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A STRIKE AGAINST STROKE



How to keep your brain in working order

BY BONNIE LIEBMAN

Six years ago, when 50-year-old Richard Dykema had a headache and trouble seeing out of one eye, he did what many people would do. He went to work.

"He had symptoms throughout the day, but he was working at a high-tech company and he had deadlines, so he was toughing it out," says Richard's wife, Holly. "He came home and we had dinner. Around 8 p.m., he fell to the floor."

If Richard or his co-workers had known the signs of a stroke and had called 9-1-1 immediately, doctors might have been able to minimize the stroke's damage.

But warning signs are just part of the stroke story. Some "silent strokes" occur without any symptoms. And they often contribute to what we assume is Alzheimer's disease.

The answer isn't just to know a stroke when you see it, but to keep it from striking in the first place.

"We know how to prevent stroke," says hypertension expert Norm Campbell. "Why aren't we doing it?"

Continued on page 3.

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A STRIKE AGAINST STROKE



Stroke 101

A typical stroke is essentially a heart attack in your brain.

Roughly nine out of 10 strokes are ischemic. That means they occur when arteries in or on the way to the brain get blocked by a blood clot. The trigger: a ruptured plaque in blood vessels in the brain or neck or near the heart—or a clot in the heart—that travels to the brain.

“The clot can block the blood vessel or it can break into little pieces that go all over the body, including the brain,” explains Norm Campbell, professor of medicine, community health sciences, and physiology and pharmacology at the University of Calgary in Canada.

If the clot cuts off the blood supply to the brain, oxygen-starved brain cells near the blocked vessel die. Two million brain cells die every minute during a stroke, causing brain damage, disability, or death.

Six months after having an ischemic stroke, a fifth of survivors aged 65 or older have trouble speaking, a third can't walk without assistance, and a quarter are in a nursing home.¹

“Hemorrhagic strokes are even more tragic,” says Campbell, who chairs the Canadian Hypertension Advisory Committee.

Hemorrhagic strokes—which occur when a blood vessel in or around the brain bursts—account for 13 percent of strokes in the United States, but 30 percent of stroke deaths.

Call 9-1-1

One drug has revolutionized the treatment of ischemic strokes. In 1996, the Food and Drug Administration approved the use of tissue-plasminogen activa-

How to keep your brain in working order

Every 40 seconds, someone in the United States suffers a stroke. That adds up to 795,000 strokes a year. And the number doesn't count invisible “silent” strokes.

Every four minutes, someone dies of a stroke. Though death rates have dropped, strokes still kill more than 137,000 Americans a year. That makes stroke the fourth-leading cause of death.

Here's what will—and won't—lower your risk of a stroke.

tor (tPA) to break up clots and restore the brain's blood supply. The catch: you don't have much time.

“The FDA's approval is for three hours, but our national guidelines allow us to go out to 4½ hours in selected patients,” says Larry Goldstein, director of the Stroke Center at Duke University Medical Center in North Carolina. “But what's very, very clear is that the sooner you get treated, the more likely that the drug is going to be of benefit.”



Holly & Richard Dykema with Ginger.

That doesn't mean you have three hours to arrive at the hospital.

“The current national goal is one hour from arrival to treatment, but that's

extraordinarily difficult to do in many settings,” says Goldstein, who chaired the American Heart Association's 2011 *Guidelines for the Primary Prevention of Stroke*.²

“A variety of things slow things down.”

Among them: “A CT scan and blood tests have to be taken, other potential reasons for the symptoms have to

be excluded, and the patient has to agree to take the drug.”

But the hospital isn't usually the problem. “The single most important reason people aren't treated with intravenous tPA is that they don't get to the hospital soon enough,” says Goldstein.

It's not just that people fail to recognize the symptoms. “Denial is very important,” notes Goldstein. “People don't believe that a stroke is happening or they dismiss it and the people around them dismiss it.”

And time is brain, as they say.

“If you're too late, there are no treatment options available,” says Campbell. “It's a true emergency. You need to call an ambulance.”

Even if the warning signs disappear, call 9-1-1. You might be having a TIA, or transient ischemic attack.

“A TIA is one of the greatest predictors of having a true stroke”—that is, one that causes permanent damage, notes Campbell. “You may not need a clot-busting drug, but you need treatment,” often with drugs to lower blood pressure or prevent clots.

“You don't want to have the stroke and then be treated. A TIA is a great opportunity to prevent a stroke. It shouldn't be squandered by delay.”

Richard Dykema was eventually treated with tPA, “but it didn't turn things around,” says Holly. “I've heard so many



stories about people who go into the hospital and can't move their limbs, can't talk, and walk out of the hospital totally fine. The drug is amazing."

TPA may not have helped because Richard had a carotid dissection, which can start with a small tear in the lining of the carotid artery in the neck. That allows blood to enter the space between the inner and outer layers of the artery wall, narrowing or completely blocking the blood vessel.

"I didn't even know what a stroke was when he had it," says Holly. "One day I had had problems seeing out of one eye, and it wasn't serious. So I said, 'Don't worry about it.' Silly me."

The urgent need to treat stroke symptoms has led to campaigns to publicize a stroke's warning signs (see "Signs of a Stroke"). But knowing the warning signs can't help with strokes that have no symptoms.

Silent Strokes

"In silent strokes, people can speak normally and have normal power and feeling in their limbs," says Campbell. "They don't get the warning signs of stroke so they don't go to the hospital." Nevertheless, silent strokes cause brain cells to die.

"What's emerging is that silent strokes are probably precursors of dementia," says Campbell. "People become cognitively impaired as the burden of silent strokes increases."

Scientists used to distinguish Alzheimer's disease from vascular dementia caused by clogged blood vessels, but no longer.³

"There's a big overlap between vascular dementia and Alzheimer's disease," explains Goldstein. "Finding pure Alzheimer's or pure vascular dementia is the rarity, not the rule. Most people have at least some components of both."

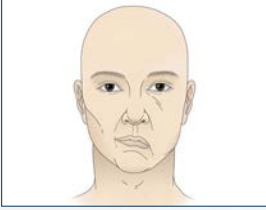
And the number of Americans suffering from dementia is climbing. So is the cost.

"We're an aging population," says Campbell. "When you look at hospitalizations, physician visits, and drugs to treat strokes and heart attacks, the cost is essentially bankrupting the health care system."

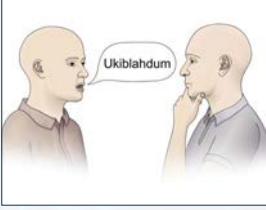
The answer isn't just to get people to act when they see warning signs or to come up with better treatments for strokes.

"I view those as waiting-for-a-stroke programs," says Campbell. "Society needs

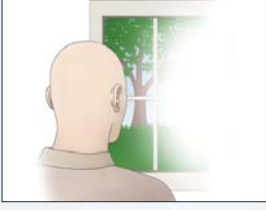
SIGNS OF A STROKE



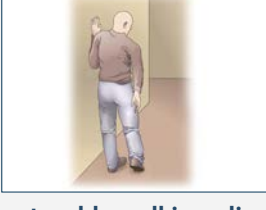
Sudden weakness or numbness on one side of the face, arm, or leg




Sudden trouble speaking or understanding, confusion



Sudden trouble seeing in one or both eyes



Sudden trouble walking, dizziness, loss of balance or coordination



Sudden headache of no known cause

to be more proactive to prevent strokes from occurring in the first place. We know how."

Prevention

"We know that people who follow a healthy lifestyle have a dramatically lower risk of stroke than people who don't," says Goldstein.

For example, in a study that tracked some 44,000 men and 71,000 women for 16 years, five aspects of lifestyle made a difference.⁴

"People who don't smoke, who are not overweight, who don't drink alcohol in excess, who exercise regularly, and who eat a healthy diet have about an 80 percent lower risk of a first stroke," explains Goldstein. "And the risk decreases for each of those lifestyle habits."

(In the study, a "healthy" diet meant higher intakes of vegetables, fruits, nuts, soy, grain fiber, chicken, and fish and lower intakes of red meat, saturated fat, and trans fat.)

And in studies on some 257,500 people, those who ate more than five servings of fruits and vegetables a day had about a 25 percent lower risk of stroke than those who ate less than three servings a day.⁵

Those studies weren't trials so they can't prove cause and effect. It's possible that people who eat healthier diets also do other things that lower their risk.

