The lowdown on exercise advice

TAKEOUT 101

Foods with more (or less!) nutrients than you thought

POP QUIZ!

Test your food & health smarts
GOING ANTIVIRAL

The coronavirus pandemic has brought out the usual charlatans of the woodwork. Purveyors of unproven dietary supplements are bilking people who are desperately searching for some way to ward off Covid-19. At the Center for Science in the Public Interest, Nutrition Action’s publisher, we’re doing our best to stop them.

We’ve already spurred the Food and Drug Administration to stop televangelist Jim Bakker from selling a phony colloidal “Silver Solution” cure.

But the implications of the FDA’s action seem to have been lost on dozens of other outfits hawking unproven supplements that make implicit antiviral claims.

Ironically, the FDA anticipated these scams almost two decades ago.

In 2002, the agency explained its approach to structure-function claims, so named because they describe how a food or supplement affects the body’s structure (say, the skeleton) or its function (digestion, for example).

These claims are “builds strong bones,” as opposed to “prevents osteoporosis.” To the FDA, the latter is a disease claim because, like a drug, it promises to “diagnose, cure, mitigate, treat, or prevent” a health problem.

The distinction is critical. A disease claim means that the FDA can regulate the supplement as an unapproved drug and has the legal authority—rarely used—to seize it from warehouses.

When the FDA put together its 2002 guidance, it offered sample claims. “Supports the immune system,” for example, was an acceptable structure-function claim. “Supports the body’s antiviral capabilities,” on the other hand, was a disease claim.

Apparently, dozens of supplement manufacturers never got the memo.

When CSPI conducted a market scan on Amazon in late May, we identified 46 products that made antiviral claims. All are clear violations of the FDA’s guidance.

Among them:

■ “Help your immune system fight viruses and bacteria in sinus, throat and respiratory tract.” (Biotica Immune Support Capsules)

■ “Help fight bacteria, viruses, and disease.” (KaraMD Total Immunity)

■ “Fend off viruses.” (Bellicos Turmeric Curcumin)

In June, CSPI urged the FDA and the Federal Trade Commission to take action against the manufacturers.

We also asked Amazon to stop selling the products.

We don’t expect these to be the last illegal claims in this pandemic. But rest assured that we do fully intend to alert the feds to the most egregious ones.

And you can help. If you see something that looks sketchy, drop me an email at covidscams@cspinet.org.

Peter G. Lurie, MD, MPH, President
Center for Science in the Public Interest

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1. Which is MOST likely to lower your risk of type 2 diabetes?
   a. Take vitamin D
   b. Eat more full-fat dairy
   c. Lose excess weight
   d. Cut carbs
   e. Eat less fat

2. Which is LEAST likely to help you lose weight?
   a. Eat breakfast
   b. Limit ultra-processed foods
   c. Limit drinks that have calories
   d. Avoid large portions
   e. Eat foods with few calories per bite

3. Which benefit has NOT been linked to replacing saturated fat with unsaturated fat?
   a. Reducing LDL (“bad”) cholesterol
   b. Reducing excess weight
   c. Reducing excess belly fat
   d. Reducing excess liver fat

4. Which is LEAST likely to be a sign of a stroke?
   a. Sudden numbness
   b. Sudden confusion
   c. Sudden trouble seeing
   d. Sudden irregular heartbeat (atrial fibrillation)
   e. Sudden dizziness

5. Which is MOST likely to keep you regular?
   a. Chicory root fiber
   b. Soluble corn fiber
   c. Inulin
   d. Guar gum
   e. Psyllium

6. Which is LEAST likely to raise the risk of breast cancer after menopause?
   a. Excess weight
   b. High insulin levels
   c. A daily serving of alcohol
   d. Using antiperspirants
   e. Hormone replacement therapy

7. Which exposure has NOT been traced to Covid-19 transmission?
   a. Attending a meeting with an infected person
   b. Singing in a choir with an infected person
   c. Eating food delivered from a store or restaurant
   d. Dining at a restaurant table adjacent to an infected person

8. Which has NOT been consistently linked to a diet high in refined carbs?
   a. High blood sugar
   b. High triglycerides
   c. Weight gain
   d. Prostate cancer
   e. Excess liver fat

