270 mg | Total Fat: 12 g
Sat Fat: 1.5 g | Carbs: 20 g | Protein: 7 g | Fiber: 5 g

Stewed Italian Beans

Serves 4 | Total Time: 20 minutes 



- 2 stalks celery, diced
- 1 carrot, diced
- 3 Tbs. extra-virgin olive oil
- 3 cloves garlic, minced
- ½ tsp. dried rosemary or thyme
- 2 Tbs. tomato paste
- 2 15 oz. cans no-salt-added kidney beans
- ½ tsp. salt
- freshly ground black pepper
- 2 Tbs. balsamic vinegar

We used red and white (cannellini) kidney beans for color, but you can use any kind. If you prefer fresh herbs, triple the amount to 1½ teaspoons.

In a large skillet over medium heat, sauté the celery and carrot in the oil until they start to soften, about 3 minutes. • Stir in the garlic, rosemary, and tomato paste. Cook, stirring frequently, for 2 minutes. • Stir in the beans with their liquid. Simmer for 5 minutes. • Season with up to ½ tsp. of salt, plenty of black pepper, and the balsamic vinegar.

Per Serving (1 cup): Calories: 280 | Sodium: 340 mg | Total Fat: 12 g
Sat Fat: 1.5 g | Carbs: 34 g | Protein: 11 g | Fiber: 9 g

Heat 'n' Eat

Top picks in the hot-cereal aisle

BY JAYNE HURLEY & BONNIE LIEBMAN



Starbucks is doing it. So are McDonald's, Caribou Coffee, Dunkin' Donuts, Jamba Juice, Au Bon Pain, and Panera. Leading chains are offering oatmeal as a healthy alternative to Egg McMuffins, bagels, doughnuts, danish, and other pastries. Bravo!

But you don't have to go out for oatmeal. Hot cereal can be a cheap, in-your-kitchen, hearty source of whole grains (and their unprocessed fiber) that doesn't drain your sugar quota for the day.

Here's what counts—and what doesn't—when you like it hot.

The information for this article was compiled by Emily Caras.

1. Go for whole grains. This one's easy. Except for grits and the original versions of Cream of Rice and Cream of Wheat (a.k.a. farina), whole grains rule in the cereal aisle. Oatmeal, king of hot cereals, is always whole, though some kinds (like steel-cut) are less processed than the instants. Check the ingredient list to make sure that other grains or flours are called "whole" or "rolled" and that any rice is brown.

One catch: bran isn't whole, according to labeling rules, yet the bran (outer layer) of the grain is the part that's richest in intact, unprocessed fiber and that may help lower your risk of heart disease and diabetes. That's why we counted bran as whole in coming up with our Best Bites, which are 100% whole grain.

2. Skip the sugar. When it comes to added sugar, less is better and none is best. We awarded Best Bites to cereals with no added sugars (that includes evaporated cane juice, honey, and maple syrup, among others).

Want sweetness? Add your own fresh or dried fruit. Or try Best Bites that do it for you. Bob's Red Mill Old Country Style Muesli, Hodgson Mill Apples & More Muesli, and Umpqua Oats Unsweetened Not Guilty All Natural Oatmeal, for example, toss in raisins and/or dried dates, apples, or blueberries.

They beat competitors like Country Choice Organic Apple Cinnamon Instant Oatmeal, whose apples account for less than 1 of the 2½ teaspoons of sugar in each serving. The rest comes from added sugar and maple syrup.

They also beat Quaker Lower Sugar Instant Oatmeals (with no more than 1 teaspoon of added sugar—about half what's in Quaker's regulars) and Quaker High Fiber Instant Oatmeals (1½ teaspoons). While that may not seem like much, the added sugar adds up quickly if you're trying to stay under the daily max: 6 teaspoons for

women and 9 teaspoons for men.

Quaker's Cinnamon and Maple Perfect Portions Instant Oatmeals have—kudos to Quaker—no added sugar, but their 220 milligrams of sodium per serving is unnecessarily high. And Quaker Weight Control Instant Oatmeal strikes out because it replaces its sugar not just with (safe) sucralose, but also with poorly tested acesulfame potassium.

3. Minimize salt. For the most part, only instant hot cereals have salt. And you don't need instants to save time. Witness Quaker Quick 1-Minute Oats. And McCann's Quick & Easy Steel Cut Irish Oatmeal and Country Choice Organic Quick Cook Steel Cut Oats cook in just five minutes.