But odds are that a healthy lifestyle means fewer risk factors for stroke (see "What's Your Risk?" p. 5). Some risk factors—like age and family history—you can't change. Of those you *can*, one stands out: "The single most important risk factor for a stroke is high blood pressure," says Goldstein.

Keep Blood Pressure Low

"An optimal blood pressure is less than 115 systolic over 75 diastolic," says Campbell. "As long as a disease hasn't caused blood pressure to go low, that's healthy."

(The target for people who are taking blood-pressure drugs is 140 over 90, notes Campbell. "I wouldn't want those people to ask their docs to lower their pressure to 115 over 75," he says.)

Why is lower better? "As blood pressure rises, all of the blood vessels in the body are damaged," says Campbell. "And that causes strokes, heart attacks, heart failure, kidney failure, dementia, impotence, and difficulty with walking."

Doctors diagnose patients with high blood pressure, or hypertension, when either the upper number reaches 140 or the lower number hits 90.

"Doctors and patients like having goal numbers, but it's not like at 139 over 89



WHAT'S YOUR RISK?

Want a rough idea of your odds of having a stroke within the next 10 years? You can estimate your risk by following these steps, which researchers based on the participants in the Framingham Heart Study.

Find Your Risk

Here's your risk of having a stroke within the next 10 years.

Points	Men	Women
1	3%	1%
2	3%	1%
3	4%	2%
4	4%	2%
5	5%	2%
6	5%	3%
7	6%	4%
8	7%	4%
9	8%	5%
10	10%	6%
11	11%	8%
12	13%	9%
13	15%	11%
14	17%	13%
15	20%	16%
16	22%	19%
17	26%	23%
18	29%	27%
19	33%	32%
20	37%	37%
21	42%	43%
22	47%	50%
23	52%	57%
24	57%	64%
25	63%	71%
26	68%	78%
27	74%	84%
28	79%	–
29	84%	–
30	88%	–

Step 1

Find the points for your age.

Age	Women
54-56	0
57-59	1
60-62	2
63-64	3
65-67	4
68-70	5
71-73	6
74-76	7
77-78	8
79-81	9
82-84	10

Step 2

Find the points for your blood pressure and other risk factors.

No BP Drugs		Taking BP Drugs		Diabetes
SBP	Points	SBP	Points	No = 0 Yes = 3
under 95	0	under 95	0	Cigarette Smoker No = 0 Yes = 3
95-106	1	95-106	1	
107-118	2	107-113	2	CVD No = 0 Yes = 2
119-130	3	114-119	3	
131-143	4	120-125	4	AF No = 0 Yes = 6
144-155	5	126-131	5	
156-167	6	132-139	6	LVH No = 0 Yes = 4
168-180	7	140-148	7	
181-192	8	149-160	8	
193-204	9	161-204	9	
205-216	10	205-216	10	

Women

Step 1

Find the points for your age.

Age	Men
54-56	0
57-59	1
60-62	2
63-65	3
66-68	4
69-72	5
73-75	6
76-78	7
79-81	8
82-84	9
85	10

Step 2

Find the points for your blood pressure and other risk factors.

No BP Drugs		Taking BP Drugs		Diabetes
SBP	Points	SBP	Points	No = 0 Yes = 2
97-105	0	97-105	0	Cigarette Smoker No = 0 Yes = 3
106-115	1	106-112	1	
116-125	2	113-117	2	CVD No = 0 Yes = 4
126-135	3	118-123	3	
136-145	4	124-129	4	AF No = 0 Yes = 4
146-155	5	130-135	5	
156-165	6	136-142	6	LVH No = 0 Yes = 5
166-175	7	143-150	7	
176-185	8	151-161	8	
186-195	9	162-176	9	
196-205	10	177-205	10	

Men

Step 3

Total the points for all your risk factors.

Age	+ _____
SBP	+ _____
Diabetes	+ _____
Cigarette Smoker	+ _____
CVD	+ _____
AF	+ _____
LVH	+ _____
Total Points	_____

Stroke Glossary

AF—Has a doctor ever told you that you have atrial fibrillation (irregular heart beats in the upper chambers of your heart)?

BP Drugs—Drugs to lower blood pressure.

CVD—Have you ever had any of these five conditions?

1. Heart attack.
2. Angina (chest pain during physical activity).
3. Unstable angina or coronary insufficiency (the symptoms of a heart attack, but with no increase in the enzymes that signal heart muscle damage).
4. Intermittent claudication (severe leg pain, usually upon exertion, that results from an inadequate blood supply).
5. Congestive heart failure (symptoms like breathlessness and severely swollen ankles caused by the heart's failure to pump enough blood and oxygen).

LVH—Has an electrocardiogram ever shown that you have left ventricular hypertrophy (an enlarged heart muscle)?

SBP—Your systolic blood pressure (the higher of your two blood pressure numbers).

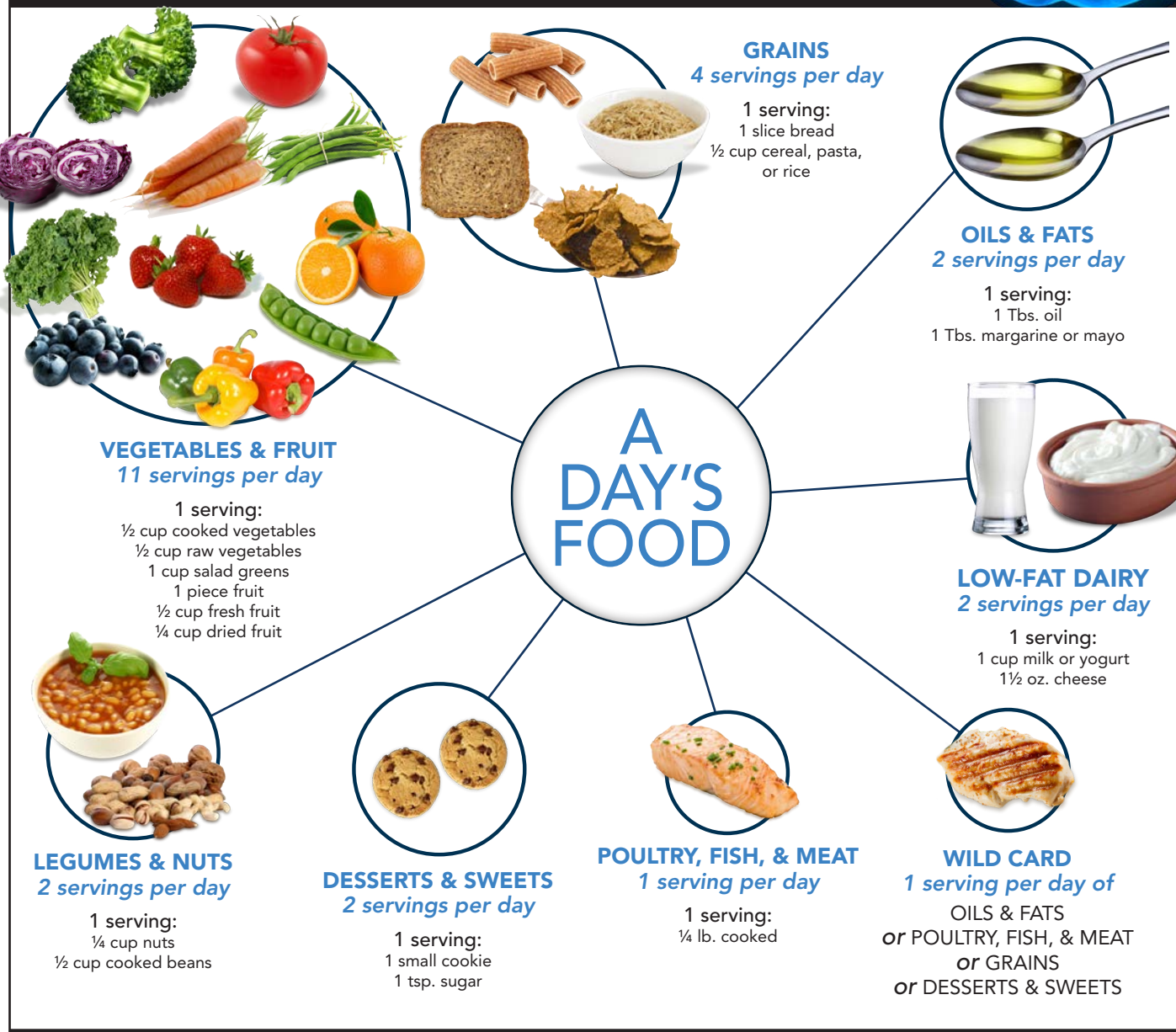
Compare Your Risk

Compare your stroke risk to that of an average person your age.