9. Which is MOST likely to curb osteoarthritis knee pain with the fewest downsides?
   a. Vitamin D
   b. Glucosamine
   c. Chondroitin
   d. Exercise
   e. Arthroscopic surgery

10. Which should you toss to lower your risk of food poisoning?
    a. Food that’s past its “sell by” date
    b. Food that’s past its “best by” date
    c. Leftovers that have been sitting on the table for more than 2 hours
    d. Thawed meat, poultry, or seafood that you want to refreeze

11. A low-carb diet is uniquely suited to help you do which of these?
    a. Lose weight
    b. Prevent heart disease
    c. Prevent diabetes
    d. Reduce medications if you have type 2 diabetes
    e. Keep cancer from spreading

12. Which is MOST likely to prevent or alleviate depression?
    a. Vitamin D
    b. Fish oil
    c. B vitamins
    d. Selenium
    e. Exercise
13. A serving of which food takes the MOST water to produce?
   a. Cheese
   b. Apples
   c. Beef
   d. Chocolate
   e. Chicken

14. Which is LEAST likely to lower high blood pressure?
   a. Cutting back on salt
   b. Losing excess weight
   c. Getting more exercise
   d. Taking vitamin D
   e. Eating more fruits and vegetables

15. Which is LEAST likely to make a multivitamin worth taking?
   a. Iron
   b. Magnesium
   c. Vitamin D
   d. Vitamin B-12
   e. Folic acid

16. Which is LEAST likely to prevent cataracts?
   a. Taking antioxidant vitamins
   b. Eating leafy green vegetables
   c. Keeping a lid on blood sugar
   d. Taking a multivitamin
   e. Wearing sunglasses year-round

17. Which food has the kind of fat that’s likely to lower your LDL (“bad”) cholesterol?
   a. Apple pie
   b. Creamy Caesar salad dressing
   c. Gelato
   d. Thin-crust pizza
   e. Chocolate-covered raisins

18. Which is LEAST likely to keep your mind sharp as you age?
   a. Taking fish oil pills
   b. Keeping a lid on blood pressure
   c. Getting your hearing checked
   d. Keeping a lid on blood sugar
   e. Staying in touch with people

19. Which is MOST likely to help your immune system?
   a. Taking a probiotic
   b. Eating zinc-rich foods
   c. Taking vitamin E
   d. Taking a multivitamin
   e. Getting enough sleep

20. Which is MOST likely to help you sleep?
   a. Valerian
   b. L-theanine
   c. Magnesium
   d. Yoga
   e. Cognitive behavioral therapy

21. A serving of which food has less than 3 teaspoons of added sugar?
   a. Yasso Mint Chocolate Chip Frozen Greek Yogurt Bar
   b. Chobani Oat Vanilla Yogurt
   c. Honest T Peach Oo-La-Long Tea (16 oz.)
   d. Starbucks Almondmilk Caffe Latte (12 oz.)
   e. Kellogg’s Raisin Bran Crunch Cereal

22. Plastics with which recycling number are MOST likely to contain the endocrine disruptor BPA?
   a. No. 1
   b. No. 2
   c. No. 4
   d. No. 5
   e. No. 7

23. Which is LEAST likely to protect your bones?
   a. Weight-bearing exercise
   b. Getting enough calcium
   c. Taking high doses of vitamin D
   d. Eating fruits and vegetables
   e. Limiting refined grains

24. Which restaurant dish (with sides) is MOST likely to have less than 1,200 calories?
   a. General Tso’s chicken
   b. Chicken teriyaki
   c. Eggplant parmesan
   d. Chicken tikka masala
   e. Chicken fajitas

25. A serving of which food creates the MOST greenhouse gas emissions?
   a. Beef
   b. Nuts
   c. Beans
   d. Pork
   e. Milk

**ANSWERS**

1. c (Lose excess weight). Losing as little as 12 pounds can lower your risk, whether you cut carbs, fat, or other calories. Vitamin D doesn’t help. Full-fat dairy hasn’t been tested in clinical trials. (See Dec. 2018, p. 3; Jul./Aug. 2019, p. 7; Sept. 2019, p. 3.)

2. a (Eat breakfast). Not a breakfast eater? Don’t assume that you’ll overeat at lunch or gain weight. (See Jul./Aug. 2018, p. 6; Jul./Aug. 2019, p. 3.)