If you want an instant, look for one (like our Best Bites) that has no more than 100 milligrams of sodium per serving.

For the best-tasting Best Bites, see the photos below.



Crunchy oats meet sweet apples and raisins.



Quick-cooking steel-cut oats in single-serve pouches. Who knew?



Nutty, hearty. Our favorite multigrain blend.



Thick and chewy...in a good way. Very satisfying.



Hot cereal getting too predictable? Toasted wheat to the rescue.

Photos: © oksix/fotolia.com (top); Bob's Red Mill, Emily Caras/OSPI (bottom)



Its extra fiber isn't the kind you need.

Too bad that some of the fiber in those cereals comes from maltodextrin or polydextrose, processed fibers that may not be as good at lowering the risk of

FIND THE GOOD FIBER

"Provides 40% of Daily Value," boasts Quaker High Fiber Instant Oatmeal. "6g Fiber," says Quaker Weight Control Instant Oatmeal.

heart disease, diabetes, and constipation as the unprocessed, intact fiber in whole grains.

Most whole-grain cereals that have no added fiber deliver 3 to 5 grams of fiber per serving. (Exception: brown rice cereals typically have only 2 grams.)

If you want more, look for non-instant cereals that have added wheat bran and/or oat bran. That's how Hodgson Mill Multi Grain Hot Cereal gets 6 grams of fiber, for example, and how Bob's Red Mill Organic High Fiber Hot Cereal gets 10 grams.

GO OATS

"As part of a heart-healthy diet, the soluble fiber in Oatmeal can help reduce cholesterol," says the Quaker Old Fashioned Oats canister.

Labeling regs allow that claim if a food has at least three-quarters of a gram of soluble (gummy) fiber per serving. But you'd need to increase your soluble fiber intake by 5 to 10 grams a day to lower your LDL ("bad") cholesterol by a modest 5 percent. A serving of plain oatmeal has around 2 grams. Oat bran hot cereal has around 3 grams. (Most other kinds of cereal have less than a gram.)

If you like oats, it's a win-win. Just don't expect miracles.



It takes at least 2½ servings a day to lower your LDL by 5 percent.

ENERGY SCAM

"OUR BALANCED MEAL of protein, healthy fats and fiber is likely to make you scale buildings and pick up cars. Or at least give you hours of energy," say the backs of the ready-to-eat Cocomama Quinoa Cereal pouches.

Hmmm.

On labels, "energy" means calories, and Cocomama has more (220 to 240 per serving) than other cereals, largely because Mama adds coconut cream, which also supplies 6 to 8 grams of saturated fat (about a third of a day's max).

Tired? Odds are you need sleep, not extra calories.



Its "energy" comes with a third of a day's saturated fat.

FAKE FRUIT?

Quaker Blueberries & Cream Instant Oatmeal has more sugar than "blueberry flavored and colored fruit pieces" (which are made largely of dried figs, sugar, blueberry juice concentrate, partially hydrogenated oil, artificial blueberry flavor, and food dyes Blue 2 and Red 40).

Quaker Weight Control Banana Bread Instant Oatmeal has no bananas. Mom's Best Naturals Organic Cinnamon Plum Spiced Multigrain Hot Cereal and Three Sisters Organic Cinnamon Plum Spiced Hot Cereal have no plums.

So it's good news that three of Quaker's four Real Medleys Oatmeal cereals seem to have more fruit than sugar (and

that it's actually the fruit that's in the name).

But you can do better. Three of our Best Bites—Bob's Red Mill Old Country Style Muesli, Hodgson Mill Apples & More Muesli, and Umpqua Oats Unsweetened Not Guilty All Natural Oatmeal—have real fruit and no added sugar. Nice.



Yes, it has no bananas.

STAY FULLER?

"Each warm, nourishing bowl is a good source of protein and an excellent source of fiber to help you stay full longer," says the back of the Cream of Wheat Instant Healthy Grain Original box. Yet it's not clear if each bowl's 7 grams of protein and 6 grams of fiber will make you feel full longer.

A serving of most hot cereals has 4 to 6 grams of protein. Healthy Grain Original gets its extra 2 grams from whey protein isolate. That can't hurt if you're middle-aged or older and are trying to reach 20 grams of protein per meal to preserve muscle. But you can get an extra 8 grams of protein simply by making your cereal with a cup of milk instead of water.