Age	Men	Women
55-59	6%	3%
60-64	8%	5%
65-69	11%	7%
70-74	14%	11%
75-79	18%	16%
80-84	22%	24%

WHAT TO EAT

Here's a variation of the DASH (Dietary Approaches to Stop Hypertension) diet that gave people the best blood pressure, triglycerides, and HDL ("good") cholesterol levels (see Oct. 2009, cover story). It has about 2,000 calories a day. If you eat more, just up the servings proportionally. • The diet provides roughly 4,700 milligrams of potassium, 500 mg of magnesium, 1,200 mg of calcium, 30 grams of fiber, and 2,300 mg of sodium per day. • The fruits and vegetables may seem overwhelming, but the servings are small. If you don't want to measure, just make sure they fill at least half your plate. (Adapted from *JAMA* 294: 2455, 2005.)



you have no risk and at 141 over 91 suddenly you have risk," says Goldstein.

In fact, the risk starts to rise well before 140 over 90. "Around 60 to 70 percent of clinical strokes are caused by increased blood pressure," explains Campbell. "Half of those strokes occur in people with high blood pressure and half strike those with increased-but-not-high blood pressure."

Increased-but-not-high blood pressure—or prehypertension—ranges from 120 to 139 systolic over 80 to 89 diastolic. "Normal" is less than 120 over less than 80.

"We use different names but the reality is that as blood pressure increases, the damage increases," says Campbell.

Here's how you can keep your pressure low, according to a report by the Institute of Medicine, the health arm of the National Academy of Sciences:⁶

■ **Lose excess weight.** If you're overweight, losing about 10 pounds could trim systolic blood pressure by an average of six points.

■ **Eat a DASH-like diet.** A DASH diet is built around vegetables, fruit, low-fat

dairy, and unsaturated fat instead of added sugars, refined starches, and saturated fat (see "What to Eat"). A DASH diet can lower systolic blood pressure by about six points. (That doesn't count the drop in pressure from the cut in sodium that's usually recommended as part of the DASH diet.)

■ **Scale back salt.** Cutting sodium in half (that means trimming about 1,700 milligrams a day for the average American) could cut systolic blood pressure by around four points.

What Else May Prevent a Stroke

■ **Vitamin D.** When it comes to vitamin D, “the jury is still out,” says JoAnn Manson, chief of preventive medicine at Brigham and Women’s Hospital in Boston.

“A higher intake of vitamin D and higher blood levels of 25-hydroxy-D are linked to a lower risk of stroke,” she explains. But until researchers test vitamin D supplements compared to a placebo, they won’t know if the vitamin makes a difference.

“There are so many sources of potential bias,” says Manson, who is also professor of medicine at Harvard Medical School. For example, “lower blood levels of vitamin D are correlated with obesity and being sedentary, because those people are less likely to be outdoors exercising and getting sun exposure that would raise blood levels.”¹

To find out if vitamin D—rather than a healthier body weight or more exercise or something else about people with higher vitamin D levels—lowers the risk of stroke and heart disease, Manson is leading the *VITamin D and Omega-3 Trial* (VITAL), which is giving men and women either vitamin D (2,000 IU a day) or a placebo. Results should be out in 2017.

■ **DHA and EPA.** “There are now several studies suggesting that people who eat more fish have a reduced risk of stroke,” says Manson. “However, the trials that randomly assigned people to take fish oil or a placebo have not clearly documented that.”

Why the discrepancy? “Eating fish may replace less healthful forms of protein such as red meat, and it also tends to track with more physical activity and healthier body weight and generally healthier diets,” notes Manson. These differences, not DHA and EPA (the two omega-3 fats in fish oil), may explain why fish eaters have a lower risk of stroke.²

Another possibility: most randomized trials have studied people at high risk for stroke or heart attacks. “They’re often on statins, aspirin, or antihypertensive medications like ACE inhibitors and beta-blockers,” explains Manson. Those drugs may work through similar pathways and lower the risk of stroke so much that “it may be difficult to see a benefit of the omega-3s.”

The VITAL trial should clear up the confusion. It’s giving 1,000 mg a day of DHA plus EPA to people who are taking fewer drugs because they’re at average risk.

What Doesn’t Work

■ **Antioxidant vitamins.** “The randomized trials of antioxidant vitamins have been disappointing,” says Manson. In trials with thousands of people, those who were given high doses of beta-carotene or vitamins E or C had no lower risk of stroke than those who got a placebo.¹

In fact, vitamin E promoted strokes in some trials. Among the 14,600 men in the Physicians’ Health Study, those who took 400 IU of vitamin E every other day for eight years had a 74 percent higher risk of hemorrhagic stroke than those who took a placebo.³

“Mega-doses of vitamin E can increase the risk of bleeding,” says Manson. (And 400 IU isn’t an outlandish dose. Most multivitamins have 30 IU, but some have 100 to 400 IU.)

■ **B vitamins.** “Homocysteine had been linked to an increased risk of stroke,” says Manson. And three vitamins (B-6, B-12, and folic acid) can lower homocysteine. “But B-vitamin supplements have not reduced the risk of stroke in randomized trials,” she notes.¹ “That’s been a surprising finding.” What went wrong?

Higher homocysteine may be a sign that people have other risk factors for stroke, like obesity. “Correlation doesn’t prove cause and effect,” cautions Manson.

¹ *Stroke* DOI:10.1161/STROKEAHA.111.639930.

² *Arch. Intern. Med.* 172: 697, 2012.

³ *JAMA* 300: 2123, 2008.

■ **Eat more potassium.** Potassium-rich fruits and vegetables can lower systolic blood pressure by about three points. (That accounts for half of the six-point drop you can expect from the DASH diet.)

■ **Exercise.** Regular aerobic exercise like brisk walking can lower systolic blood pressure by two to four points.

■ **Limit alcohol.** No more than two drinks a day for men or one drink a day for women can cut systolic blood pressure by an average of three points.

It’s not hard to see the food industry’s role in raising our blood pressure.

“Sodium is added during food processing, by restaurants or in packaged foods,”

notes Campbell. “Both have too little potassium due to lack of fruits and vegetables. And obesity is due to calorie density due to sugars and saturated and trans fats.

“Food companies are killing us, but we’re not supposed to demonize them.”

Don’t Give Up

Richard Dykema hasn’t fully recovered from his stroke. “We used to be very active,” says his wife, Holly. “He used to ride a motorcycle, scuba dive, and hang glide. Now he’s in a wheelchair most of the time. Walking is difficult.

“He was hit on many levels. He has absolutely no use of his arm. His leg was paralyzed, but it’s come back some. And he has a communication disorder and cognitive issues.”

But Holly still has hope.

“For many years, the theory was that what you see at six months is what you get for the rest of your life,” she says. “I’ve been going to support groups for six years, and I’ve seen many people continue to make improvements years after their stroke.

“You may not be climbing mountains again, but that doesn’t mean you’ll never be able to walk out your front door. You have to reinvent your life.”

For Holly, that meant starting the Stroke Association of Florida (SAF) to help other survivors and caregivers in Sarasota and Manatee counties.

At first, she explains, “I barely knew when my next shower was going to come, let alone who would care for Richard when I went back to work.”

The SAF offers information on support groups and a local resource guide.

“When Richard first came home, I needed a transfer board to get him in and out of the car,” says Holly. “A couple of months down the road, he no longer needed that.

“Then he needed a device to help him go fishing one-handed. How do you open a jar or operate a zipper with one hand? Your needs are going to change.”

The SAF’s second goal is to educate the local community.

“People need to know about the lifestyle changes that can prevent strokes,” says Holly. “And they need to know that they should call 9-1-1 immediately, because waiting to see if symptoms go away can mean the difference between complete recovery and disability.” 🍌

¹ *Circulation* 125: e2, 2012.