3. b (Reducing excess weight). Replacing saturated fat with unsaturated fat has lowered LDL cholesterol in many studies and liver and deep belly fat in a few studies. (See Jan./Feb. 2018, p. 3; Jul./Aug. 2018, p. 9; Nov. 2019, p. 7.)

4. d (Sudden irregular heartbeat). Atrial fibrillation increases the risk of a stroke, but it’s not a sign that you’re having a stroke. Don’t delay calling 911 if you have the other symptoms, or ones like face drooping, arm weakness, or slurred speech (stroke.org/en/about-stroke/stroke-symptoms). Time lost is brain lost. (See Sept. 2015, p. 3.)

5. e (Psyllium). Beans, fruits, vegetables, and whole grains that are rich in unprocessed fiber, especially bran, are your best bet. But of these five processed ingredients that count as “fiber” on food labels, only psyllium may help. (See Jun. 2020, p. 8.)

6. d (Using antiperspirants).

7. c (Exercise). It helps, according to the American College of Sports Medicine (see June 2020, p. 7; see May 2019, p. 3).


9. d (Physical activity). It helps, according to the Physical Activity Guidelines for Americans. In the best studies, vitamin D, glucosamine, and chondroitin didn’t help. In the best studies, vitamin D, glucosamine, and chondroitin didn’t help. In the best studies, vitamin D, glucosamine, and chondroitin didn’t help. (See Oct. 2018, p. 3)

10. c (Eating food delivered from a store). Producing a serving of beef soaks up more greenhouse gas emissions than making a dish with beans, and refi ned grains? (especially indoors). No infections have developed.

11. d (Prostate cancer). Need any more reasons to cut back on added sugars? (see Oct. 2015, p. 7.)

12. d (Prostate cancer). Need any more reasons to cut back on added sugars? (see Oct. 2015, p. 7.)

13. d (Using antiperspirants). That swamps chocolate. (See May 2019, p. 3; Jan./Feb. 2016, p. 10.)

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25. d (Using antiperspirants). That swamps chocolate. (See May 2019, p. 3; Jan./Feb. 2016, p. 10.)
Excess weight, high insulin levels, and liver and deep belly fat in a few can lower LDL cholesterol in many studies. (See Jul./Aug. 2018, p. 9; Nov. 2019, p. 7.)

3. (Reducing excess weight). Replacing fat with fiber, especially whole grains and vegetables, can reduce your risk. (See May 2020, p. 8.)

4. (Cutting back on sugars). Added sugars—sugars that you’re not pregnant—can cause a (Eat breakfast). Not a breakfast that has a high fat content or a (Prostate cancer). Need any more reasons to cut back on added sugars and refined grains? (See Nov. 2019, p. 3.)

5. Radiotherapy and physical therapy help curb arthritis pain. Surgery is no better than physical therapy and has more potential harms. In the best studies, vitamin D, glucosamine, and chondroitin didn’t help. (See Oct. 2017, p. 3.)

6. (Taking fish oil pills). In the best studies, the omega-3 fats in fish oil didn’t cut the risk of memory loss. (Neither did ginkgo, Prevagen, or vinpocetine.) (See Jan./Feb. 2020, p. 3.)

7. (Eating food delivered from a store or restaurant). You’re more likely to catch Covid-19 from other people (especially indoors). No infections have been traced to packages or food. (See May 2020, p. 8.)

8. (Prostate cancer). Need any more reasons to cut back on added sugars and refined grains? (See Nov. 2019, p. 3.)

9. (Exercise). Strength training and physical therapy help curb arthritis pain. Surgery is no better than physical therapy and has more potential harms. In the best studies, vitamin D, glucosamine, and chondroitin didn’t help. (See Oct. 2017, p. 3.)

10. (Leftovers that have been sitting on the table for more than 2 hours). “Sell by” and “best by” dates refer to quality, not safety. If meat, poultry, or seafood was thawed in the fridge, you can safely re-freeze it. (See Jan./Feb. 2020, p. 10.)

11. (Reduce medications if you have type 2 diabetes). Low-carb diets don’t lead to more weight loss than other calorie-cutting diets and are no better at warding off heart disease, diabetes, or cancer spread. If you take diabetes meds, check with your doctor before cutting carbs. (See Oct. 2018, p. 3.)

