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Gut Myths?

Clearing up confusion in the GI tract

BY BONNIE LIEBMAN

Got gas? Wondering if you should avoid gluten? Spending too much—or too little—time in the facilities lately? Thinking of trying pills to help you digest milk, get more fiber, or clean out your system?

When it comes to your GI tract, it's hard to know what's what. Entire aisles in the drugstore and shelves in the supermarket—not to mention your grandmother—promise answers. Yet misconceptions abound. Here are half a dozen that won't fool you.

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MEMO FROM MFJ

Eat Your Veggies



Everyone who talks, writes, or preaches about nutrition puts fruits and vegetables at the pinnacle of goodness. While they may lack magical powers, most are excellent sources of potassium (which helps lower blood pressure), vitamins (like A and C), fiber (which helps the digestive system run smoothly), and other nutrients. And when we fill up on low-calorie fruits and veggies, our diets have less room for junk. What's more, people who eat more produce have a lower risk of heart disease and stroke.

Since 1980, the government has advised us to eat more fruits and vegetables. For two decades, the National Cancer Institute has urged us to eat five to nine servings of fruits and vegetables each day. And the U.S. Department of Agriculture's recent MyPlate graphic encourages people to fill half their plate with fruits and vegetables.

Most people have heard the message. But we're still not eating enough. After rising about 25 percent between 1980 and 1995, vegetable consumption leveled off at a sorry one cup per person per day (excluding white potatoes, potato chips, and fries). And fruit consumption has remained constant—at just half a cup per day—for the past 25 years. (We don't count fruit juice, since it lacks the fiber that's in whole fruit and since liquid calories promote weight gain.)

Despite all the farmers markets, Michael Pollan books, and readers of *Nutrition Action*, we're eating far too little fruits and vegetables. Fewer than one in 10 Americans eat the levels recommended by MyPlate, according to the Centers for Disease Control and Prevention (CDC). For a 2,000-calorie diet, that's 2 cups of fruit and 2½ cups of vegetables a day. And that includes potatoes and fruit juice.

If we're serious about getting people to eat more fruits and vegetables, we need better strategies. Let me suggest a few:

- **Powerful, paid media campaigns** can boost consumption. A major carrot grower, Bolthouse Farms, for example, found that clever TV commercials increased carrot sales by 15 percent. Government matching money or tax breaks could stimulate similar efforts. And the produce industry needs to fund multi-million-dollar PR campaigns, just as the meat and dairy industries have done.
- **The SNAP (food stamp) program** should provide extra benefits to encourage people to buy more fresh produce.
- **Cooking classes** could teach kids what to do with broccoli and acorn squash.
- **Researchers** need to figure out how to create more convenient and less perishable produce like baby carrots and bagged salads.

If we don't invest in those kinds of programs now, Americans likely will be eating even fewer fruits and vegetables in the years ahead. And we'll be suffering from even higher rates of obesity, diabetes, and other health problems.



What's up, Doc? Help people eat more fruits and vegetables now or watch disease rates climb later.

If we don't invest in those kinds of programs now, Americans likely will be eating even fewer fruits and vegetables in the years ahead. And we'll be suffering from even higher rates of obesity, diabetes, and other health problems.

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Gut Myths?

Clearing up confusion in the GI tract

An estimated 63 million Americans complain of chronic constipation, 2.2 million have diverticular disease, at least 1.8 million can't tolerate gluten, and many millions would no doubt give up that new iPhone to avoid all future embarrassing episodes of gas. (Okay, maybe not.)

If you've got gut issues, you're not alone. And no one's saying they're easy to solve. But we can at least put some GI myths to rest.

MYTH: Got gas? Beans, vegetables, and milk are the main culprits.

Beans, cabbage, Brussels sprouts, milk, bran. Those are some of the usual suspects when people are trying to figure out why they're experiencing, ahem, gas. And those foods *can* cause gas.

But most of us overlook a growing source of the problem: inulin, or chicory root extract, one of the most popular ingredients in "high-fiber" foods.

"Of all the fibers added to foods, inulin is the one that probably causes the most intestinal gas," says fiber expert Joanne Slavin, professor of nutrition at the University of Minnesota. "Inulin contains sugars that our digestive enzymes can't break down."

The enzymes do just fine with sugars that have only one or two basic units (called saccharides). Sucrose, or table sugar, for example, is a disaccharide that is broken down in the small intestine into fructose and glucose.

But when it comes to sugars made up of three or more units—often called oligosaccharides—our enzymes are useless. So the sugars end up as food for the bacteria in the gut.

"Inulin is quickly and completely fermented in the large intestine," explains Slavin. And when your bacteria finish fermenting it, you get stuck with the gas they give off.

"Beans are notorious for causing gas because they have sugars like raffinose and stachyose," notes Slavin. Raffinose has three sugar units. Stachyose has four.

"If you look at the literature on treating or cooking beans to make them less gassy, it's mostly to get the oligosaccharides out of there," she adds.

(Beano tablets can prevent gas because they contain an enzyme that breaks down

raffinose and stachyose.)

Whether inulin is a problem depends on how much you eat and who you are.

"Our review of studies found that inulin is generally well tolerated at levels up to 15 grams a day," says Slavin. But at around 20 grams, flatulence or bloating is more likely.¹ "So dose is a big issue, and there's also individual variability."

Each serving of Fiber One 90 Calorie Brownies, Fiber One Cottage Cheese, and Yoplait Light with Fiber has five grams of fiber, and much of it is inulin. Some Fiber One Chewy Bars have up to nine grams.



High-fiber foods made with inulin or sugar alcohols may be making you gassy.

"If you have a serving of beans, you'll get about three grams of oligosaccharides, not nine grams," says Slavin. "And they're more manageable in a real food because they're digested more slowly and usually mixed with other foods."

Another hidden source of gas: sugar alcohols like sorbitol and maltitol.

"They're low-calorie carbohydrates because they're not completely digested and absorbed," explains Slavin. "Typically,

if you're eating sugar-free candy or gum, your exposure to sugar alcohols is low, but if people eat the whole bag of candy, it can cause gas."

Sugar alcohols aren't all equal, though. In small studies, some people complain of gas when doses of sorbitol reach 10 to 20 grams, but few complain unless they get at least 30 to 40 grams of maltitol.^{1,2}

Most foods don't have that much. Breyers Vanilla or Chocolate CarbSmart and No Sugar Added ice creams, for example, have four to five grams of sorbitol per half cup, but many people start at a whole cup. And Baskin Robbins No Sugar Added Caramel Turtle Truffle ice cream has 25 grams of maltitol per scoop.

Of course, some people may eat more than one food with sugar alcohols during the course of a day. And people vary. "Most people can tolerate normal doses, but not everybody is the same," says Slavin.

On the plus side, sugar alcohols have fewer calories than sugar, and inulin spurs the growth of *Bifido* bacteria, which may be good for gut health (that's why it's called a "prebiotic"). But the more bacteria in your gut, the more gas they give off.

"Scientists argue that gas isn't bad for you, but most people say it's not acceptable," says Slavin. "If you have gas, you should definitely consider what you're eating. If it's a lot of fermentable fiber or sugar alcohols, that could be the explanation."

MYTH: A gluten-free diet helps you lose weight and feel energetic.

In August, Lady Gaga told the Australian cable news channel Sky News that she was "on a mission to lose 10 pounds on a gluten-free diet," according to *The Huffington Post*. The pop star was "hoping that eating wheat-free will give her the energy she needs to power through the remaining legs of her international tour."

When people who have celiac disease eat gluten—a protein found in wheat, barley, and rye—it triggers an abnormal immune response that damages the lining of the small intestine. That can cause diar-



rhea, cramps, pain, bloating, and vitamin deficiencies. Avoiding gluten, even tiny amounts, can allow the damage to heal.

But does going gluten free make the pounds melt away?

"There's no evidence from studies that that's true," says gluten expert Joseph Murray, a gastroenterologist at the Mayo Clinic in Rochester, Minnesota.

"When patients with celiac disease go on a gluten-free diet, some go up in weight and some go down, but most don't change."³

For people without celiac disease, it's not avoiding gluten, but the foods gluten comes in, that may matter.

"Whenever anyone goes on any restrictive diet, they typically end up eating less, because food is not so readily available," says Murray. "That's one of the major reasons we eat too much. Food is too available. If you go gluten free, it's not so easy to get fast food."

It's not just fast food that's not available. Suddenly, breads, bagels, pasta, pizza, burritos, pancakes, muffins, doughnuts, cupcakes, cookies, pies, pretzels, and dozens of other foods get wiped off your plate. What's left? For Lady Gaga, it was mostly fish, chicken, and vegetables.

"Is there something about wheat products or gluten-containing foods that causes weight gain beyond their calories?" asks Murray. "I don't think so."

Fatigue is a different story.