At least Healthy Grain uses wheat bran—rather than processed fibers—to boost its fiber. Judging by the ingredients (wheat farina, bran, and wheat germ), it looks like the whole-grain wheat was taken apart and put back together, but with extra bran. Odds are, the bran in the barely processed whole wheat flakes you'll get in Bob's Red Mill Rolled Wheat Hot Cereal is better at keeping you regular. 🍌



Any whole-grain cereal can make you feel full longer.

MIX IT UP

Start with an unsweetened cereal and add:

- > Almonds and dried apricots
- > Diced apple, cinnamon, and raisins
- > Golden raisins and sunflower seeds
- > Dried mango and shredded coconut
- > Diced pear, walnuts, and nutmeg
- > Chopped dates and pecans



Hot Stuff

Best Bites (✓✓) are 100% whole grain (we counted bran as whole), contain no added sugar (the chart lists *total* sugar because companies wouldn't disclose how much naturally occurring sugar is in their cereals' fruit or grain), have no more than 100 mg of sodium per serving, and are free of the poorly tested artificial sweetener acesulfame potassium.

(Within each section, cereals are ranked from most to least fiber, then least to most total sugar, calories, and sodium, then most to least protein.)

Multi-Serve Cereal— with no added sugar (about ½ to 1 cup cooked)	Calories	Fiber (g)	Total Sugar (g)	Protein (g)	Sodium (mg)
✓✓ Bob's Red Mill Organic High Fiber (45 g)	150	10	0	8	0
✓✓ Bob's Red Mill 7 Grain (41 g)	140	6	0	6	0
✓✓ Quaker (or other brands) Oat Bran (40 g)	150	6	0	7	0
✓✓ Hodgson Mill Multi Grain (40 g)	160	6	0	7	0
✓✓ Old Wessex Ltd. All-Natural 5 Grain (40 g)	160	6	0	6	0
✓✓ Hodgson Mill Cracked Wheat (40 g)	110	5	0	5	0
✓✓ Bob's Red Mill 5 Grain (35 g)	120	5	0	5	0
✓✓ Country Choice Organic Multi Grain (40 g)	130	5	0	5	0
✓✓ Bob's Red Mill—Cracked Wheat, Organic 6 Grain, Organic Cracked Wheat, or Rolled Wheat (40 g) ¹	140	5	0	6	0
✓✓ Bob's Red Mill 10 Grain (46 g)	140	5	0	6	10
✓✓ Bob's Red Mill Grains & Nuts (44 g)	150	5	0	6	0
✓✓ Old Wessex Ltd. Instant Oatmeal—All-Natural or Organic (40 g)	160	5	0	6	0
✓✓ Wheatena (40 g)	160	5	0	5	0
✓✓ Bob's Red Mill Creamy Rye Flakes (30 g)	100	4	0	4	0
✓✓ Bob's Red Mill Peppy Kernels (28 g)	100	4	0	4	0
✓✓ Bob's Red Mill Rolled Triticale (30 g)	100	4	0	4	0
✓✓ Cream of Wheat Whole Grain (33 g)	100	4	0	4	90
✓✓ Bob's Red Mill Organic Kamut (40 g)	120	4	0	5	0
✓✓ Mother's Whole Wheat (40 g)	130	4	0	5	0
✓✓ Bob's Red Mill Scottish Oatmeal—Organic or regular (36 g)	140	4	0	6	0
✓✓ Bob's Red Mill 8 Grain (40 g)	150	4	0	6	0
✓✓ Mother's Instant Oatmeal (40 g)	150	4	0	5	0
✓✓ Quaker (or other brands) Oats—Old Fashioned or Quick 1-Minute (40 g)	150	4	0	5	0
✓✓ Quaker (or other brands) Steel Cut Oats (40 g)	150	4	0	5	0
✓✓ Bob's Red Mill Gluten Free Mighty Tasty (42 g)	150	4	0	4	10
✓✓ Bob's Red Mill Whole Wheat Farina—Organic or regular (45 g)	160	4	0	5	0
✓✓ Quaker Perfect Portions (45 g)	160	4	0	6	220
✓✓ Bob's Red Mill Apple, Cinnamon & Grains (45 g)	160	4	0.5	6	20
✓✓ Bob's Red Mill Spice N' Nice (44 g)	190	4	0.5	5	10
✓✓ Bob's Red Mill Old Country Style Muesli (32 g)	110	4	1	4	0
✓✓ Hodgson Mill Apples & More Muesli (35 g)	150	4	1	5	0
✓✓ Hodgson Mill Bulgur Wheat (40 g)	120	3	0	10	0
✓✓ Bob's Red Mill Rolled Spelt (40 g)	130	3	0	5	0
✓✓ Bob's Red Mill Millet Grits (47 g)	170	3	0	5	0
✓✓ Quaker Quick 5 Minutes Grits (37 g)	130	2	0	3	0
✓✓ Bob's Red Mill Organic Creamy Buckwheat (41 g)	140	2	0	5	0
✓✓ Arrowhead Mills Organic Gluten Free Rice & Shine—Quinoa or regular (42 g) ¹	150	2	0	4	0
✓✓ Bob's Red Mill Creamy Rice—Organic or regular (41 g)	150	2	0	3	10
✓✓ Ancient Harvest Quinoa Organic Quinoa Flakes (34 g)	130	2	0.5	4	0