12. (Exercise). It helps, according to the Physical Activity Guidelines for Americans (health.gov/paguidelines). The supplements and omega-3s have largely struck out. (See May 2019, p. 3; Jan./Feb. 2016, p. 7; Jun. 2015, p. 3; Apr. 2015, p. 7.)

13. (Beef). Producing a serving of beef soaks up 464 gallons of water. That swamps chocolate (182 gal.), chicken (130 gal.), apples (30 gal.), and cheese (25 gal.). (See Oct. 2015, p. 7.)

14. (Taking vitamin D). Trials on vitamin D have come up empty. Everything else helps. (See Jan./Feb. 2018, p. 7; Mar. 2016, p. 9.)

15. (Magnesium). Most multivitamins don’t have enough magnesium to matter. But many people don’t get enough vitamin D from food (or the sun). And anyone over 50 should get some B-12 from a supplement or fortified food. Folic acid can cut the risk of birth defects like spina bifida that can occur before a woman knows that she is pregnant. And many premenopausal women don’t get enough iron. (See Mar. 2020, p. 3.)

16. (Taking antioxidant vitamins). In large trials, antioxidant vitamins C and E didn’t prevent cataracts. But in the Physicians’ Health Study I, men who took Centrum Silver for 11 years had a 9 percent lower risk. People who eat more leafy greens also have a lower risk. Keeping a lid on blood sugar can prevent diabetes, which boosts cataract risk. Sunscreens with UVB and UVB protection shield the eyes. (See May 2016, p. 9.)

17. (Creamy Caesar salad dressing). It looks creamy, but it’s mostly unsaturated oil, which can lower LDL. Most chocolate coatings are saturated fat (so they don’t melt in your hand). Gelato, pie crust, and cheese pizza aren’t low in sat fat. (See Nov. 2017, p. 3.)

18. (Taking fish oil pills). In the best studies, the omega-3 fats in fish oil didn’t cut the risk of memory loss. (Neither did ginkgo, Prevagen, or vinpocetine.) (See Jan./Feb. 2020, p. 3.)

19. (Getting enough sleep). Lack of sleep can make you more likely to catch a cold. Whether it matters for Covid-19 is unknown. (See Dec. 2019, p. 8; Jun. 2020, p. 3.)

20. (Cognitive behavioral therapy). It’s the gold standard for treating insomnia. The others aren’t backed by solid evidence. (See Mar. 2018, p. 9.)

21. (Yasso Mint Chocolate Chip Frozen Greek Yogurt Bar). It’s got only 2 teaspoons (9 grams) of added sugars. The others have at least 3 teaspoons—a quarter of a day’s worth. Check Nutrition Facts labels for added sugars! (See Sept. 2017, p. 10.)

22. (No. 7). No. 7 is often polycarbonate, which contains BPA. It’s also worth avoiding No. 3 because it may contain phthalates and No. 6 because it contains styrene, a probable carcinogen. (See Nov. 2017, p. 8.)

23. (Taking high doses of vitamin D). High doses of D (4,000 IU a day or more) may raise the risk of bone loss and falls. Shoot for the RDA (600 IU a day up to age 70 and 800 IU if you’re over 70). (See Jul./Aug. 2017, p. 3; Jul./Aug. 2020, p. 3.)

24. (Chicken teriyaki). In a 2013 study of non-chain restaurants, main dishes (with sides) averaged 1,300 calories. That included chicken teriyaki (1,150 cal.), chicken fajitas (1,320 cal.), chicken tikka masala (1,430 cal.), eggplant parmesan (1,950 cal.), and General Tso’s chicken (1,960 cal.). (See Jan./Feb. 2016, p. 8.)

25. (Beef). It’s far worse than any other food (except lamb). The others, from most to least emitter: pork, (dairy) milk, beans, and nuts. (See Apr. 2020, p. 3.)

How’d you do?

We told you it wouldn’t be a slam dunk.

21–25 Hubba-hubba! You looking for a job?

14–20 Well done! Can we give the zero-to-fivers your email?

6–13 Don’t fret. If you had aced the quiz, you’d have learned less.

0–5 Oops. Using Nutrition Action to line the kitty box?
Don’t Just Sit There...