"For the great majority of patients with celiac disease, fatigue is a major symptom," notes Murray. "It may be partly due to vitamin deficiencies or to inflammation in the intestine. And it usually gets better on a gluten-free diet, though it takes weeks or months for the recovery."

But people without celiac may also report fatigue that diminishes on a gluten-free diet. Why?

"For one thing, you don't eat that great big carbohydrate with your midday meal," says Murray. "Certain foods that happen to be rich in gluten may produce sleepiness because of the carbohydrate load or calorie load."

That raises a different question: instead of seeing a doctor, should people with fatigue or stomach problems simply try a gluten-free diet to see if they feel better?

"That's not a good idea," says Murray. "First, if you *do* have celiac disease, it's much more challenging to get diagnosed if you're already on a gluten-free diet."

When the doctor takes a biopsy of the lining of your small intestine, it won't show damage if you've been off gluten.

And some people feel better on a gluten-free diet simply because they expect to. It's a placebo effect.

"About a third of people will respond for two or three months, and then the placebo effect wears off," says Murray. "They may feel better because they're eating less food or less junk food. But the symptoms

roughly 7,800 people, Murray estimated the number of Americans with celiac.⁵

"We estimate that 1.8 million Americans have celiac disease, but only 17 percent of them know it," he says. Meanwhile, "1.6 million Americans are on a gluten-free diet, and the great majority of them do not have a diagnosis of celiac disease."

"The irony is that the people who have celiac disease and need to be on the gluten-free diet don't know it, and we don't know if many of the people who are on a gluten-free diet need to be on it."

There's one more complication: studies have found that some people *without* celiac get symptoms when they eat gluten.⁶

"We don't have a good test for patients with non-celiac gluten sensitivity," says Murray. "If they've been tested for celiac and don't have it, but their symptoms are not explained by anything else, I'd say it's worthwhile trying a gluten-free diet."

"I wouldn't do it for more than a month though," he adds. "I see people who come to me after a year on a gluten-free diet. They're totally convinced that they have gluten sensitivity, and I say, 'But you're no better than you were. Why don't you just go back to eating gluten?' And they say, 'But it's bad for me.' And I ask, 'How do you know that?' We're not always logical beings."



Colon cleansers are a waste of money...and colonic irrigation kits can be dangerous.

could start coming back and then you're stuck in a diagnostic mystery."

Meanwhile, other problems could get worse. Trying a gluten-free diet "could delay a diagnosis of Crohn's disease," notes Murray. "Or, God forbid, it could be cancer, and the diagnosis gets delayed while they're on a gluten-free diet."

What's more, someone with celiac needs follow-up.⁴ "We need to make sure that the damage to the intestine heals, and that nutritional deficiencies are gone," says Murray. "And family members need to be tested."

And a gluten-free diet isn't free. "There's the excess cost, the diet can be low in vitamins and fiber, which can lead to constipation, and it's a burden on family members."

Ironically, people who are eating a gluten-free diet aren't necessarily the ones who need to. Using blood samples from a nationally representative sample of

MYTH: Your colon needs cleansing.

Nature's Bounty Colon Cleanser promises to "Cleanse, Detox, Regulate." GNC's Preventive Nutrition Advanced Complete Body Cleansing 14-Day Program (only \$39.99!) includes a "liver cleanser," a "gastro cleanser," and pills for "kidney health."

Those are just supplements you swallow. People who are more motivated can buy colonic irrigation kits from Web sites like homecolonics.com.

Do you need to clean your colon and other organs?

"There's no evidence that cleansing is helpful in any way," says Ranit Mishori, a physician and associate professor of family medicine at Georgetown University Medical Center in Washington, D.C.

"Our bodies are designed in such a way that, through the liver and kidneys, we cleanse all the toxins that are there,"

she explains. “The claims that you need to cleanse your body of toxins to reduce allergy, depression, or other problems are completely unfounded.”

The idea that intestinal waste can poison the body began in ancient times, explained Mishori in a 2011 paper on the dangers of colon cleansing using colonic irrigation.⁷ Cleansing was popular in the early 1900s until the American Medical Association condemned the practice in 1919. But in recent years, cleansing has made a comeback.

“Irrigation kits include a water tank and a hose, and one puts the hose, for lack of a better description, up one’s rectum,” says Mishori. “It’s sort of an enema on steroids. It’s a superduper enema.”

All that water (up to 16 gallons) can cause cramps, nausea, vomiting, or worse.

Irrigation “can be extremely dangerous,” says Mishori. “There are cases of perforation of the rectum or colon and infections that lead to abscesses and severe systemic infection.

“Most of the cases we see and all of the fatalities in the U.S. are related to this type of colon cleansing,” she adds. “There have been lawsuits in Colorado, Florida, and Texas related to adverse outcomes from colon irrigation. Some ended in death.”

Supplements are also heavily advertised despite no solid evidence of benefit.⁸ And although they’re not as risky as irrigation kits, they can also cause problems.

“First of all, these supplements are meant to cause diarrhea, which is never a good thing,” says Mishori.

“Diarrhea can cause dehydration, it can cause changes in minerals and electrolytes in the body. And if you have an underlying chronic condition like heart disease, liver disease, kidney disease, or low immunity, diarrhea can worsen it, leading to kidney failure or liver failure.

“The funny thing for me as a physician is that some people who ask me if they should do colon cleansing are reluctant to undergo a colonoscopy because of the prep,” she says.

“In both cases, you’re sitting on the toilet for two days, and it’s uncomfortable. When it’s for weight loss, it’s okay, but when it’s for cancer screening, it’s not. I find that very odd.”

No one knows how many people are harmed by colon cleansing, adds Mishori.

Looking for Lactose

Milk has the most lactose, especially if you’re drinking a 16 or 20 oz. milkshake or latte. If a cheese or cream has no sugars in its ingredient list, the “Sugars” number on the Nutrition Facts panel is equal to the amount of lactose it contains.

Here are the lactose levels in some typical foods. Other brands are probably similar.

Milk & Cream

	Lactose (grams)
Starbucks Caffè Latte (<i>grande</i> , 16 fl. oz.)	17*
Milk—fat free, 1%, 2%, or whole (8 fl. oz.)	12
Starbucks Cappuccino (<i>grande</i> , 16 fl. oz.)	10*
Daisy Brand Light Sour Cream (2 Tbs.)	2*
Daisy Brand Sour Cream (2 Tbs.)	1*
Land O Lakes Half and Half (2 Tbs.)	1*
Land O Lakes Heavy Whipping Cream (2 Tbs.)	0*

Cheese

Breakstone’s Cottage Cheese, 2% (½ cup)	5*
Knudsen Cottage Cheese, 2% (½ cup)	4*
Sargento Part-Skim Ricotta (¼ cup)	3*
Philadelphia ½ Less Fat Cream Cheese, tub (2 Tbs.)	2*
Feta (1 oz.)	1*
Kraft American Singles (1 slice, 0.7 oz.)	1*
Philadelphia Regular Cream Cheese (2 Tbs.)	1*
Mozzarella, Parmesan, or Swiss (1 oz.)	0.5*
Blue, Brie, Camembert, or Cheddar (1 oz.)	0*

Yogurt (6 oz.)

Dannon All Natural, Nonfat or Lowfat, plain	12*
Dannon Fruit on the Bottom, Lowfat	10*
Dannon All Natural, Full Fat, plain	9*
Chobani, Fage, or Dannon Oikos Greek, plain	7*

Desserts & Sweets

Milkshake, restaurant (22 fl. oz.)	25*
Chocolate Mousse (½ cup)	8
Egg Custard (½ cup)	7
Häagen-Dazs Vanilla Ice Cream (½ cup)	5*
Breyers Natural Vanilla Ice Cream (½ cup)	4*
Cheesecake, frozen (1 slice, 4.4 oz.)	2
Chocolate Pudding, refrigerated (4 oz.)	2

Chocolate

Milk or White Chocolate (1.4 oz.)	3*
Chocolate Fudge (1.4 oz.)	1*
Dark Chocolate, 45-59% cacao (1.4 oz.)	0.5

Miscellaneous

Kraft Macaroni & Cheese Dinner (1 cup)	8
Lasagna (1 cup)	3
Quiche Lorraine (1 slice, 4.9 oz.)	3
Broccoli in Cheese Sauce (⅔ cup)	2
Applebee’s Mozzarella Sticks (10 oz.)	1
McDonald’s Big Mac (7.6 oz.)	0.5
Pizza Hut Cheese Pizza (2 medium slices)	0.5

* Estimate. Chart compiled by Paige Einstein.

Sources: Company information, USDA, and McCance and Widdowson’s *The Composition of Foods* integrated dataset, 6th edition, 2002.

“Many people probably use colon cleansing with no adverse effects. But some bad outcomes don’t get reported because the doctors don’t bother to write them up.