² *Stroke* 42: 517, 2011.

³ *Stroke* 42: 2672, 2011.

⁴ *Circulation* 118: 947, 2008.

⁵ *Lancet* 367: 320, 2006.

⁶ books.nap.edu/openbook.php?record_id=12819.

Life Lessons



27-year-old male rhesus monkeys (left: calorie-restricted, right: control). In the NIA study, the typical male had a lifespan of 35 years. In the wild, a typical male lives to 27 years.

Rhesus monkeys fed a calorie-restricted diet live no longer than monkeys fed a normal-calorie diet, according to a 25-year study from the National Institute on Aging (NIA).

Lifespans—and the causes of death—were no different whether the monkeys were fed a normal amount of food

(controls) or 30 percent less, regardless of whether the calorie restriction started when the animals were young or old. Monkeys whose calories were cut from a young age were less likely to get cancer than control monkeys, though cutting calories early or late in life had no impact on cardiovascular disease, diabetes, arthritis, or diverticulosis.

The NIA results differed from an earlier University of Wisconsin study in which calorie-restricted monkeys lived longer. (Rats, mice, dogs, and other animals also have lived longer when calorie-restricted.) However, the NIA control monkeys were fed only as much as they needed, while the Wisconsin controls ate as much as they wanted. It's possible that eating fewer calories than a typical monkey (or, perhaps, human) *wants* to eat does extend life.

What's more, all the Wisconsin monkeys ate a purified diet that was high in sugar and corn starch, which could have put the controls at greater risk. The NIA monkeys ate natural foods.

What to do: Don't eat fewer—or *more*—calories than you need to maintain a healthy weight.

Nature DOI:10.1038/nature11432.

Vitamins C, E & Eyes

In a lengthy trial, antioxidant vitamins C and E failed to prevent macular degeneration, a common cause of blindness in older people.

Scientists randomly assigned roughly 14,000 men aged 50 or older to take vitamin E (400 IU every other day), vitamin C (500 mg per day), both, or a placebo. After eight years, there was no difference—around 3 percent of the people in each group had been diagnosed with macular degeneration.

In 2010, the same authors reported that men given vitamins C and E had no lower risk of cataracts. And a higher dose of vitamin E (600 IU every other day) had no impact on

the risk of cataracts or macular degeneration in a 10-year study on nearly 40,000 women.

However, an earlier trial found that a daily dose of vitamin C (500 mg), vitamin E (400 IU), beta-carotene (25,000 IU), zinc (80 mg), and copper (2 mg) helped keep macular degeneration from progressing from an intermediate to an advanced—but not from an early to an intermediate—stage.

What to do: If you have macular degeneration, ask your doctor what to take. If you don't have it, there's no reason to think that vitamins C or E will protect your eyes.

Ophthalmol. 119:1642, 2012.

Getting Fat on Sugary Drinks

Three new studies offer strong evidence that sugary drinks lead to obesity.

■ **Dutch** researchers assigned 641 normal-weight children aged 4 to 12 to drink one cup a day of a beverage sweetened with either sugar (104 calories, about the same as a cup of Coca-Cola) or the artificial sweeteners Splenda and acesulfame potassium (0 calories). The children didn't know which drink they were getting.

After 1½ years, weight, waist size, and body fat increased more in the youngsters who got the sugary drinks.

"Children in the United States consume on average almost three times as many calories from sugar-sweetened beverages as the amount provided in our trial," noted the authors.

■ **Boston Children's Hospital** scientists studied 224 overweight or obese 9th- or 10th-graders who regularly drank at least one 12 oz. serving of sugary beverages or fruit juice a day. Half got home deliveries of calorie-free beverages (water or diet drinks) plus phone calls and visits encouraging them to switch to calorie-free drinks. The other half got a \$50 gift card to a local supermarket after being in the study for four months and another \$50 gift card after eight months.

After one year, the gift-card recipients had gained more weight than those who got the calorie-free drinks. A year after the study ended, the difference in weight between the two groups was no longer statistically significant.

■ **Harvard School of Public Health** researchers examined 32 gene variations linked to obesity in roughly 28,000 women and men who were not obese when the study started.

For every 10 obesity-prone gene variations the participants had, the risk of becoming obese over the next 6 to 18 years was three times higher in those who consumed at least one sugary beverage a day than in those who drank less than one a month.

What to do: Replace sugary sodas, iced teas, fruit drinks, energy drinks, and juices with water or diet drinks. 🍷

N. Eng. J. Med. DOI:10.1056/NEJMoa1203034.

N. Eng. J. Med. DOI:10.1056/NEJMoa1203388.

N. Eng. J. Med. DOI:10.1056/NEJMoa1203039.

N. Eng. J. Med. DOI:10.1056/NEJM1209884.

FIND THE FLAW

Seeing through sketchy claims

BY DAVID SCHARDT

An exaggeration here, an inflated claim there. With a constant stream of ads, advice, and promotions competing for our eyeballs, who can keep track of what's true and what's not? Here's the scoop on some claims that stretch, bend, or simply invent the truth.

1 Infomercial to Never Watch



Click on this ad, which seems to be all over the Internet, to find out which five foods to never eat, and you'll have to first sit through a 25-minute slide show.

It features Isabel de los Rios and her friend Jeff, who are trying

to sell their \$47 "Beyond Diet" weight-loss program. The pair recommends eating foods like eggs, meat, butter, millet, fruits, and vegetables and avoiding foods like those that contain soy and canola oil.

And the five foods to never eat? (Spoiler alert! The banana pictured in the ad isn't one of them.) The list appears to consist of orange juice, whole wheat bread, low-fat muffins, granola, and "healthy" breakfast cereals, though Isabel and Jeff never get around to explaining exactly what those foods have to do with "stomach" fat. Maybe that's because our hosts have no good evidence. Or maybe they figure that, after their seemingly endless commercial, most viewers will have forgotten the question.

Jeff says that they base their advice about which foods to eat and avoid on their success in helping "thousands and thousands" of people lose weight. And he points out that Isabel's certifications include one from the Corrective Holistic Exercise Kinesiology Institute of San Diego. (The Institute offers three-, five-, and six-day workshops leading to certification as a "Holistic Lifestyle Coach.")

Nice work if you can get it.

Avoid tilapia?



No need to avoid tilapia, Andrew Weil notwithstanding.

"If I were you, I would avoid tilapia," Andrew Weil tells visitors to drweil.com.

That would be a big change for a huge number of people, since tilapia has become the third most popular fish in the American diet.

Why avoid it?

A 2008 study from the Wake Forest University School of Medicine in North Carolina found "very high levels" of omega-6 fats in tilapia, according to Weil. Omega-6 fats, which are in seeds, nuts, and oils, are used by the body to make hormones that "tend to increase inflammation," cautions Weil.

In fact, tilapia is a low-fat fish, with not much omega-6 fat—less than half a gram in a three-ounce cooked serving, according to the U.S. Department of Agriculture and others. (In comparison, a one-ounce serving of almonds has around 3½ grams of omega-6 fat—seven times more than a serving of tilapia.)

What the Wake Forest researchers said was that tilapia has relatively low levels of *omega-3* fats (less than 150 milligrams of DHA and EPA in a serving, which is what you'd expect, given what tilapia is fed), and that the fish's ratio of omega-6 fat to omega-3 fat—about 2.5 to 1—is, in their opinion, high enough to promote inflammation.¹

However, there's no good evidence that a high ratio of omega-6 to omega-3 causes inflammation (see cover story, June 2012). In fact, omega-6 fatty acids help lower the risk of heart disease, according to the American Heart Association.²

"Tilapia is low in total and saturated fat and high in protein," says William Harris of the University of South Dakota, who chaired the Heart Association's scientific panel on omega-6 fats and cardiovascular disease.

"It clearly can be part of a healthy diet."

¹ *J. Am. Diet. Assoc.* 108: 1178, 2008.

² *Circulation* 119: 902, 2009.

Berry Premature



Weight-loss miracle?
Perhaps if you're an overweight mouse.

After such a coveted endorsement, health food stores and pharmacies couldn't stock enough of the pills to meet demand.