Spending nearly all day seated? That could raise your risk of dying of cancer. Researchers had roughly 8,000 people aged 45 or older wear an accelerometer to measure their movement during their waking hours for a week.

Five years later, those who had been sedentary for at least 12 out of 16 of their waking hours had about a 50 percent higher risk of dying of cancer than those who had been sedentary for less than 12 hours (after accounting for other risk factors). Replacing a half hour of sedentary time every day with a half hour of moderate or vigorous exercise was linked to a 31 percent lower risk of dying of cancer over the next five years.

What to do: Step away from the couch, desk, or car and move. Better yet, go for a brisk walk or bike ride or a game of tennis, golf, or whatever.


Eggspectations & Appetite

In fact, they were served a 460-calorie omelet made with 3 eggs and 1½ oz. of cheese on both days.

Participants ate about 70 more calories of an all-you-can-eat pasta lunch on the “small-omelet” day than on the “large-omelet” day.

What to do: Keep in mind that how much you eat may depend on more than hunger.


Insulin & Memory

Insulin delivered via a nasal spray doesn’t preserve memory, despite promising early results (see Jan./Feb. 2014, p. 3).

Scientists gave either a daily insulin or placebo spray to 240 people with mild cognitive impairment or Alzheimer’s disease. After a year, memory tests and Alzheimer’s biomarkers were no different between the two groups.

What to do: Don’t expect insulin to protect your memory.


Lifestylestones?

A healthy lifestyle may prevent gallstones. Scientists followed roughly 100,000 people for up to 26 years. Women with the healthiest lifestyles had a 74 percent—and men had an 83 percent—lower risk of gallstones than those who had the least healthy lifestyles.

Lifestyle factors linked to a lower risk were a healthy weight (which had the biggest impact), coffee (at least 16 oz. a day), moderate alcohol intake, exercise, never smoking, and a high score on the Alternate Healthy Eating Index. The index adds points for vegetables, fruits, whole grains, nuts, beans, oils, and seafood and subtracts points for sugary drinks, juice, salt, and red or processed meat.

What to do: Aim for a healthy lifestyle. Though this study can’t prove cause and effect, a similar lifestyle score has been linked to living longer without cancer, heart disease, and type 2 diabetes (see May 2020, p. 3).

By Caitlin Dow

We all got the exercise-is-good-for-you memo. But when it comes to which exercise does what, how to do it, and how to avoid soreness that keeps you from doing it again, questions abound. Here are some answers.

In fact, stretching has a payoff if it’s done right. “If you stretch a muscle for less than 60 seconds, you’re not going to have issues,” says Behm. “And it may decrease the chance of acute injuries like muscle strains without impairing your performance.” His advice:

- **Warm-up.** “Do five minutes or so of aerobic activity like cycling or brisk walking to warm up the body.”
- **Static stretching.** “Hold each stretch for no more than a minute total.”
- **Dynamic stretching.** “You could kick each leg back and forth, do big arm circles, that kind of thing.”
- **Specific movements.** “Do a few minutes of the movements specific to the sport, like hitting a tennis ball a few times, before you start your match.”

It’s worth stretching...if you do it right.

Lift weights while losing weight?

When you lose weight, you may also lose bone. And that can spell trouble, especially for older adults, whose bones become more fragile with age.

Solution: “Exercise can minimize weight-loss-induced bone loss,” says Dennis Villareal, a physician at the Michael E. DeBakey Veterans Affairs Medical Center in Houston.

Villareal and his colleagues randomly assigned 107 older adults with obesity to one of four groups:

- a diet group that cut 500 to 750 calories a day,
- an exercise group that did balance, flexibility, aerobic, and strength training three times a week,
- a diet + exercise group that did both, or
- a control group that didn’t change their diet or exercise.

After a year, both groups of dieters had lost close to 10 percent of their
starting weight. (The exercise-only and control groups didn’t lose any weight.) Compared to the control group, hip bone density dropped only in the diet group. It increased in those who did exercise alone and decreased less in the diet-plus-exercise group.

Which type of exercise best preserves bone?

In a new study, Villareal randomly assigned 160 older adults with obesity to one of four groups. The control group made no changes. The other three groups cut 500 to 750 calories a day and did one of the following three times a week for six months:

- **aerobic exercise** like treadmill walking, stair climbing, or cycling,
- **strength training** using weight-lifting machines, or
- **aerobic + strength training**.