“People have incredibly stressful lives, whether it’s because of their working life or family life or interpersonal relationships,” she notes. “And there’s this perverse thinking that if you just get some gunk out, by pooping it all out, it’s going to make a huge difference in your life.

“So many other interventions are proven and safe—yoga, exercise, walking, talking, and even having a glass of wine,” says Mishori. “Why do we have this need to detoxify and get the gunk out?”

MYTH: Most adults can’t digest the lactose in a glass of milk.

Lactose is the naturally occurring sugar in milk. But many adults no longer have the enzyme lactase, which breaks lactose down into glucose and galactose.

Instead, the undigested lactose passes into the colon, where bacteria ferment it and release gas. And if there’s enough lactose, it can also draw water into the colon, causing diarrhea.

But many people without lactase can drink up to a cup of milk at a meal without symptoms of lactose intolerance—usually abdominal pain, bloating, and diarrhea.^{9,10}

You’re less likely to have symptoms if your stomach empties slowly. “The rate of stomach emptying is genetically controlled, and we vary,” explains Richard Grand, professor of pediatrics at Harvard Medical School.

“Fat reduces the rate of stomach emptying,” he notes. “So if you drink fat-free milk alone or with a low-fat meal, you may have symptoms.” But if you drink it with a typical meal, which contains fat, the symptoms may not appear.

And you can grow more lactose-loving bacteria—the kind that break down lactose without fermenting it and giving off gas.

“Often people who have lactose intolerance adapt to a little lactose in their diet, because the bacterial flora in their colon can ‘learn’ to digest the lactose,” says Grand, who is also director of the Inflammatory Bowel Disease Center at Children’s Hospital in Boston.

“These people may have a lactase deficiency in their small intestine, but their bacteria can break the lactose down, so



they don't have symptoms."

To build up your lactose-digesting bacteria, start with small amounts of milk. "Maybe a tablespoon, then build up to a glass per meal over three to six weeks," suggests Grand. "See how much you can tolerate."

It's also possible that your symptoms aren't due to lactose.

"The best studies give people milk, and then give them an identical product with glucose instead of lactose," Grand explains. "The majority of the time, they can't tell which milk they've been given. The clinical symptoms in a large percentage of those people are equal."

One explanation: many people who complain of lactose intolerance may actually have irritable bowel syndrome.¹¹

"Irritable bowel syndrome has similar features—abdominal pain, usually shortly after eating, and then either constipation or diarrhea during the day," says Grand. "So it's common for them to be confused."

"Lactose intolerance is overdiagnosed," he adds. "People diagnose themselves, and they shouldn't."

Another mistake: some people assume that if they're lactose intolerant, they need to avoid all dairy. That's not so:

■ **Cheese.** "Hard, unprocessed cheeses like real cheddar and Swiss don't have much lactose," says Grand. (See "Looking for Lactose," p. 5.)

Processed cheese slices may have added whey and other milk ingredients, though. So does Kraft Macaroni & Cheese. But if the Nutrition Facts list no more than 1 or 2 grams under "Sugars," you're probably safe.

■ **Yogurt.** Yogurt is made from milk, but the yogurt's cultures turn some of the milk's lactose into lactic acid. "Yogurt has that tangy taste because the culture has *Lactobacillus* and other good bugs that break down lactose," explains Grand.

And most of the lactose that's left gets broken down by the yogurt's bacteria once it reaches your gut.¹²

"But many flavored yogurts have milk or milk solids added for taste," notes Grand. So they have extra lactose. (Check the ingredients to see if a yogurt has added milk solids or whey.)

■ **Enzymes.** If your body doesn't make its own lactose-digesting enzymes, you

can buy them in pills like Lactaid, Lactase, and Dairy Relief.

"Taken with milk, or even a little bit before milk, they work quite well," says Grand. "Some brands are better for one person than another, so if one doesn't work, try another."

MYTH: All fiber supplements are equally good at keeping you regular.

"Promotes regularity," says the label of Walgreens Fiber Select Gummies. VitaFusion Fiber Well Gummies "help support regularity." "Therapy for regularity," says the Metamucil canister.



Want to stay regular? The psyllium in Metamucil works better than fiber gummies.

To the average consumer, all fiber supplements may appear equally good for regularity. But they're not.

"Wheat bran and psyllium are the best for increasing stool weight," says the University of Minnesota's Joanne Slavin.

"If you look at fibers that have the most effect on stool weight, about half the fiber gets broken down in the gut, but half is still there by the end, so it's going to hold water and make a bigger stool."

For every gram of the fiber in wheat bran you swallow, for example, stool weight increases by about five grams. That's also true for psyllium, the fiber in Metamucil.¹³

Other fibers have less impact on stool weight. "When we gave people 20 grams a day of soluble corn fiber or polydextrose, the increase in stool weight was about 25 percent of that seen with wheat bran," explains Slavin. (That study has yet to be published.)

And 20 grams is quite a bit. A daily dose of VitaFusion Fiber Well Gummies, for example, has just five grams of polydextrose.

"Some of these regularity claims are misleading because people get less than what they're expecting," adds Slavin.

Inulin may also be disappointing.

"Inulin has no effect on stool weight," says Slavin. "It's completely fermented, so by the end of the ride, there's nothing left." That's what she found when men were fed a large dose of inulin—20 grams a day.¹⁴ (Each Walgreens Fiber Select Gummy has 2 grams of inulin.)

"But for someone who's constipated," notes Slavin, "inulin could speed things up, because it's fermented quickly. The fermentation and short-chain fatty acid production could bring some water into the colon and loosen things up."

That's largely speculation, she adds, because no one has done good studies. "A couple of studies have been done in the elderly, but the effects are self reported."

Slavin's bottom line: "Fibers are not alike, even though it looks like they're the same on the label. In the physiological world, they're quite different."

MYTH: Nuts, seeds, and popcorn lead to diverticular disease.

Stay away from nuts, popcorn, corn, and caraway, sesame, sunflower, pumpkin, and other seeds. That's what doctors told patients with symptoms of diverticular disease until 2008.

That's when a study that tracked 47,000 men for 18 years found a *lower* risk of diverticulitis or diverticular bleeding among men who ate the *most* popcorn or nuts than among those who ate the least, and no link with corn or seeds.¹⁵ Yet the myth persists...and not just among the public.

"I still see patients whose physicians have recommended that they don't eat those foods," says Lisa Strate, the assistant professor of gastroenterology at the University of Washington School of Medicine who led the study.

"The theory was around for decades, although it was unsubstantiated, and only our one publication suggested that these foods really don't increase the risk. So I think it's still a very common belief."

While some people are distracted by

nuts and seeds, they should be worried about other risk factors.

“More than 50 percent of adults will develop diverticulosis by the age of 60,” explains Strate. “That’s the condition of having pockets or sacs in the colon.” They typically cause no symptoms.

“It’s much less common to develop bleeding or diverticulitis, which is inflammation of one or a few of these pockets,” she adds.

Those complications strike 10 to 35 percent of people with diverticulosis, ac-

ording to some estimates. “A recent, as yet unpublished, study suggests that it’s more along the lines of 1 percent,” notes Strate. “But even if 1 percent of people with diverticulosis have complications, it’s still a common problem.”

So far, researchers know more about what leads to inflammation or bleeding than about what causes the pockets in the first place. Among the risk factors for complications:

■ **Too little fiber.** In a study that tracked roughly 47,000 people in Eng-

land and Scotland for 12 years, those who consumed the most fiber (at least 26 grams a day) had a 40 percent lower risk of being hospitalized for diverticular disease than those who ate the least fiber (less than 14 grams a day).¹⁶ The Health Professionals Follow-up Study of 48,000 U.S. men found nearly identical results.¹⁷

“Individuals who are on a low-fiber diet appear more likely to get diverticular complications,” says Strate.

However, she notes, “it doesn’t look like low-fiber diets lead to diverticulosis.” Eating too little fiber may only boost the risk of complications.

■ **Obesity.** When researchers monitored roughly 36,000 Swedish women for 12 years, those who were either overweight or obese had about a 30 percent higher risk of being hospitalized for diverticular disease.¹⁸

And when Strate tracked the 48,000 U.S. male health professionals for 18 years, those who were obese had nearly double the risk of diverticulitis and triple the risk of bleeding compared to those who were normal weight.¹⁹ The risk also rose with increasing waist size, especially with a waist over 40 inches.

Why is belly fat worse? “It’s more metabolically active,” says Strate. “It produces more molecules that may increase inflammation in the colon.”

■ **Inactivity.** Among the U.S. health professionals, men who ran at least three hours a week had a 34 percent lower risk of diverticulitis and a 39 percent lower risk of bleeding than men who did no vigorous exercise.²⁰ Likewise, the Swedish women who got more than 30 minutes of exercise a day had a lower risk than those who got up to 30 minutes a day.¹⁸

Bulk Delivery

Here’s a sampling of foods that are rich in unprocessed fiber (along with a few lower-fiber foods for comparison). Yogurts, ice creams, juices, waters, and other foods with processed fibers like inulin and polydextrose aren’t as good for regularity.