Raspberry ketone is the chemical that gives the fruit its scent. It's too expensive to extract from raspberries, so what's available

The "#1 miracle in a bottle to burn your fat," Dr. Mehmet Oz promised his national TV audience this year. Raspberry ketone will "naturally trick your body into thinking it's thin."

in stores has been synthesized in laboratories.

Despite Dr. Oz's claims of impressive research, raspberry ketone has never been studied in humans for weight loss or, as far as we can tell, for anything else.

In the only study on weight in animals, six overweight mice fed a high-fat diet showed a 7 percent increase in weight after five weeks, while six similar mice fed raspberry ketone plus the same high-fat diet gained no weight.¹ That's it. A study on 12 mice constitutes a "miracle" for humans. What's more, the mice were given the human equivalent of roughly 15 grams of raspberry ketone every day. That's more than what's in a whole bottle of most brands.

The bottom line: researchers don't have a clue whether raspberry ketone does anything for people.

¹ *Life Sci.* 77: 194, 2005.

The Whole Truth (POM-style)

Heart therapy.

POM Wonderful. The Antioxidant Superpower.



"...Natural Fruit Product with Health Promoting Characteristics." - FTC Judge

The FTC: POM's ads were "false," "deceptive," and "misleading."

no such thing. Nor did the FTC judge mean what the latest POM ad would have you believe when he used the words "natural fruit product with health promoting characteristics" in his decision. The judge wasn't expressing his own opinion. He was merely quoting witnesses to establish that pomegranate juice is a fruit and not a drug under the law.

The pomegranate-juice company had appealed The Federal Trade Commission's complaint that POM's ads, which suggested that the juice could help with cardiovascular disease, prostate cancer, and erectile dysfunction, were "false and unsubstantiated."

After listening to POM's and the government's expert witnesses, the FTC judge ruled that POM had "insufficient competent and reliable scientific evidence" to back up its health claims. The judge ordered the company to stop making those claims—and any others—about pomegranate juice that didn't have good evidence behind them.

Guess POM was banking on most people reading the company's ads and not the 335-page court decision (which, in case you're interested, is at www.ftc.gov/os/adjpro/d9344/120521pomdecision.pdf).

"You may have heard that the Federal Trade Commission sued POM Wonderful for false and misleading advertising," POM announced last spring in full-page ads in *The New York Times* and the *Los Angeles Times*, in Internet banner ads, and on a new Web site called pomtruth.com.

"But what you...need to know," the company continued, "is that the FTC judge agreed that POM Wonderful 100% Pomegranate Juice" does "provide significant health benefits."

The judge agreed to

Belly Fat Pills

Is this the answer to America's big gut epidemic: pills that "can reduce your pot belly without changing your diet or physical activity"?

Maybe you've seen the full-

page ads in *USA Today* for the diet pills from a "famous plastic surgeon." That would be the late Dr. Frank Ryan, whose Jeep ran off a cliff and crashed into the Pacific Ocean two years ago. Before his untimely death, Ryan's company claims that he wanted to sell his dietary supplements to the public and not just to Hollywood celebrities.

Lucky us.

Ryan's "Abdominal Fat Reducer" pills consist of run-of-the-mill ingredients commonly found in weight-loss supplements, like CLA (a type of fat), green tea extract, and caffeine.

The label says that the formula has been "clinically tested." It was. And it flunked even that tiny, flawed test.

In the company-funded pilot study, which was done five years ago, researchers gave 30 overweight or obese men and women either Ryan's pills or a placebo for eight weeks.¹ (Nearly half of the people didn't finish the study.)

Both the pill takers and placebo takers cut their calories by one-third. The researchers didn't monitor whether they also exercised more (or less). So much for the claim that the pills work "without changing your diet or physical activity."

By the end of eight weeks, the ten pill takers had lost four pounds and reduced their waist size from 39 to 37 inches, about the same as the eight placebo takers, who had lost three pounds and reduced their waist from 34 to 32 inches.

Take it away, Hollywood? Not exactly.



Clinically tested...and it flunked.

¹ clinicalstudiespublishing.com/pdf/supplemental/AES-2006%20Final%20Report-10-19-07.pdf.

Ensuring the Bottom Line



Want to add muscle? Get more exercise.

"Over 40? You can lose 8% of your muscle every 10 years," warns Abbott Laboratories. No problem. Just drink two bottles of Ensure Muscle Health every day to "help rebuild muscle and strength naturally lost over time."

Ensure contains "Revigor," Abbott's name for the amino acid derivative beta-hydroxy-beta-methylbutyrate—HMB for short.

HMB may produce a small

extra gain in strength when given to young men who are starting a strength-training program. But it had no impact on men who had done strength training before, and it didn't build muscle in trained or untrained men.¹

What about older people who are slowly losing muscle?

In the largest and longest study to date, researchers gave 77 Iowa men and women in their 70s a daily dose of two or three grams of HMB plus several essential amino acids or a placebo of nonessential amino acids and no HMB.² (It's not clear why both groups didn't get essential amino acids.)

But they weren't just any researchers. The lead author, Steven Nissen, until recently a professor of animal science at Iowa State University, holds several patents related to HMB and is the CEO of Metabolic Technologies, Inc., which sells HMB. Another author is also a patent holder, and a third is an employee of the company.

After one year, the HMB takers had no more muscle than the placebo takers, as measured by the most reliable yardstick of lean tissue, and both groups gradually lost handgrip and leg strength. However, the authors concluded that HMB works because a less reliable test found an increase in muscle. A third test found no net increase in body protein.

"If HMB helped retain muscle in those who would normally be losing it, that would be very promising," says Doug Paddon-Jones, who studies muscle synthesis in older adults at The University of Texas Medical Branch in Galveston.

But if you already get enough calories and protein from your diet, adding 500 calories a day from the two bottles of Ensure you'd need to drink to get two grams of HMB "is a recipe for obesity," warns Paddon-Jones. And that much Ensure would cost you about \$150 a month.

¹ J. Strength Cond. Res. 23: 836, 2009.

² J. Parenter. Enteral Nutr. 33: 71, 2009.

"You'll be Regular, Trust Me"

If you watch the network news on TV, you've seen the commercials with this woman interrupting people to give them Phillips' Colon Health to relieve their constipation and other intestinal ailments. Too bad she can't



Relieves constipation? Who knows?

offer them evidence that it works.

Colon Health is a combination of three probiotic ("good") bacteria. For years, Bayer Healthcare, which owns the Phillips brand, had declined to identify the three strains it used, citing trade secrets. So consumers couldn't check the evidence for Bayer's claims.

The company has finally revealed what's in Colon Health: *Lactobacillus Gasseri* KS-13, *Bifidobacterium Bifidum* G9-1, and *Bifidobacterium Longum* MM-2. But Bayer now refuses to disclose the evidence that the three bacteria relieve constipation.

The information is "proprietary," it says. But could there be another reason the company is mum? Could it be because there's no evidence to disclose? Among the more than 22 million articles in Medline, the world's largest database of scientific research, there's not a single study that looked at the effect of any of the three bacteria on constipation.

An Internet search turned up mentions of three unpublished studies (one in Japan and two in Canada). And a fourth study was published in Japan 25 years ago in an obscure journal that's no longer available. But there's no information about which products were tested in which people, whether the probiotics were compared with a placebo, or how significant any effects on constipation were.

Surely, a company like Bayer can do better than that.

Safe, Natural ADD/ADHD Symptom Relief



It's homeopathic, so it needs no evidence.

hyperactivity disorder. But many of the "natural" alternatives are untested, including homeopathic medicines like Synaptol.

Synaptol consists of 11 "active ingredients" that have each been diluted so much that there may not be a single molecule of the

Thanks a Little!

"Synaptol works for ADHD guaranteed," say the Internet ads.

Claims like that have a huge appeal for parents who don't want to give prescription stimulants to children who have been diagnosed with attention deficit

original ingredient left. But that doesn't stop Synaptol's marketers from making claims. Synaptol's *Apis mellifica* (which started out as ground-up honeybees before being diluted), for example, helps stop fidgeting, says the company's Web site.

What's the scientific evidence that Synaptol works? There's none.

"Field studies and trials are not required" for Synaptol and other homeopathic medicines, the manufacturer reminded us in an e-mail. That's because in 1938 Congress gave the homeopathy industry license to regulate most of its own health claims. And marketers seldom base those claims on clinical trials.