“All three of the groups who dieted and exercised lost about 9 percent of their starting weight,” says Villareal.

“But aerobic exercise didn’t prevent weight-loss-induced bone loss, whereas strength training alone or combined with aerobic exercise was equally effective at diminishing bone loss.” Ditto for lessening muscle loss.

**The Bottom Line:** “When you diet, do exercise, with an emphasis on strength training,” says Villareal.

**Work up an appetite?**

“There’s a common misconception that exercise is going to make you eat more at the next meal,” says David Broom, professor in the Centre for Sport, Exercise and Life Sciences at Coventry University in England.

“But in the typical person, exercise suppresses appetite for about an hour or so. And at the next meal, people tend to eat the same amount compared to days when they don’t exercise.”

Of course, there are exceptions. “We pooled the data from 17 of our studies and found that some people’s appetite will not change or may even increase after they exercise,” notes Broom.

“But only vigorous exercise seems to matter. In one study, 14 young men walked briskly for an hour or rested quietly on separate days.

“We saw no difference in appetite, the hunger hormone ghrelin, or calorie intake,” says Broom.

“In our studies, you have to get above about 60 percent of your maximal oxygen uptake for exercise to suppress appetite. That means a fast jog or cycling like you’re in a hurry to get somewhere.”

But those studies don’t tell us what happens to appetite—and food intake—in response to exercise over the long run. The answer isn’t clear.

In one study, 35 overweight people or people with obesity exercised hard enough to burn 500 calories a day, five days a week, for 12 weeks.

On average, the group lost about eight pounds, right on par with the researchers’ predictions.

“But when you look at the range, someone lost 32 pounds and someone else gained four pounds,” Broom notes. “There was tremendous variation in weight loss.”

As for food intake, on one test day near the end of the study, people who had lost the least weight ate roughly 270 calories more—while those who had lost the most weight ate 130 calories less—than they did at the start of the study.

“When we get those little tears, our body treats them like an injury and sends in the immune system to repair them,” says Broom. “That leads to inflammation—and soreness—that can last for two or three days, sometimes more.”

Contrary to popular belief, stretching before or after exercise won’t prevent muscle soreness.

“If you’re already sore and you stretch, the soreness might go away while you’re stretching, and that can feel nice,” says Broom. But don’t expect lasting relief.

What might help?

“Buy a foam roller,” Behm suggests. You can use the dense foam cylinder to massage your muscles.

“Our studies show that rolling on foam
after exercise reduces soreness."\(^{11,12}\)

In one study, 20 young men did 10 sets of 10 squats—enough to cause micro tears that should later hurt. Half used a foam roller to massage their thigh and glute muscles for 20 minutes immediately after squatting and again 24 and 48 hours later. The foam-rollers reported less soreness than those who did nothing.\(^{12}\)

Less pain wasn’t the only upside. “Intense exercise that results in micro tears impairs range of motion, speed, and force, but foam rolling mitigates all those impairments,” says Behm.

And that may enable you to get back to your workout more quickly.

The Bottom Line: Try foam rolling to reduce muscle soreness.

Back me up?

“People often think of low-back pain as not that serious,” says Roger Chou, director of the Pacific Northwest Evidence-based Practice Center at Oregon Health & Science University. “Maybe it hurts, but it’s more of a nuisance than anything.”

But low-back pain has an enormous impact, he notes.

“Globally, it’s one of the leading causes of disability. And in the United States, it’s one of the main reasons why people go to the doctor.”\(^{14,15}\)

What causes back pain?

“That’s not a simple question to answer,” says Chou. “Some people have acute back pain maybe due to lifting something too heavy. But often, there’s no specific cause.”

Fortunately, “most people will be back to normal pretty quickly,” adds Chou. But for others, the pain persists.

“Some chronic back pain may be due to arthritis, or maybe the discs between the vertebrae have started to wear out,” says Chou.

But it’s not just what you see on an X-ray. “Mental health, job dissatisfaction, and how people cope with their pain are all linked to the severity and persistence of chronic low-back pain,” he notes.

Compounding the problem: pain can cause people to curtail their movement. “Some people are very afraid of their pain,” says Chou. “They think it means something serious, so they avoid physical activity.”

But movement may help.