	Fiber (grams)	Fiber (grams)
Fruits & Juices		
Raspberries (1 cup)	9	Rice, brown (¾ cup)
Blackberries (1 cup)	7	Rice, white (¾ cup)
Avocado (½)	5	Nuts (number closest to 1 oz.)
Pomegranate (¾ cup seeds)	5	Almonds (23)
Figs, dried (5)	4	Pecans (19 halves) or Pistachios (49)
Pear (1), Banana (1), or Kiwifruit (2)	4	Peanuts (28) or Peanut butter (2 Tbs.)
Apple (1), Apricots, dried (5), or Orange (1)	3	Cashews (18)
Blueberries, Cherries, or Strawberries (1 cup)	3	Beans (½ cup cooked, unless noted)
Prunes (4) or Prune juice (1 cup)	3	Black beans, Pinto beans, or Split peas
Grapefruit (½), Peach (1), or Raisins (¼ cup)	2	Chickpeas or Lentils
Pineapple (½ cup)	2	Kidney beans
Cantaloupe (¾) or Grapes (1½ cups)	1	Hummus (2 Tbs.) or Tofu, firm (3 oz.)
Orange juice (1 cup) or Watermelon (1 cup)	0.5	Bread & Crackers
Vegetables (cooked, unless noted)		
Artichoke (½)	5	Wasa Crispbread, Light Rye (4)
Lima beans or Peas (½ cup)	5	Finn Crisp Thin Crispbread, Original (4)
Pumpkin, canned or Acorn squash (½ cup)	4	Sara Lee 100% Whole Wheat Bread (2 slices)
Sweet potato, with skin (1)	4	Nabisco Triscuit (6) or Wheat Thins (16)
Broccoli (2 spears) or Green beans (½ cup)	3	Cereals
Asparagus (6 spears) or Cauliflower (¾ cup)	2	Kellogg’s All-Bran Original (½ cup)
Brussels sprouts, Kale, or Spinach (½ cup)	2	Post Wheat’n Bran Shredded Wheat (1¼ cups)
Cabbage (1 cup)	2	Kellogg’s Raisin Bran (1 cup)
Carrot, raw (1) or Romaine lettuce, raw (2 cups)	2	Post Grape-Nuts (½ cup)
Potato, with skin (1) or Corn (½ cup)	2	Post Original Shredded Wheat (1 cup)
Green pepper, raw (½) or Tomato, raw (½ cup)	1	Quaker Oat Bran (1½ cups cooked)
Grains & Pasta (cooked)		
Bulgur (¾ cup)	6	Alpen Original Muesli (⅔ cup)
Pasta, whole wheat (1 cup)	6	Post Bran Flakes (¾ cup)
Barley, pearled (1 cup)	5	Wheatena (1 cup cooked)
Popcorn, air-popped (4 cups)	4	Quaker Old Fashioned Oats (1 cup cooked)
Quinoa (¾ cup)	4	General Mills Cheerios (1 cup)
Pasta, white (1 cup)	3	General Mills Wheaties (¾ cup)
		Kellogg’s Corn Flakes (1 cup)

Sources: Company information and USDA. Information compiled by Paige Einstein.

¹ Crit. Rev. Food Sci. Nutr. 49: 327, 2009.

² Am. J. Clin. Nutr. 68: 357, 1998.

³ Am. J. Clin. Nutr. 79: 669, 2004.

⁴ Clin. Gastroenterol. Hepatol. 10: 893, 2012.

⁵ Am. J. Gastroenterol. 107: 1538, 2012.

⁶ Am. J. Gastroenterol. 106: 508, 516, 2011.

⁷ J. Family Pract. 60: 454, 2011.

⁸ Am. J. Gastroenterol. 104: 2830, 2009.

⁹ N. Engl. J. Med. 333: 1, 1995.

¹⁰ Curr. Treat. Op. Gastroenterol. 11: 19, 2008.

¹¹ N. Engl. J. Med. 310: 1, 1984.

¹² consensus.nih.gov/2010/lactose.htm.

¹³ Am. J. Clin. Nutr. 72: 784, 2000.

¹⁴ Food Funct. 2: 72, 2011.

¹⁵ JAMA 300: 907, 2008.

¹⁶ BMJ. DOI:10.1136/bmj.d4131.

¹⁷ Am. J. Clin. Nutr. 60: 757, 1994.

¹⁸ Am. J. Gastroenterol. 107: 296, 2012.

¹⁹ Gastroenterol. 136: 115, 2009.

²⁰ Am. J. Gastroenterol. 104: 1221, 2009.



Bone Basics

Potassium citrate—which is found primarily in fruits and vegetables—appears to boost bone density by neutralizing excess acid in the body.

Swiss researchers gave 169 people who were over 65 either a placebo or enough potassium citrate to supplement their diets with 2,400 milligrams of potassium a day. Both groups also got calcium (500 mg) and vitamin D (400 IU) every day. None of the participants had bone density low enough to require treatment for osteoporosis.

The potassium in produce may protect bones.

After two years, the potassium takers had higher spine, hip, arm, and leg bone density than the placebo takers, and the potassium citrate neutralized excess acid excretion.

Potassium citrate was also good for bones when U.S. researchers gave 52 men and women over 55 either a placebo or potassium citrate at a medium or higher dose (2,400 or 3,600 mg of potassium a day). Each participant also got calcium (630 mg a day) and vitamin D (400 IU a day). After six months, those taking the higher dose of potassium lost less calcium than the placebo group. (The medium-dose group was in between.)

What to do: Eat more fruits and vegetables. Most people have excess acid in their blood because the typical American diet is rich in grains and animal protein, both of which generate acids in the body. Our bones release calcium to neutralize the excess acid, which can lead to osteoporosis (brittle bones) as we age (see Nov. 2010, cover story).

Why not take potassium citrate pills? Fruits and vegetables not only supply potassium, but may also replace the extra grains that most people eat. What's more, the people in these studies had to go to the trouble of taking six to nine potassium citrate pills a day.

J. Clin. Endocrin. Metab. DOI:10.1210/jc.2012-3099 and *J. Bone Miner. Res.* DOI:10.1002/jbmr.1764.

Calcium & Vitamin D Revisited

Taking calcium and vitamin D doesn't appear to raise the risk of heart disease or stroke—or to lower the risk of dementia—as some studies had suggested.

Researchers re-examined the results of the Women's Health Initiative (WHI), which gave 36,000 women either a placebo or calcium (1,000 mg a day) plus vitamin D (400 IU a day) for seven years. However, all of the women were also allowed to take calcium and vitamin D supplements on the side, so the trial ended up testing adequate calcium intakes (1,000 mg a day) in the placebo takers versus high intakes (roughly 2,000 mg a day) in the calcium takers.

The women assigned to take calcium and vitamin D had no higher risk of heart disease or stroke, but they did have a 17 percent increased risk of kidney stones.

As for bones, the women who took no calcium supplements on the side and who kept taking the calcium and vitamin D they got from the trial had a 75 percent lower risk of hip fracture than those who took no calcium on the side and got a placebo. However, the authors cautioned that something else about people who stick to a study protocol might have accounted for their lower risk.

And when researchers gave cognitive tests to roughly 4,000 of the WHI women, those assigned to take calcium and vitamin D had no lower risk of dementia over eight years.

What to do: Shoot for the RDA for calcium (1,200 mg a day) and vitamin D (600 IU a day up to age 70 and 800 IU a day over 70) from food and supplements combined.

Osteoporos. Int. DOI:10.1007/s00198-012-2224-2 and *J. Am. Geriatr. Soc.* DOI:10.1111/jgs.12032.

Immunity Boost?

Eating more fruits and vegetables may boost immunity in older people.

Researchers in Northern Ireland randomly assigned 83 healthy volunteers aged 65 to 85 to eat either their normal diets or to make sure that their diets included at least five servings of fruits and vegetables each day. (All participants reported eating no more than two servings a day before the study began.)

After 16 weeks, the fruit-and-vegetable group had a better immune response to a pneumonia vaccine (but not to a tetanus vaccine) than the people who didn't step up their produce intake.

What to do: Eat more fruits and vegetables. This study doesn't prove that they'll strengthen your immune system if you're under 65 or if you're already eating more than two servings a day. What's more, the study wasn't double blind, so it's possible that the people assigned to eat more fruits and vegetables did something else to boost their immune response.

And keep in mind: other studies show that eating about a dozen (small) servings of fruits and vegetables every day can lower blood pressure.

Am. J. Clin. Nutr. 96:1429, 2012.