Too bad anxious parents aren't likely to know that. 🍌



COZY FOOD

BY KATE SHERWOOD

Looking for an antidote to shorter days and nipper temperatures? You couldn't do any better than these three dishes. 🍴

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

Baked Tilapia

Total Time: 40 minutes 



- 1 lb. Yukon gold potatoes, peeled and thinly sliced
- 1 onion, thinly sliced
- ¾ tsp. kosher salt, divided
- 4 tilapia filets, about 1 lb.
- 1 15 oz. can no-salt-added diced tomatoes
- ½ cup white wine
- ¼ cup extra-virgin olive oil
- 1 tsp. herbes de Provence

Herbes de Provence is a magical combination of basil, fennel seed, thyme, lavender, and other herbs that makes this dish taste like sunshine in Saint-Tropez. Look for it in the spice aisle.

Preheat the oven to 450° F. • In a 13" x 9" baking dish, arrange half the potatoes in a single layer. Top with all of the onions. Sprinkle with ¼ tsp. of salt. Lay the fish filets in the dish, overlapping the thinner parts of the filets. Pour the tomatoes and wine over the fish and season with ¼ tsp. of salt. Arrange the remaining potato slices on top of the fish. Drizzle with the oil and season with ¼ tsp. of salt and the herbes de Provence. • Bake for 10 minutes. Reduce the oven to 200° F and bake for another 10 minutes. • Serves 4.

Per Serving (2 cups): Calories 380; Total Fat 16 g; Sat Fat 2.5 g
Protein 26 g; Carbs 28 g; Fiber 4 g; Sodium 440 mg

Hunter's Chicken

Total Time: 30 minutes 



- 1 lb. boneless, skinless chicken breast or thighs
- 4 Tbs. extra-virgin olive oil, divided
- 1 onion, diced
- 1 lb. cremini mushrooms, diced
- 2 Tbs. tomato paste
- ½ cup dry vermouth
- 1 15 oz. can no-salt-added diced tomatoes
- ½ tsp. dried thyme
- Freshly ground black pepper
- ½ tsp. kosher salt

You can use dry white wine instead of vermouth.

In a large, deep skillet, sauté the chicken in 1 Tbs. of the oil until browned, about 3 minutes per side. Remove and set aside. • Sauté the onion and the mushrooms in the remaining 3 Tbs. of oil until they start to brown, 8-10 minutes. • Stir in the tomato paste and cook for 2 minutes. Add the vermouth, diced tomatoes, and thyme. Simmer until the sauce thickens, about 10 minutes. • Chop the chicken and return it and any juices to the skillet to gently cook through. Season with pepper and up to ½ tsp. of salt. • Serves 4.

Per Serving (1½ cups), made with chicken breast: Calories 370; Total Fat 17 g
Sat Fat 2.5 g; Protein 29 g; Carbs 19 g; Fiber 3 g; Sodium 400 mg

Cannellini Beans & Chorizo

Total Time: 20 minutes 



- ½ lb. chicken chorizo sausage, casing removed
- 3 Tbs. extra-virgin olive oil
- 5 cloves garlic, minced
- 2 bell peppers, chopped
- 1 15 oz. can no-salt-added cannellini beans
- Freshly ground black pepper

Chorizo is a Spanish sausage that is flavored with paprika and comes either fresh or smoked. For this recipe I prefer the fresh sausage. You can use Italian chicken or turkey sausage instead—just add 1 Tbs. of paprika while sautéing the sausage.

Sauté the sausage in the oil, breaking it up into small pieces, until lightly browned, about 3 minutes. Stir in the garlic and cook for another minute. Remove the sausage and garlic with a slotted spoon and set aside. • Sauté the peppers until they start to brown, 2-3 minutes. Stir in the beans with their liquid and heat through. • Stir the sausage into the peppers and beans. Season with plenty of black pepper. • Serves 4.

Per Serving (1¼ cups): Calories 300; Total Fat 16 g; Sat Fat 2.5 g
Protein 17 g; Carbs 21 g; Fiber 6 g; Sodium 370 mg

Photos: Jorge Bach/OSPI.



BRAND-NAME RATING Schmears & Cheers

the good, the bad, and the spreadable

BY JAYNE HURLEY & BONNIE LIEBMAN

Spreads aren't what they used to be.

Land O Lakes, Olivio, Smart Balance, Breakstone's, and Country Crock are adding healthier unsaturated oils to their butter. And companies are adding canola oil, olive oil, flaxseed oil, fish oil, sea salt, honey, vitamin E, and calcium and/or vitamin D to their non-butter spreads to make them stand out.

But Americans—with their spreading waistlines—aren't what they used to be, either. That's why we set a 50-calorie limit for each tablespoon of our Best Bites. We also banned partially hydrogenated oils (which means no trans fat), added sugar, and all but 1.5 grams of saturated fat. (Honorable Mentions can have up to 2 grams and have no calorie limit.)

Here's what to look for—and what to ignore—in a spread.

The information for this article was compiled by Paige Einstein.



Better Butter

A tablespoon of regular butter has 7 grams of saturated fat. That's a third of a day's worth. And it comes with 0.5 grams of trans fat and 100 calories.

Delicious, only 50 calories, and a sat-fat deal for butter.

Companies have been trying to make their butter better for you. Here, from most to least saturated fat, is how your options stack up:

■ **Whipped.** Whipped butter has less saturated fat and fewer calories because it has more air. Land O Lakes and Organic Valley whippeds cut the sat fat to 3.5 grams and the calories to 50 per tablespoon. Breakstone's and Natural by Nature reach around 5 grams of sat fat and 60 to 70 calories.

■ **Blended with oil.** Land O Lakes and Breakstone's blend some of their regular tub butters—and Country Crock, Olivio, and Smart Balance blend all of their regulars—with unsaturated oil (canola, olive, soybean, and/or flaxseed). Depending on how much oil they use, the sat fat drops to 3.5 to 4.5 grams per tablespoon. But the calories still hover around 100. Land O Lakes and Smart Balance butter-oil-blend sticks, unfortunately, still hit 5 or 6 grams of sat fat.

■ **Light.** Light butters typically have around 3 grams of saturated fat and 50 calories per tablespoon, thanks largely to added water.

■ **Light and blended with oil and sugars.** Land O Lakes Honey and Land O Lakes Cinnamon Sugar Butter Spreads get the sat fat down to 2.5 grams per tablespoon by blending their butter with oil, water, and about a teaspoon's worth of added sugars. Country Crock Honey Spread has roughly half a teaspoon of sugar and 1.5 grams of sat fat. All have 70 calories. Memo to both companies: Americans need to eat less sat fat *and* less sugars (including honey).

■ **Light and blended with oil.** Thanks to added unsaturated oils and water, Land O Lakes Light Butter with Canola Oil, Smart Balance Light Butter & Canola Oil Blend, and Olivio Light Butter With Canola, Olive & Flaxseed Oil manage to knock the saturated fat down to 2 grams, which makes them low enough for an Honorable Mention. Couple that with 50 calories per tablespoon, and you're about as low as butter can go. Bonus: the spreads still have that creamy, real-butter taste.



Zero (Sort Of)

According to their Nutrition Facts labels, Country Crock, I Can't Believe It's Not Butter!, Smart Balance, Promise, BestLife, Olivio, and Brummel & Brown spreads all have 0 grams of trans fat. So do Fleischmann's, Parkay, Blue

Taste winner...and (like all Country Cocks) trans-free.

Bonnet, Move Over Butter, Land O Lakes, and Benecol.

But there's a difference.

The spreads in the second group contain partially hydrogenated oil—the source of man-made trans fat. So how can they have 0 grams of trans? Easy. The Food and Drug Administration (FDA) lets labels list trans fat as 0 grams (and make a “0 grams trans fat” claim) if a food has less than 0.5 grams of trans per serving.

Oops. Although 0.3 or 0.4 grams of trans fat may seem trivial, some scientists recommend no more than 2 grams per day. (Others say even that's too much.) So “0 grams trans fat” could mean nearly a quarter of a day's maximum in every tablespoon. And that's a shame, because spreads don't need trans fat.

Solution? Look for spreads (like the Best Bites in our chart on p. 15) that contain no *partially* hydrogenated oil. (Don't worry about “hydrogenated” or “fully hydrogenated” oil. It has no trans fat.)