“We don’t tell people to lie in bed for three to five days like we used to,” says Chou. “We urge people to try to do their regular activities, to the extent possible, even from the beginning.”

Pain medication is rarely the answer for chronic low-back pain. “Drugs are not going to reduce your pain by much more—or maybe any more—than exercise,” says Chou. “And medications, especially opioids, have side effects.”\(^{16}\)

What can best restore your lifestyle and help ease your pain? “Exercise,” says Chou. “And cognitive behavioral therapy, which helps people cope with pain.”

Are you better off with strength training, core stability, aerobic exercise, yoga, or something else?

No one type of exercise stands out. “The average benefits are all in the same ballpark,” says Chou.\(^{12}\) “That tells me that simply moving is more important than exactly what you’re doing.”

“Many physical therapy programs incorporate a variety of types of exercise and cognitive behavioral principles,” he adds. “They get people to set goals and work through the fear and catastrophizing that may prevent them from getting better. That’s ideal.”

The bad news: exercise only leads to modest relief for chronic low-back pain.

“Chronic pain is really hard to treat,” notes Chou. “On average, we’re talking about an improvement of a point or so on a 10-point pain scale. Some people may improve by more, but it’s not a huge benefit for pain.”

On average, function also improves by only about that much.\(^{12}\)

“But we do see some people who have their function almost completely restored, even if they still have some underlying pain,” says Chou.

And just a point or two can make a difference. “We want to get people off the couch, moving, engaging with friends and family, and living their lives again.”

The Bottom Line: “If you have chronic low-back pain, find an exercise that you like,” says Chou. “It’s an opportunity to make some lifestyle changes that are not just good for your back but for all areas of your life.”\(^{\star}\)
WHO KNEW?
Foods with more—or less—than you thought

BY LINDSAY MOYER

Many people don’t get enough fiber, vitamin D, calcium, or potassium. Others are seeking more protein (whether they need it or not). But we may be looking in the wrong places. Here’s a handful of foods with less (or more) of those nutrients than you might expect. Turn the page to see foods with surprisingly high (or low) levels of nutrients we overdo.

The information for this article was compiled by Kaamilah Mitchell.

Vitamin D

LESS THAN YOU THOUGHT

Egg yolks. Vitamin D is a “reason to keep the yolk in your next omelet,” says eatingwell.com. But one large egg has just 5 percent of a day’s worth of D. That’s a drop in the bucket.

Cheese. Most dairy milk that’s sold in supermarkets has added vitamin D (12 to 20 percent of a day’s worth per cup). But most cheeses are made with unfortified milk.

Yogurt (maybe). Many big brands (like Stonyfield, Yoplait, and Dannon) add vitamin D to all or most of their yogurts. Others—like Chobani, Wallaby, and Brown Cow—don’t.

MORE THAN YOU THOUGHT

Few foods are naturally rich in vitamin D, which we get largely from sunlight, supplements, and fortified foods. Exceptions:

Salmon. Just 3 oz. of salmon can supply half a day’s vitamin D or more. Many other fish have at least 10 percent of a day’s worth. That includes tilapia, barramundi, rainbow trout, rockfish, and herring. (Chicken, turkey, beef, and pork have little or none.)

Sunny mushrooms. Plants have next to no vitamin D. But mushrooms (they’re fungi) make their own when they’re exposed to ultraviolet light...just like we do! The problem: Most mushrooms are grown in the dark. So some growers now treat theirs with enough UV light to add 50 to 100 percent of a day’s vitamin D to every 3 oz. serving.

How to tell if your shrooms got some sun? Look for a vitamin D claim or check the Nutrition Facts label. Of course, pricey foraged mushrooms like morels or chanterelles get a vitamin D boost—roughly 20 percent of a day’s worth per serving—because they grow outdoors.

Potassium

LESS THAN YOU THOUGHT

Coconut milk. “Nutrients & electrolytes,” says Vita Coco Coconut Water. And each cup delivers 470 milligrams of potassium, a respectable 10 percent of a day’s worth. Coconut water is the juice inside a young coconut. Coconut milk is a different story. So Delicious Organic Unsweetened, for example, has 0 percent.

Cranberries. Most raw fruits and vegetables are a surefire way to rack up potassium without many calories. But a quarter cup of dried cranberries has virtually no potassium...and most brands contain about half a day’s added sugar. Ditto for a cup of cranberry juice cocktail.