DHA & Arthritis

A diet rich in DHA, one of the two main omega-3 fats in fish oil, may help prevent cartilage loss in people with osteoarthritis.

Researchers studied 472 people who had—or were at high risk for—arthritis in their knees. Those with the highest blood levels of DHA had less cartilage loss (measured by an MRI). The researchers didn't find a link with EPA, the other omega-3 fat in fish oil.

However, people with higher blood levels of arachidonic acid—an omega-6 fat found largely in meat, poultry, fish, and eggs—had more synovitis (but no more cartilage loss) than those with lower levels. Knee synovitis is an inflammation of the membrane that lines and lubricates the knee joint.

What to do: It's too early to know if DHA prevents knee cartilage loss or if arachidonic acid causes knee inflammation. In the meantime, it's worth eating fatty fish like salmon at least twice a week to get a good dose of DHA.

Osteoarthritis Cartilage 20: 382, 2012.

When Bigger Isn't Better

Coping with an enlarged prostate

BY DAVID SCHARDT

How can something so small cause such big problems? For some older men, the prostate, which is normally the size of a walnut, can feel as big as a grapefruit as it squeezes the urethra, making urination urgent, painful, and sometimes futile.

Doctors usually prescribe drugs to control the symptoms. But what you eat and how much you move can also help.

"Most men's prostates get bigger as they get older," says urologist J. Kellogg Parsons, an associate professor of surgery at the UC San Diego Moores Cancer Center. The condition is called benign prostatic hyperplasia, or BPH. It's an increase in the number of (non-malignant) prostate cells.

"Some men are on the express and get to an enlarged prostate faster, while others are on the local and get there slower," says Parsons. "But once the prostate has grown larger, it will never go back to its former size by itself." Only certain medications or surgery can make that happen.

While not all men with an enlarged prostate experience urinary problems, most middle-aged and older men eventually feel discomfort.

The lucky ones find it a nuisance, not something that disrupts their lives. For others, however, "an enlarged prostate can have a huge impact on daily activities and the quality of life," says urologist Kevin T. McVary of the Southern Illinois University School of Medicine in Springfield.

PEE MAJOR OR MINOR?

Men with BPH may feel an urgency to urinate at any hour of the day or night, then have difficulty actually urinating, only to have the aggravation start all over again a short while later.

"Some men start changing their lives around, depending on their bladder," says McVary. "They pick certain stores to shop in, based on the availability and location of restrooms." Or they avoid going to the movies or the theater or traveling on long plane rides, for fear of not getting to a bathroom quickly enough.

For many men, though, BPH is more than an inconvenience.

"One of the most serious symptoms affecting lifestyle is the repeated getting up at night to urinate, called nocturia, because it so disrupts sleep cycles that folks

just have a hard time living their lives the next day," says Parsons.

"And if you're an older man with urinary symptoms who is getting in and out of bed many times a night to go to the bathroom when the room is dark, you may be more likely to fall."

Men with prostate problems are also more likely to face erectile difficulties and suffer depression, Parsons points out. And in a small percent of cases, severe prostate



Men who are more active are less likely to suffer from an enlarged prostate.

enlargement can lead to infections, bladder failure with the need for a catheter, and even kidney failure.

NOT CANCER

One thing men with an enlarged prostate don't have to worry about is that it will lead to prostate cancer.

"Scientists have researched the possible link between the two for at least 90 years, and there is no evidence that definitively shows that a man with an enlarged prostate has an increased risk of developing prostate cancer," says Parsons.

In the Prostate Cancer Prevention Trial, for example, over 5,000 men randomly assigned to take a placebo got biopsies to look for prostate cancer, no matter what their PSA scores.¹ (PSA, or prostate-specific antigen, is a protein produced by prostate cells. Blood levels of PSA are often elevated in men with prostate cancer.)

"Those suffering from BPH were no more likely to have prostate cancer than those without BPH," says Alan Kristal, an epidemiologist at the Fred Hutchinson Cancer Research Center and the University of Washington in Seattle.

That's not surprising, he adds. "Prostate cancer and BPH affect different parts of the prostate gland, and the disease process is likely very different for the two."

KEEPING PROSTATES HEALTHY

"Some risk factors you can't do anything about," says McVary. You're more likely to suffer from an enlarged prostate as you get older, for example, or if prostate problems run in your family, or if you're African American or Hispanic.

"But you can make changes in your lifestyle that can lower your risk of suffering from BPH," says Parsons. "And the same changes most likely can also reduce the discomfort if you already have symptoms."

Parsons cautions that those recommendations are based on studies that ask people about their diet and exercise habits and then track who ends up with what health problems in the future. The studies can't prove cause and effect because something else about people who eat a certain way or exercise a certain amount may explain their higher or lower risk.

But even if Parsons' advice turns out not to reduce the risk of BPH, it's worth following. "The advice should sound familiar," he says, "because it's essentially to follow a healthy lifestyle."

Get regular aerobic exercise. "Do at least a moderate amount of aerobic exercise—30 minutes or more a day, five to seven days a week, of brisk walking, jogging, running, or swimming," recommends Parsons.

Three studies have followed a total of more than 37,000 middle-aged and older men for close to a decade to see who reported symptoms of an enlarged prostate and who didn't. In two of the three, regular exercisers had a lower risk.

>>>>>

■ In the Health Professionals Follow-Up Study, Harvard researchers monitored more than 30,000 men for eight years. The more physically active the men reported being at the start of the study, the lower their risk of surgery or symptoms of BPH later on.² And that was true at any age.

Those who walked at least two hours a week for exercise, for example, had about a 25 percent lower risk than those who didn't walk for exercise. And men who watched TV or videos for more than 10 hours a week were about 30 percent more likely to need prostate surgery or to have symptoms than men who watched for less than six hours a week.

■ Among 1,700 men living in the Boston area, those who were the most physically active over an eight-year period had a lower risk of prostate surgery or of having the symptoms of an enlarged prostate than those who were the least active. But the risk was no lower for men who were moderately active.³

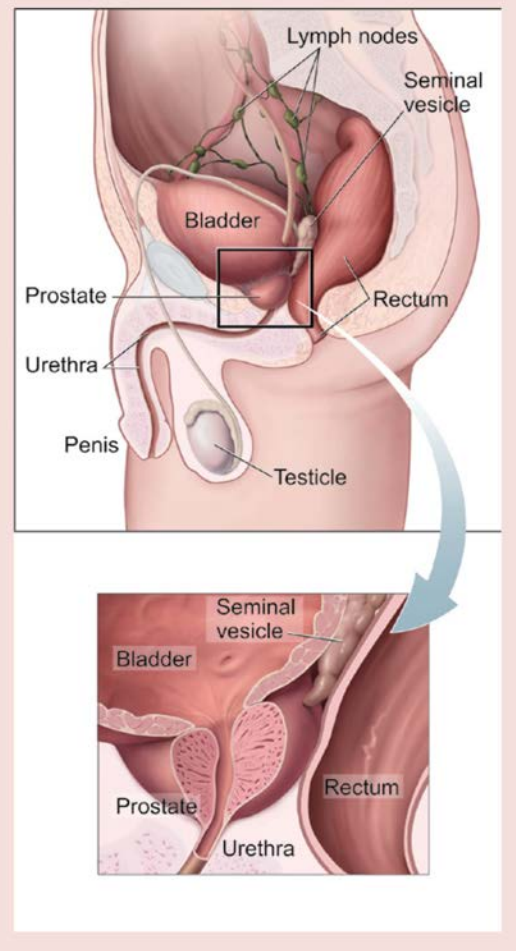
■ In contrast, among 5,667 men in the seven-year Prostate Cancer Prevention Trial, those who were the most physically active were just as likely as those who were the least active to report urinary tract symptoms from an enlarged prostate.⁴

However, "we really didn't measure exercise that well in this study," admits the University of Washington's Alan Kristal, who says he believes that exercise does matter, "because pretty much every other study has found that."

Why would exercise help the prostate? Although researchers aren't certain, says Parsons, exercise increases blood flow to the pelvic area, which is good for the prostate. Also, an enlarged prostate is associated with inflammation, and exercise lessens inflammation in the body.⁵

Another possible mechanism: physical activity decreases the body's sympathetic nervous system "tone."

The sympathetic nervous system is in touch with every organ and muscle, ready to mobilize the body's fight-or-flight response to stress.



In men with BPH, an enlarged prostate gland can pinch off urine flow through the urethra, which it surrounds. The result: an urgency to urinate but difficulty urinating.

"Increased activity of the sympathetic nervous system goes hand in hand with prostate growth and its symptoms," explains McVary.

"And we know that physical inactivity causes your sympathetic tone to increase dramatically, while exercise can actually lower it."

Maintain a healthy weight and avoid a big belly. "Overweight men are more likely to suffer prostate symptoms, especially if they're carrying extra fat in their bellies," says McVary.