And butter lovers beware: a tablespoon of regular butter has 0.5 grams of naturally occurring trans (which appears to be as bad as man-made trans).



Don't Count Your Coconuts...



Coconut oil: lots of hype but little evidence.

But its promises go too far. “Melt tastes delicious and supports healthy weight when replacing other fats in your daily diet,” says the label. “An excellent source of MCFAs (the ‘good fats’) that we burn as energy instead of storing as fat.”

See the word “supports”? That means “little or no evidence needed to make this claim.” The bottom line: medium-chain fatty acids *might* have a modest effect on weight loss (see June 2012, p. 10), but you’d be safer simply buying a lower-calorie spread.

“Bake, sauté, stir-fry and amaze with this creamy-smooth butter-busting delight made with extra virgin coconut oil,” boasts the Earth Balance Organic Coconut Spread label. Since when is 5 grams of saturated fat (a quarter of a day’s worth) per tablespoon delightful?

Melt Organic drops the sat fat to 3.5 grams by blending its virgin coconut oil with less-saturated oils.

Crock ‘n’ Roll

“Bake & Fry Naturally,” says Earth Balance Natural Shortening. Spectrum Organic Shortening is “a better alternative than ordinary shortening because it’s never hydrogenated which means it has 0 g trans fat.” So what? A tablespoon of either brand has 5 or 6 grams of saturated fat from palm or palm fruit oil—about as much as lard.

Stick margarines made with partially hydrogenated oils—like Land O Lakes, Blue Bonnet, Parkay, Imperial, Mrs. Filbert’s, and Fleischmann’s—keep the sat fat to 1.5 to 2 grams, but they come with 1.5 to 2.5 grams of trans fat. Leave them on the shelf.

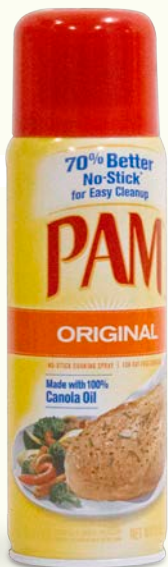
Crisco Shortenings are a step up (3 grams of sat fat and, we estimate, 0.3 grams of trans fat). But you can do better.

Country Crock sticks (“Great For Baking and Cooking”) have only 2.5 grams of sat fat and no partially hydrogenated oils. Promise sticks (3 grams of sat fat) are a close second.

Attention bakers: unlike pie crusts, cookies and cakes don’t require solid fats, so any regular (non-light) tub will do.



The best baking stick we found.



A calorie bargain...but not fat free.

Spray-on Facts

“For Fat-Free Cooking,” says the label of PAM Original No-Stick Cooking Spray. “Made with 100% Canola Oil.”

How can an oil be fat free? According to the FDA, a food with less than 0.5 grams of fat per serving can list 0 grams of fat on its label. And a serving of PAM—which is just a quarter- or a third-of-a-second spray—has less than 0.5 grams of fat. At least many of PAM’s labels disclose that a *one-second* spray has 9 calories and 1 gram of fat. That still makes PAM a calorie bargain. Even a more-realistic three-second spray delivers only 30 calories.

Spread those Vitamins



A good spread if you need extra calcium and vitamin D.

Do you need them? Only if you’re using a spread to reach your daily targets. The vitamin D can’t hurt. But there’s no evidence that getting more than the recommended levels of calcium—1,000 milligrams a day for women up to age 50 and men up to age 70, and 1,200 mg for people older than that—does anything for your bones. And higher levels might harm your heart.

It’s fine to rely on our Best Bites (I Can’t Believe It’s Not Butter! and Country Crock) for calcium and vitamin D if you need them. Just don’t assume that more is better.

A tablespoon of calcium-plus-vitamin-D spreads by I Can’t Believe It’s Not Butter!, Country Crock, or Blue Bonnet has 10 percent of the Daily Value for calcium and 20 percent of the DV for vitamin D. Some Smart Balance spreads have 50 percent of the DV for vitamin D.



Smart for Hearts?

■ **Smart Balance.** “Supports Healthy Cholesterol Levels,” says the bold type on most Smart Balance tubs. “Already within the normal range,” adds the smaller, fainter type.

Spreads with sterols can help lower cholesterol.

Translation: Smart Balance can’t promise to lower your cholesterol if it’s high. How helpful.

“Clinical research has proven the right blend of fats may improve your cholesterol ratio when at least 2/3 of your fat intake comes from this product or our Food Plan,” add the labels. Most people don’t get two-thirds of their fat from a spread. They need a spread with less saturated fat to “balance” the meat, cheese, and other sat fats they eat. But many Smart Balance spreads have 2.5 grams of sat fat per tablespoon. That’s too much.

■ **Sterols.** “100 mg Plant Sterols Helps Block Cholesterol in the Butter,” say Smart Balance’s spreadable butters. Plant sterols (and stanols) do help lower cholesterol, but you need at least 0.8 grams (800 milligrams) a day to cut cholesterol by about 10 percent. That’s eight tablespoons of Smart Balance spreadable butter.

Our advice: skip the butters and try Promise Activ Light or Smart Balance HeartRight Light, with 1.7 grams (1,700 mg) of plant sterol esters per tablespoon. Both are Best Bites. They beat Benecol and Benecol Light, which have 0.5 grams (500 mg) of plant stanols. And the Benecols contain partially hydrogenated oil, so they’re not Best Bites.

■ **Omega-3 fats.** “Omega-3s EPA/DHA & ALA to Help Maintain a Healthy Heart,” say Smart Balance Omega-3 and Light Omega-3 Buttery Spreads. Even if EPA and DHA protect your heart—the evidence isn’t clear—each tablespoon of the spreads has just 32 milligrams of the fish oils (what you’d get in about half a teaspoon of salmon). Smart Balance Omega-3 Buttery Sticks also have 32 mg of EPA plus DHA in every tablespoon. But that doesn’t make up for their 5 grams of saturated fat. 🐟

Spread the Word

Best Bites (✓✓) have no more than 1.5 grams of saturated fat and 50 calories per tablespoon. Honorable Mentions (✓) can have up to 2 grams of sat fat and have no calorie limit. We eliminated spreads made with partially hydrogenated oil or added sugar.

Within each section, items are ranked from least to most trans fat, then saturated fat, then calories, then sodium.

Butters are ranked by sat fat first.

	Calories	Saturated Fat (g)	Trans Fat (g)	Sodium (mg)
Tubs & Squeezes made without partially hydrogenated oil (1 Tbs.)				
✓✓ Smart Beat Smart Squeeze	10	0	0	100
✓✓ Olivio Light	50	1	0	90
✓✓ Promise—Activ Light or Light ¹	50	1	0	90
✓ Country Crock Whipped Easy Squeeze	60	1	0	80
✓ I Can't Believe It's Not Butter! Original Squeezable	60	1	0	80
✓ Spectrum Naturals	80	1*	0	60
✓ Canoleo Soft	100	1	0	100
✓✓ I Can't Believe It's Not Butter! Whipped & Creamy Taste	50	1.5	0	70
✓✓ Smart Balance Light ¹	50	1.5	0	80
✓✓ Brummel & Brown	50	1.5	0	90
✓✓ Country Crock Light	50	1.5	0	90
✓✓ I Can't Believe It's Not Butter! Calcium + Vitamin D	50	1.5	0	90
✓✓ I Can't Believe It's Not Butter! Light ¹	50	1.5	0	90
✓✓ Country Crock Calcium plus Vitamin D	50	1.5	0	100
Country Crock Honey Spread	70	1.5	0	50
✓ Parkay Squeeze	70	1.5	0	110
✓ Promise Buttery	80	1.5	0	90
✓ Olivio Original	80	1.5	0	100
✓ Balade Buttery	30	2	0	110
✓ Smart Balance Whipped Low Sodium	60	2	0	30
✓ Smart Balance made with Extra Virgin Olive Oil	60	2	0	70
✓ BestLife ¹	60	2	0	100
✓ I Can't Believe It's Not Butter!—made with Olive Oil or Original ¹	70	2	0	90
✓ Country Crock—Churn Style or Original ¹	70	2	0	100
Earth Balance—Natural made with Olive Oil or Organic Whipped ¹	80	2.5	0	90
Smart Balance Omega-3	80	2.5	0	90
Smart Balance Original ¹	80	2.5	0	90
Smart Balance with Calcium and Vitamin D	80	2.5	0	90
Smart Balance Organic Whipped	80	2.5	0	100
Earth Balance—Natural Original or Natural Soy Free ¹	100	3	0	110
Melt Organic ¹	80	3.5	0	70
Earth Balance Organic Coconut Spread	100	5	0	70
Olivio Coconut Spread	50	5.5	0	90
Tubs made with partially hydrogenated oil (1 Tbs.)				
Fleischmann's Light	40	0.5	NA	70
Benecol Light	50	0.5	NA	110
Blue Bonnet Light	40	1	NA	90
Move Over Butter	50	1	NA	80
Blue Bonnet Calcium plus Vitamin D	50	1	NA	130
Parkay Light	50	1	NA	130
Fleischmann's Unsalted	60	1	NA	0
Fleischmann's—made with Olive Oil or Original ¹	60	1	NA	40
Blue Bonnet	60	1	NA	120
Benecol	70	1	NA	110