	Calories	Fiber (g)	Total Sugar (g)	Protein (g)	Sodium (mg)
Cream of Wheat 2½ Minute (33 g)	120	1	0	4	90
Farina Mills Farina Original (35 g)	130	1	0	4	0
✓✓ Hodgson Mill Gluten Free Buckwheat (41 g)	150	1	0	2	0
Cream of Rice (45 g)	160	0	0	3	0

Single-Serve Oatmeal—**with no added sugar** (1 package)

✓✓ Umpqua Oats Unsweetened Not Guilty All Natural (52 g)	210	7	1	7	0
Quaker Weight Control Instant (45 g) ¹	160	6 ^F	0 ^A	7	280
Nature's Path Organic Original (50 g)	190	6	0	8	120
✓✓ Whole Foods 365 Organic Original Instant (40 g)	150	4	0	6	0
✓✓ Country Choice Organic Quick Cook Steel Cut Oats (40 g)	150	4	0	5	0
✓✓ Quaker Organic Regular Instant (28 g)	100	3	0	4	0
✓✓ McCann's Irish Regular Instant (28 g)	100	3	0	4	80
✓✓ Quaker Original Instant (28 g)	100	3	0	4	80
✓✓ Country Choice Organic Original with Flax Instant (29 g)	110	3	0	4	0

Single-Serve Other Grains—**with no added sugar** (1 package)

Cream of Wheat Instant Healthy Grain Original (45 g)	150	6	0	7	170
✓✓ Three Sisters Organic Plain Grain (42 g)	160	4	0	6	80
✓✓ Mom's Best Naturals Organic Plain Grain Multigrain (42 g)	160	3	0	6	80
Cream of Wheat Instant Original (28 g)	100	1	0	3	170
Quaker Instant Grits—Butter or Original (28 g) ¹	100	1	0	2	330

Single-Serve Oatmeal—**with added sugar** (1 package)

Quaker High Fiber Instant (45 g) ¹	160	10 ^F	1.5	4	240
Umpqua Oats All Natural (76 g) ¹	290	7	5	8	300
Quaker Real Medleys (73 g) ¹	280	6	4.5	8	200
Nature's Path Organic (46 g) ¹	180	4	2.5	5	120
Country Choice Organic Multigrain (45 g) ¹	170	4	3	4	140
Quaker Instant Oatmeal Express (54 g) ¹	200	4	4.5	5	290
Quaker Lower Sugar Instant (34 g) ¹	120	3	1	4	230
Quaker Instant (40 g) ¹	150	3	2.5	4	210
Country Choice Organic Instant (40 g) ¹	160	3	2.5	4	60
Quaker Organic Maple & Brown Sugar Instant (41 g)	150	3	3	4	100
McCann's Irish Instant (39 g) ¹	150	3	3	4	210
Three Sisters Dark Chocolate Old Fashioned Instant (44 g)	160	3	3	4	220
McCann's Artisan Collection Irish (42 g) ¹	160	3	3	3	220

Single-Serve Other Grains—**with added sugar** (1 package)

Mom's Best Naturals Multigrain—Organic or regular (43 g) ¹	160	4	2	5	170
Three Sisters Multigrain (43 g) ¹	160	3	2	5	90
Three Sisters Organic (43 g) ¹	160	3	2	5	220
Cocomama Quinoa Cereal (142 g, prepared) ^{S1}	230	3	3	5	210

✓✓ Best Bite. ¹Average. ^AContains acesulfame potassium. ^FNumber includes added processed fiber. ^SContains more than 1.5 grams of saturated fat.