Among the men in the Health Professionals Follow-Up Study, for example, those with waists greater than 42 inches were twice as likely as those with waists less than 35 inches to have their prostates removed or to report frequent symptoms over an eight-year period.⁶

And in the Prostate Cancer Prevention Trial, "we found that being overweight or obese increased the chances of suffering from an enlarged prostate by about 30 percent," says Kristal.⁴ "The relationship was

even stronger for abdominal obesity," he adds.

"What that tells you is that beyond being overweight, it's *where* you're overweight that matters most."

That's not surprising, notes Kristal. "Abdominal obesity is an inflammatory disease and raises the levels of inflammatory compounds in the blood. The higher the level of these compounds, the more likely a man is to suffer from BPH."

Insulin levels are also higher in people with abdominal obesity, McVary points out. High insulin triggers more insulin receptors to appear on cells, a process that requires insulin growth factor.

"And insulin growth factor can cause the prostate to enlarge," says McVary.

Eat plenty of vegetables. In the Health Professionals Follow-Up Study, men who reported eating six servings of vegetables a day had an 11 percent lower risk of prostate symptoms than men who said they ate no more than 1½ servings a day.⁷ Those who got the most lutein (from green vegetables like spinach, broccoli, and peas) and beta-carotene (from orange or

dark-green vegetables like carrots, sweet potatoes, and spinach) had half the risk of those who got the least.

And in the Prostate Cancer Prevention Trial, men who said they ate at least four servings of vegetables a day had a 32 percent lower risk of BPH than men who averaged less than one serving a day.⁸

"Of course, instead of the vegetables, the lower risk of BPH symptoms might be due to the fact that men who eat lots of vegetables are likely to follow a healthy lifestyle," Kristal points out.

If vegetables do help, adds Parsons, "one possible reason is that there are compounds in vegetables that tend to be anti-inflammatory."

¹ *Am. J. Epidemiol.* 173: 1419, 2011.

² *Arch. Intern. Med.* 158: 2349, 1998.

³ *J. Clin. Epidemiol.* 54: 935, 2001.

⁴ *J. Urol.* 177: 1395, 2007.

⁵ *Mediators Inflamm.* 2008: 109502, 2008.

⁶ *Am. J. Epidemiol.* 140: 989, 1994.

⁷ *Am. J. Clin. Nutr.* 85: 523, 2007.

⁸ *Am. J. Epidemiol.* 167: 925, 2008.

Pills for Prostates

“Pee like a firehose!” “Shrink Prostate!” “Eliminates Enlarged Prostate Symptoms.” “Make less bathroom trips.”

If you're a man coping with an enlarged prostate, why bother with prescription drugs, which can relax the urinary tract muscles or shrink an enlarged prostate modestly? Just pick up a prostate supplement at the supermarket or drugstore.

They're typically combinations of plant extracts, vitamins, and minerals. A few of the ingredients have been tested for effectiveness, usually in small, short-term trials. Most haven't.



What may help

Beta-Sitosterol

“The available evidence suggests that beta-sitosterols are well tolerated and improve urologic symptoms and flow measures,” concluded the Cochrane Collaboration, an international network of scientists who review the effectiveness of medical therapies.

That evidence? In four studies in Germany and the UK on a total of 475 men with BPH, those who took 60 to 195 milligrams a day of beta-sitosterol for one to six months had greater urine flow than those who took a placebo. In two of the studies the beta-sitosterol takers reported having milder symptoms, and in one they got up an average of one less time per night.¹

But the studies were small and short term, and tested different amounts and formulations of beta-sitosterol. Saw palmetto also showed promise in early small studies, but when it was tested in large studies, researchers found no benefit.

Pygeum Africanum

It “provides moderate relief” for men and “may be a useful treatment option, at least in the short term,” according to the Cochrane Collaboration.

In six small studies in Italy and Germany, men with BPH who took 100 to 200 milligrams a day of pygeum had increased urine flow and reported improvements in symptoms compared with men who took a placebo.² However, in the three studies that looked, pygeum takers made no fewer trips to the bathroom during the night.

As with beta-sitosterol, the studies were short term and small, and tested different doses and preparations. They also rarely used standardized methods to record symptoms. That lessened the reliability of their results.

¹ *Cochrane Database Syst. Rev.*: CD001043, 2000

² *Cochrane Database Syst. Rev.*: CD001044, 2002.

What doesn't seem to help

Saw Palmetto

The best known—and now the most overrated—botanical sold for prostate relief “did at first appear to have some beneficial effects for prostate health in small studies,” says UC San Diego's J. Kellogg Parsons.

“But since then, two large, very rigorous and well-done randomized controlled trials in the U.S. have shown that saw palmetto doesn't have a benefit.”

In the two studies, which looked at a total of 600 men with BPH, those who took 320 to 960 milligrams of saw palmetto every day for up to six years reported no fewer symptoms or nighttime trips to the bathroom than those who took a placebo.^{1,2}

Selenium

Among more than 4,700 men in the Prostate Cancer Prevention Trial, those who were taking at least 10 micrograms of selenium in supplements every day were just as likely to report prostate symptoms over a nine-year period as those who were taking less than 10 mcg.³

Lycopene

Despite its reputation as being good for the prostate, “lycopene supplements do nothing for men with BPH,” says Southern Illinois University's Kevin T. McVary.

In three trials in the United States, Germany, and India on a total of roughly 150 men with BPH, those who took 8 to 30 milligrams of lycopene every day for four months to one year reported no fewer prostate symptoms than those who took a placebo.⁴

¹ *JAMA* 306: 1344, 2011.

² *N. Engl. J. Med.* 354: 557, 2006.

³ *Am. J. Epidemiol.* 167: 925, 2008.

⁴ *Maturitas* 72: 269, 2012.

What may be harmful

Vitamin E

Of the roughly 26,000 men in the SELECT trial, those who took 400 IU of vitamin E every day for 5½ years were 17 percent more likely to be diagnosed with prostate cancer than those who took a placebo.¹

Zinc

There's no good evidence that taking zinc relieves the symptoms of BPH.

Worse, men in the Health Professionals Follow-Up Study who took more than 100 milligrams a day of zinc from supplements for 14 years were three times more likely to be diagnosed with advanced prostate cancer than men who took 1 to 24 mg a day.² (The recommended intake for men is 11 mg per day from foods and supplements combined.)

And in a study of macular degeneration, men who took 80 mg of zinc every day for six years were more likely than those who took a placebo to be hospitalized for urinary tract problems, including BPH and urinary retention.³

¹ *JAMA* 306: 1549, 2011.

² *J. Natl. Cancer Inst.* 95: 1004, 2003.

³ *J. Urol.* 177: 639, 2007.

Worth Taking Drugs?

Talk to your doctor. The evidence for beta-sitosterol and pygeum is weaker than the evidence for prescription drugs, which have been tested in dozens of well-controlled clinical trials.

The two main classes of BPH drugs: alpha blockers like **Flomax** and **UroXatral**, which relax the muscles of the bladder neck and prostate, and 5-alpha reductase inhibitors like **Proscar** and **Avodart**, which lower levels of hormones produced by the prostate.

The alpha blockers are relatively free of side effects, but a small number of men on reductase inhibitors experience decreased sex drive or impotence. 🍌



WINTER SALADS

BY KATE SHERWOOD

Nothing beats perfectly ripe tomatoes drizzled with olive oil and balsamic vinegar, with a twist of freshly ground black pepper. But summer isn't the only time for great-tasting salads, as these three delicious winter creations prove. 🍷

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

Cauliflower & Beet Salad

Total Time: 20 minutes



- 4 cups small cauliflower florets
- 3 Tbs. extra-virgin olive oil, divided
- 1 tsp. Dijon mustard
- 1 Tbs. red wine vinegar
- ¼ tsp. kosher salt
- 8 cups mixed salad greens
- 1 cup diced cooked beets
- ¼ cup unsalted, roasted sunflower seeds

Check your supermarket's produce case for vacuum-packed cooked beets. To turn the salad into the perfect dinner for a chilly winter evening, just add roasted chicken or fish.

Preheat the oven to 450°F. • Toss the cauliflower florets with 1 Tbs. of the oil on a rimmed baking sheet. Roast until lightly browned in spots, 10-15 minutes. Remove and allow to cool. • In a large bowl, whisk the mustard, vinegar, and salt with the remaining 2 Tbs. of oil. • Toss the salad greens with the dressing. Top with the beets, cauliflower, and sunflower seeds. • Serves 4.