	Calories	Saturated Fat (g)	Trans Fat (g)	Sodium (mg)
Parkay	70	1.5	NA	80
Canoleo Canola Premium	100	1.5	NA	100
Land O Lakes Fresh Buttery Taste	70	2	NA	80
Land O Lakes Fresh Buttery Taste with Olive Oil	70	2	NA	80
Land O Lakes	100	3	NA	130

Sticks made without partially hydrogenated oil (1 Tbs.)

Country Crock	80	2.5	0	90
Promise	80	3	0	100
I Can't Believe It's Not Butter!	100	3.5	0	100
Earth Balance Vegan Buttery	100	4	0	120

Sticks made with partially hydrogenated oil (1 Tbs.)

Blue Bonnet Light	50	1	1	80
Parkay Light	50	1	1	80
Mrs. Filbert's	70	1.5	1.5	100
Imperial	70	1.5	1.5	110
Blue Bonnet	70	1.5	1.5	130
Parkay	80	1.5	1.5	130
Fleischmann's Unsalted	80	2	1.5	0
Fleischmann's Original	80	2	1.5	110
Land O Lakes Fresh Buttery Taste	90	2	2	100
Land O Lakes	100	2	2.5	110

Butter (1 Tbs., tub unless noted)

✓ Land O Lakes Light with Canola Oil	50	2	NA	90
✓ Olivio Light With Canola, Olive & Flaxseed Oil	50	2	NA	90
✓ Smart Balance Light Butter & Canola Oil Blend	50	2	NA	90
Land O Lakes—Cinnamon Sugar or Honey ¹	70	2.5	NA	40
Land O Lakes Whipped Light	50	3	0.2*	90
Balade Light ¹	50	3	0.3*	50
Land O Lakes Whipped Unsalted	50	3.5	0.3*	0
Organic Valley Whipped	50	3.5	0.3*	40
Land O Lakes Whipped Salted	50	3.5	0.3*	50
Land O Lakes Light, stick	50	3.5	0.3*	100
Country Crock Spreadable with Canola Oil	80	3.5	NA	70
Olivio Spreadable With Canola & Olive Oil	90	3.5	NA	70
Smart Balance Butter & Canola and Extra Virgin Olive Oil Blend	100	4	NA	90
Smart Balance Butter & Canola Oil Blend	100	4	NA	90
Breakstone's Whipped Salted ¹	70	4.5	0.3*	60
Land O Lakes—Roasted Garlic with Oil, with Canola Oil, or with Olive Oil ¹	90	4.5	NA	100
Breakstone's Spreadable with Canola Oil	100	4.5	NA	80
Natural By Nature Whipped Salted	60	5	0.3*	80
Smart Balance Buttery Sticks ¹	100	5	NA	100
Land O Lakes with Olive Oil & Sea Salt, stick	100	6	NA	90
Butter, regular, salted, stick or tub, any brand	100	7.5	0.5	100

Shortening (1 Tbs.)

BestLife Buttery Baking Sticks	80	3.5	0	100
Earth Balance Natural, stick	130	5	0	0
Spectrum Organic, tub ¹	110	6	0	0
Pure lard, any brand	120	5	0.1*	0
Crisco—Baking sticks or tub ¹	110	3	0.3*	0

No-Stick Sprays (3-second spray)

✓✓ PAM Original	30	0	0	NA
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✓✓ Best Bite. ✓ Honorable Mention. ¹Average. * Estimate. NA Number not available.

Daily Limits (for a 2,000-calorie diet): Sodium: 1,500 milligrams. **Saturated + Trans Fat:** 20 grams (no more than 2 of them trans).

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RIGHT STUFF

FRUIT FREEZE



"Strawberries, Blackberries, Blueberries." You don't see too many ingredient lists as simple as that.

Yet that's what you get—all you get—in a bag of **Cascadian Farm Organic Harvest Berries**. The fruit needs no syrups or added sugars because it's naturally sweet, and no

artificial colors or flavors because it's real fruit. What a concept!

Each one-cup serving supplies 35 percent of a day's vitamin C and 4 grams of fiber, all for just 60 virtually fat-free, sodium-free calories. And that doesn't count the potassium, polyphenols, and other naturally occurring compounds that may help keep you healthy.

Best of all, Cascadian Farm makes fruit easy. No matter the season, just empty into a bowl and thaw in the refrigerator for two hours or in the microwave for four minutes. Then pour into your bowl of yogurt or cereal, into your muffin or pancake mix, or over your frozen yogurt or sorbet. For an instant ice-cold smoothie, toss some into a blender with fat-free plain yogurt and a banana.

Easier yet, just snack on the fruit while it's still slightly frozen. It's not just ice cream that tastes better cold.

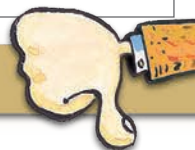
Cascadian Farm isn't the only frozen-fruit purveyor in town. **Welch's** now offers a frozen **Antioxidant Fruit Blend** and a **Four Berry Mix**. And **Earthbound Farm** markets a frozen **Organic Berry Basket Blend**.

If you can't find fresh, fruit on ice is plenty nice.

Cascadian Farm: (800) 624-4123

Welch's: (800) 340-6870

Earthbound Farm: (800) 690-3200



FOOD PORN

QUIZNO-NO

"All-natural chicken, smoky bacon, all-natural mozzarella, sautéed mushrooms, Parmesan Alfredo sauce."

Sounds like the makings of a steaming plate of pasta carbonara, no?

No. It's **Quiznos Chicken Carbonara sub**. Yessiree. Now you can watch your Alfredo sauce soak into your choice of white, wheat, rosemary Parmesan, or garlic focaccia "Artisan Bread."

Go with a large (11-inch) on garlic focaccia, and your sub packs 1,200 calories, close to a day's saturated fat (17 grams), and nearly two days' worth of sodium (2,610 milligrams). The roll alone delivers 450 calories.

Those numbers are from the Nutritional Facts Calculator on the Quiznos Web site. According to the site's Nutritional Info download page, though, the sandwich has 1,280 calories, 27 grams of sat fat, and 2,920 mg of sodium. Yikes!

Even the lower numbers put the sub in the same ballpark as a Quiznos Double Cheese Prime Rib or Black Angus sandwich.

Our advice: skip the subs and the wraps (which pack about 1,000 calories each). Wrap or roll, who needs all that white flour?

Instead, try the **Harvest Chicken Salad** (with Granny Smith apples, grapes, dried cranberries, cucumbers, tomatoes, and pumpkin seeds). A large has just 510 calories, 6 grams of sat fat, and 790 mg of sodium, even with all the dressing. (With half the dressing, you're down to 380 calories and 550 mg of sodium.)

Not too shabby. You could almost call it a Quiz-yes.

Quiznos: (866) 486-2783

dish OF THE MONTH

Roasted Sweets & Onions

Cut 1 lb. of peeled sweet potato into half-inch cubes. Toss with 1 large chopped onion and a mixture of 2 Tbs. of canola oil, 1 Tbs. of balsamic vinegar, 1 Tbs. of brown sugar, and 2 tsp. of reduced-sodium soy sauce. Roast on a baking sheet at 400°F until the potatoes are tender, 20-25 minutes. Let sit for 5 minutes before serving.