Daily Limits (for a 2,000-calorie diet): **Fiber:** at least 25 grams. **Sodium:** 1,500 milligrams. **Added Sugar:** 25 grams (6 teaspoons) for women, 38 grams (9 teaspoons) for men. (Note: To convert teaspoons of sugar to grams, multiply by 4.2.)

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

The Center for Science in the Public Interest (CSPI), founded in 1971, is an independent nonprofit consumer health group. CSPI advocates honest food labeling and advertising and safer and more nutritious foods. CSPI's work is supported by *Nutrition Action Healthletter* subscribers and foundation grants. CSPI accepts no government or industry funding. *Nutrition Action Healthletter*, first published in 1974, accepts no advertising.

Nutrition Action Healthletter

CENTER FOR SCIENCE IN THE PUBLIC INTEREST
Suite 300, 1220 L Street N.W.
Washington, DC 20005
www.cspinet.org

RIGHT STUFF

CHICKEN DONE RIGHT



It doesn't matter if you're looking at a big brand of breaded chicken patties like Tyson or Perdue—or at (chicken-less) Boca Chik'n or MorningStar Farms Chik patties. Either way, you can expect 400 to 600 milli-

grams of sodium in each 2.5 to 3 oz. patty. Good luck staying under the recommended max (1,500 mg a day).

That is, unless you pick up frozen **Bell & Evans Breaded** or **Applegate Naturals Chicken Patties**. Each Bell & Evans patty (4 oz. uncooked) has just 300 mg of sodium. Applegate's 3 oz. patties (they come cooked) get by with just 210 mg. Bland? No way. You'd never know they had roughly half the sodium of the big brands.

Both Bell & Evans and Applegate come out moist on the inside and crispy on the outside. Just pop them in the oven for 20 to 30 minutes (you can microwave Applegate's for 1½ minutes) and serve. Delish.

Bonus: neither brand uses chickens that have been raised using antibiotics. Bell & Evans' suppliers let their chickens roam free. Applegate's birds are raised on "sustainable family farms in a stress-free environment that promotes natural behavior and socialization."

You could cut the sodium even further by cooking your own fresh chicken and coating it with unsalted breading. But some days, that's two steps too many. With Bell & Evans or Applegate, just throw a few in the oven, grab some whole-grain buns, make a hefty salad, and set the table.

Can you take a hint, Boca? How about it, MorningStar? C'mon, Tyson. Let's go, Perdue. Less-salty patties couldn't be rocket science.

Bell & Evans: (717) 865-6626

Applegate: (866) 587-5858

FOOD PORN

WILD THINGS

Let's see. Should you order **Buffalo Wild Wings' Traditional Wings** or its "all-white chicken" **Boneless Wings**?

No problem. The restaurant offers a **Traditional & Boneless Combo**—six of each, served with french fries and coleslaw. How convenient.

The six Traditional Wings deliver 670 calories and 22 grams of saturated fat plus 2 grams of trans fat, thanks in part to deep-fried fatty wing meat and skin. Think of them as a 14 oz. New York strip steak. The half-dozen Boneless Wings pack 580 calories, 12 grams of sat fat, and 1 gram of trans. They're a 10 oz. New York strip steak.

How does chicken end up with as much saturated fat as beef? Simple. Buffalo fries its wings—and its french fries—in beef tallow.

With the fries (which are equal to a 9 oz. sirloin steak) plus coleslaw and blue cheese dressing, the Combo hits the jackpot: 2,260 calories (more than a day's worth), 53 grams of sat fat (a 2½-day supply), and 4 grams of trans fat (2 days' worth).

And don't forget the 5,960 milligrams of sodium (enough to take you from Monday through Thursday).

Buffalo Wild Wings is known as "the wing capital of the world" because the chain sells "on average 21 million traditional and boneless wings each week."

To update a '60s classic, "Wild Wings, you make my cardiologist sing."

Buffalo Wild Wings: (952) 593-9943

dish OF THE MONTH

Savory Mushrooms

For a dazzling topping for 4 cups of broccoli, cauliflower, or any other steamed vegetable, sauté ½ lb. of sliced mushrooms (any kind) in 2 Tbs. of extra-virgin olive oil in a large pan until well browned. Add 2 Tbs. of balsamic vinegar and 1 Tbs. of reduced-sodium soy sauce and sauté until dry.