Per Serving (3½ cups): Calories: 210 | Sodium: 240 mg | Total Fat: 15 g
Sat Fat: 2 g | Carbs: 15 g | Protein: 6 g | Fiber: 6 g

Roasted Sweet Potato & Scallion Salad

Total Time: 25 minutes



- 1 lb. sweet potatoes, peeled
- 2 bunches scallions, white and pale-green parts cut into ½-inch pieces
- 2 Tbs. canola oil, divided
- 1 Tbs. reduced-sodium soy sauce
- 1 Tbs. balsamic vinegar
- 1 tsp. brown sugar
- 8 cups mixed salad greens
- ¼ cup roasted and salted pumpkin seeds

Sweet, savory, and crunchy. Every bite contains a surprise.

Preheat the oven to 450°F. • Cut the sweet potatoes into ½-inch-thick sticks. On a rimmed baking sheet, toss the sweet potatoes and scallions with 1 Tbs. of the oil. Roast until the sweet potatoes are tender, 10-12 minutes. Remove and allow to cool. • In a large bowl, whisk the soy sauce, vinegar, and sugar with the remaining 1 Tbs. of oil. • Toss the salad greens with the dressing. Top with the sweet potatoes, scallions, and pumpkin seeds. • Serves 4.

Per Serving (3 cups): Calories: 240 | Sodium: 250 mg | Total Fat: 11 g
Sat Fat: 1 g | Carbs: 31 g | Protein: 7 g | Fiber: 8 g

Baby Kale Salad

Total Time: 10 minutes



- 1 Tbs. fresh lemon juice
- 2 Tbs. minced shallot
- ¼ tsp. kosher salt
- 2 Tbs. extra-virgin olive oil
- ½ lb. baby kale
- ¼ cup shredded Parmesan cheese
- Freshly ground black pepper, to taste

This is one of the few salads you can make hours ahead of time. It gets better as the flavors meld and the kale softens in the dressing. And don't be stingy with the black pepper. You'll be amazed at the extra flavor pop it delivers.

In a large bowl, whisk together the lemon juice, shallot, salt, and oil. • Toss the kale in the dressing with the Parmesan cheese and season with plenty of black pepper. (If you can't find baby kale, you can use Tuscan kale. Before tossing with the dressing, remove and discard the large, center stems. Then, working in batches of about 8 leaves, stack the leaves and cut them crosswise into thin strips.) • Serves 4.

Per Serving (3 cups): Calories: 110 | Sodium: 230 mg | Total Fat: 9 g
Sat Fat: 2 g | Carbs: 7 g | Protein: 4 g | Fiber: 1 g



RESTAURANT CONFIDENTIAL

TREME EATING 2013

BY JAYNE HURLEY & BONNIE LIEBMAN

Double Your Trouble

Designed like 1950s soda shops, **Johnny Rockets** restaurants are a place to “experience the uncomplicated goodness of classic Americana.”

And what’s more classic Americana than the **Bacon Cheddar Double**—a white-flour bun stuffed with two one-third-pound beef patties, four slices of cheddar cheese, four strips of bacon, and a “special” sauce?

The tab: 1,770 calories, 50 grams of saturated fat, and 2,380 milligrams of sodium. Three McDonald’s Quarter Pounders with Cheese have “only” 1,570 calories.

But wait. Who gets just a burger? Johnny’s **Sweet Potato Fries** add another 590 calories—110 more than his regular “American Fries” and 90 more than a large McDonald’s Fries—and 800 mg of sodium.

And what’s Americana without a shake? Johnny’s hover around the 1,000-calorie mark, thanks to their size (20 oz.) and their “premium vanilla ice cream, whole milk, and real whipped cream.” Surely, you have room for the extra 1,140 calories, 37 grams of sat fat, and estimated 13 teaspoons of added sugar in a **Big Apple Shake**, which squeezes a slice of Johnny’s “all-American” Apple Pie into your drinkable body-fat booster.

Your meal ends up with a cool 3,500 calories (enough for today and most of tomorrow), 88 grams of saturated fat (a four-day supply), and 2½ days’ worth of sodium (3,720 mg) and added sugar (15 teaspoons). It’s like finishing off your three Quarter Pounders with Cheese and large Fries with a medium McCafé Vanilla Shake and two Baked Apple Pies.

If that isn’t uncomplicated goodness, what is?



It’s January—the month when millions of Americans make New Year’s resolutions, start new diets, and join health clubs.

But restaurants don’t care if customers are trying to shape up. Their goal: boost the bottom line. And if that means serving up a 2,000-calorie order of macaroni & cheese, a 1 lb. slice of chocolate cake, or a milkshake that contains a slice of apple pie, well, whose problem is that?

As IHOP says, “It’s all about flavor. Not about limits.” None at all.

Information compiled by Paige Einstein. All numbers are from the restaurant chains.



No Limits!!!

“It’s time to have it all!” chirps the **IHOP** Web site. “When it comes to breakfast, why choose just one thing? Our breakfast combos put your favorites together on one plate, so you can dig into everything you love—from eggs to steaks to pancakes!”

That’s right. IHOP’s **Country Fried Steak & Eggs** isn’t one thing. It’s “8 oz. fried beef steak smothered in country gravy. Served with two eggs, hash browns and two buttermilk pancakes.” Nothing like a mix of fried red meat, fried eggs, fried potatoes, and a load of refined carbs (from the breading, pancakes, syrup, and potatoes) for breakfast.

IHOP isn’t kidding. The meal does have it all—all the calories (1,760—almost a day’s worth), all the saturated fat (23 grams—your full quota until this time tomorrow), all the sodium (3,720 milligrams—2½ days’ worth), and all the sugar (11 teaspoons—close to two days’ worth), if you use a typical quarter cup of syrup. Think of it as five McDonald’s Egg McMuffins sprinkled with 10 packets of sugar.

No worries. As the Web site says, IHOP is the place “Where it’s all about flavor. Not about limits.”

They probably wouldn’t charge too much to add some French toast, waffles, sausage, and bacon if you ask nicely.



photos: Jorge Bach/CSPI



The Veal Thing

Veal is an innocent-sounding name for the meat from a young calf that has been made anemic by its milk-only diet so that its flesh attains the light pink or white color that is so prized.

But why think about that? You're dining out.

Like many Italian restaurants, **Maggiano's Little Italy** offers several veal dishes that may appeal to people who think veal is a healthy alternative to beef. Oh dear.

Take the 18 oz. **Veal Porterhouse**, which is drizzled with butter sauce and comes with half a pound of roasted, fried, and garlic-battered Crispy Red Potatoes. Even without the spuds, you're talking 1,900 calories, 40 grams of saturated fat, and 2,860 milligrams of sodium. The potatoes bring the total to 2,710 calories (almost 1½ days' worth), 45 grams of sat fat (a two-day supply), and 3,700 mg of sodium (2½ days' limit). And those numbers don't include the Ciabatta Roll that comes with the meal.

You'd be better off eating four Pizza Hut Personal Pan Pepperoni Pizzas.

But why think about that? You're dining out.

Spaghet(not so)tini

"Crispy battered shrimp, fresh mushrooms, tomato and arugula tossed with spaghetti and a basil-garlic-lemon cream sauce."

Nothing about the way **The Cheesecake Factory** describes its **Bistro Shrimp Pasta** sounds extreme. Sure, there's cream and battered shrimp, but they're mixed in with mushrooms and arugula, for heaven's sake.

Granted, The Cheesecake Factory has a knack for creating over-the-top dishes. It has made eight appearances in our last four Xtreme Eating articles—more than any other chain. And this dish has the dubious distinction of delivering *more calories than any other entrée on the menu*. More than the fettuccini Alfredo, more than the steaks and chops, more than the cheesecakes.

According to company headquarters, the **Bistro Shrimp Pasta** has 3,120 calories. And keeping those 1½ days' worth of calories company are 89 grams of saturated fat (enough to keep your arteries busy from Monday morning to Friday noon) and 1,090 milligrams of sodium (two-thirds of a day's worth).

That's what happens when you mix 3½ cups of pasta with a butter-and-cream sauce topped with battered, fried shrimp. It's like eating three orders of Olive Garden's Lasagna Classico plus an order of Tiramisu for dinner.

What's for dessert?



Pot Belly & Jowls?

"PB&J isn't just for kids," says the **Smoothie King** Web site. "We blend fresh ground peanut butter and banana with your choice of plump strawberries or tasty grape juice."

Go with grape juice and you end up with a **Peanut Power Plus Grape Smoothie**. A 40 oz. large ("The King") has 1,460 calories (three-quarters of a day's worth) and a 3½-day supply of added sugar (22 teaspoons). Make that 6½ days' worth, since the 17 teaspoons of naturally occurring sugar in the grape juice aren't much better than added sugar. The numbers for the strawberry version are in the same ballpark.

Only The Hulk Smoothies have more calories—1,600 to 1,930 in a large—but they're "developed specifically for gaining weight,"

notes the Web site. In contrast, the Peanut Power Plus Grape is in Smoothie King's "Indulge" section. (Translation: not developed for gaining weight, but darn good at it.)

Somehow, people believe that smoothies are healthy no matter what. Do two cups of grape juice, five tablespoons of peanut butter, a banana, and a boatload of sugar sound like a healthy lunch or (heaven forbid) snack? Even if you "make it skinny"—that means they leave out the added sugar—you'll still be downing 1,060 calories.

"You'll love it no matter how old you are," says Smoothie King. "And definitely be ready to go out and play." Or just sit around and make new fat cells.



Baby Backside

Chili's serves 20,000 miles' worth of Baby Back Ribs every year, says the Web site of Brinker International, the chain's corporate parent. It's "almost enough to wrap around the globe!" And a good start if you want to look like one.

A Full Rack of Baby Back Ribs with Shiner Bock BBQ Sauce (made with Shiner Bock Beer) packs 1,660 calories, 39 grams of saturated fat, and 5,025 milligrams of sodium.

Toss in the Homestyle Fries (400 calories) and Cinnamon Apples (270 calories) that come with the ribs and you're talking a *real* ribs dinner. That assumes you can still open your mouth after swallowing 2,330 calories (more than a day's worth), 45 grams of sat fat (two days' quota), and 6,490 mg of sodium (a stunning four-day supply).

It's like ordering two Chili's 10 oz. Classic Sirloin Steak dinners (each with Loaded Mashed Potatoes and Steamed Broccoli), with a 10 oz. Classic Sirloin Steak on the side. After all, who would be full after only *two* steak dinners?



It'll Cost Ya

The Cheesecake Factory Crispy Chicken Costoletta doesn't sound like much of an indulgence. Sure, the chicken breast is "lightly breaded and sauteed to a crisp golden brown," but it *is* chicken breast, after all. And the dish comes with mashed potatoes (not fries) and fresh asparagus (a green veggie!).

So you might be a tad surprised to learn that, according to the company, the meal packs 2,610 calories (more than a day's worth), 89 grams of saturated fat (enough for almost a full work week), and 2,720 milligrams of sodium (your limit for today and most of tomorrow). In fact, the dish has more calories than any steak, chop, or burger meal on The Cheesecake Factory's menu.

How do they do it? It's partly the lemon (read: butter) sauce, the chicken's oil-soaked breading, and the butter and cream in the three-quarter-pound serving of mashed potatoes. And it's partly the sheer quantity of chicken (each of the three pieces could serve as an entrée at most other restaurants).

Think of the Crispy Chicken Costoletta as an entire KFC 12-piece Original Recipe bucket (2,550 calories), except that the KFC has less than half the sat fat.



Macadoozy

"Penne with Cabot Aged Cheddar, Parmesan & Romano. Sprinkled with buttery crumb topping and baked in a deep dish pan."

That's how **Uno Chicago Grill** describes its **Deep Dish Macaroni & 3-Cheese**. Sounds like a

classy upgrade of a classic comfort food. It's an upgrade, all right. The calories shoot up to 1,980 (you're done for the day!), the saturated fat hits 71 grams (3½ days' worth), and the sodium reaches 3,110 milligrams (a two-day dose).

The Mac & 3-Cheese has more calories than any individual pizza on Uno's menu except the sausage-laden Chicago Classic (which squeezes by with 2,300 calories). But it makes the Classic's sat fat (53 grams) look prudent.

It's not just the three cheeses. There's the Alfredo sauce, which is made with heavy cream, cheese, rendered chicken fat, and butter. And the four cups of pasta plus the crushed Ritz Cracker crumbs also do their share to boost the calorie (and white flour) load.

Each Deep Dish Macaroni & 3-Cheese is like a Family Size box of Stouffer's Macaroni & Cheese (which serves five) with half a stick of butter melted on top. Some comfort.

Get-a-Gutto Cake

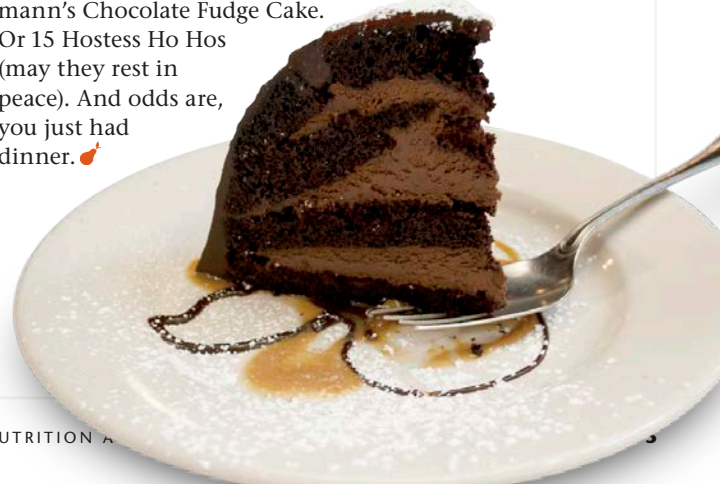
"Chocolate cake layered with sambuca chocolate mousse, iced with chocolate frosting and dusted with cocoa powder."

Yessiree. The **Chocolate Zuccotto Cake** at **Maggiano's Little Italy** is big on chocolate. And big, period.

Each slice is five inches tall and four inches wide and weighs just short of a pound. That helps explain why it delivers 1,820 calories (almost a day's worth), 62 grams of saturated fat (a three-day load), and 26 teaspoons of added sugar (four days' allowance) to your middle.

That's roughly equal to an *entire* (eight-serving) Entenmann's Chocolate Fudge Cake.

Or 15 Hostess Ho Hos (may they rest in peace). And odds are, you just had dinner. 🍷



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

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RIGHT STUFF

A CUT ABOVE



Looking for a snack to throw in your bag as you dash out the door? **Bolthouse Farms Baby Carrot Snack Bags** are all wrapped and ready to go. Ditto for **Green Giant Fresh Snack Packs** and many store brands.

Yes, they cost more than baby cut carrots that come in a one- or two-pound bag (which cost more than full-size, unpeeled carrots). And yes, you'd save plastic by refilling your own container with a handful of carrots instead.

But that one extra step could make you less likely to bother with carrots and more likely to end up snacking on a bag of chips or a candy bar, muffin, soft pretzel, cookie, cupcake, doughnut, granola bar, bagel, or whatever else they're selling at Starbucks, the vending machine, the gas station, the drugstore, or any other place you go. And most of those alternatives would cost more than a palm-sized bag of carrots that's made for travel (about 50 cents).

Each 2 oz. snack bag of Bolthouse carrots—they come five to a big bag—has 2 grams of fiber, 90 percent of a day's vitamin A, 8 percent of a day's vitamin C, and about 5 percent of a day's potassium and vitamin B-6. Not too shabby for 25 calories that should be more filling than, say, a twentieth of a slice (about a bite) of a 490-calorie Starbucks Banana Nut Loaf or Zucchini Walnut Muffin.

But *any* snack eventually gets boring. Do we see snack packs of mini bell peppers, snow peas, and other veggies in the future? Does Bolthouse? Does big Mr. Jolly Green?

Bolthouse Farms: (800) 467-4683
Green Giant Fresh: (800) 998-9996

FOOD PORN

MILANO THANKS



"Now the perfect harmony found in the Pepperidge Farm Milano cookie is available in a delicious cake," says the **Pepperidge Farm Milano Cookie Cake** package.

"Temptingly moist vanilla cake, surrounded by delicious chocolate buttercream icing and topped with real Milano cookie crumbles," adds the box. Translation: Pepperidge Farm is using its popular Milano name to sell a mixture of sugar, partially hydrogenated oils, white flour, and a paragraph of other ingredients. It does the same with its new **Chocolate Chunk Cookie Cake**.

Really? Most companies have bent over backwards to get partially hydrogenated oils out of their foods so they can slap a "0 grams trans fat" claim on their labels, and Pepperidge Farm is launching two new cakes made with partially hydrogenated oil?

According to the label, a serving of Milano Cookie Cake is 2.2 ounces (an eighth of a cake) and has 250 calories. But food-labeling rules say that a serving of a cake like this one is 2.8 ounces—about a sixth of a Milano Cookie Cake.

That brings the damage to 310 calories, plus 5½ teaspoons of added sugar (about a day's quota), 6½ grams of saturated fat (a third of a day's worth), and 2½ grams of trans fat (1¼ days' limit, though *any* trans is too much).

Attention arteries and fat cells: Incoming! Shrink the serving. Tuck in some trans. Did Pepperidge Farm think no one would notice?

Pepperidge Farm: (888) 737-7374

dish OF THE MONTH

1-2-3-4 Spicy Beans

1. Sauté 3 minced cloves of garlic in 1 Tbs. of olive oil for 1 minute.
2. Stir in 1 tsp. of chili powder and cook for 15 seconds.
3. Add a 15 oz. can of no-salt-added black beans with the liquid and simmer until slightly thickened, about 5 minutes.
4. Season with up to ¼ tsp. of salt.