MORE THAN YOU THOUGHT

Beans. Just a half cup of most beans or lentils has about as much potassium as a small banana (360 milligrams). Beans also have fiber, protein, magnesium, folate, and iron. Nice!

Winter squash. Squashes like acorn (450 mg of potassium per half cup), Hubbard (370 mg), and butternut (290 mg) are in banana territory. Tip: Sweet potatoes (480 mg of potassium per half cup) also have twice the fiber of white potatoes, plus a wallop of beta carotene.

Portobello mushrooms. A cup of portobellos has 530 mg of potassium and will set you back just 35 calories. Wow!

DAILY VALUES

<table>
<thead>
<tr>
<th>Vitamin D: 800 IU (20 mcg)</th>
<th>Protein: 50 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium: 4,700 mg</td>
<td>Added Sugar: 50 g</td>
</tr>
<tr>
<td>Calcium: 1,300 mg</td>
<td>Saturated Fat: 20 g</td>
</tr>
<tr>
<td>Fiber: 28 g</td>
<td>Sodium: 2,300 mg</td>
</tr>
</tbody>
</table>
Portobello mushrooms.

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potassium per half cup),
Squash-
iron. Nice!
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inside a young coconut. Coconut water is the juice
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Calcium
LESS THAN YOU THOUGHT
Greek yogurt. When ordi-
ary yogurt gets strained,
it gains protein but loses
some calcium (which goes
out with the whey). A typical
5 oz. flavored greek yogurt has
10 percent of a day’s calcium,
versus 15 percent for a flavored
not-greek.
Cottage cheese. Like greek yogurt, it’s strained. So a half
cup has just 4 to 8 percent of a day’s calcium. A few brands
add calcium. Horizon Organic, for example, has 15 percent.
Cream cheese. Unlike other cheeses, it has no more than
2 percent of a day’s calcium and a paltry 2 grams of protein
in two tablespoons. It’s more like cream than cheese.
MORE THAN YOU THOUGHT
Tofu (sometimes). Nasoya
Organic Extra Firm Tofu has
10 percent of a day’s calcium
in 3 oz. Hodo Organic Firm
Tofu doubles that. Both add
calcium sulfate to firm up their
soy milk. Other firming agents
mean less calcium.
Canned salmon (with bones).
Salmon sold in tall cans, not
flat tuna-sized ones, comes
with small bones. The surprise:
they’re soft enough to eat (honest!) The payoff: 15 to 20 per-
cent of a day’s calcium per 3 oz. serving. Mash the bones
into the fish with a fork, then make salmon salad or patties.
MORE THAN YOU THOUGHT
Lentil pasta. A cup of white pasta has
7 grams of protein. Whole wheat has
8 grams. But pasta made from red lentil
flour has a whopping 12 to 15 grams. Try
Barilla (13 grams) or Tolerant (14 grams).
Pea milk. A cup of most plant
milks has 0 to 3 grams of protein. Exceptions:
soymilk (6 to 8 grams) and milks with
added pea protein like Ripple (8 grams)
and Silk Protein (10 grams).
Pumpkin seeds. Most nuts and seeds
range from 4 grams of protein per ounce
(hazelnuts, walnuts, Brazil nuts) to
6 grams (almonds, pistachios, sunflower seeds). But peanuts
hit 7 grams, and pumpkin seeds pump it up to 8 or 9 grams.
Edamame. A half cup of most beans offers a perfectly fine
6 or 7 grams of protein. Edamame does a bit better (9 grams).

**MORE THAN YOU THOUGHT**

**Frozen fruit bars.** “Made with real fruit,” say Outshine Strawberry Fruit Bars. Yes, strawberries are the top ingredient. But each bar has 14 grams of total sugar, and 12 of the 14 (3 teaspoons) come from added cane sugar. That’s a quarter of a day’s max.

**Tonic water.** Canada Dry Tonic Water tastes bitter, not sweet. But, like most tonic waters, it’s got nearly as much added sugar as Coca-Cola. Top off your gin & tonic with 7 oz. of tonic water, and you add 5 teaspoons of sugar. Tip: A 7 oz. bottle of Fever-Tree Refreshingly Light tonic water slashes the added sugar to only 1½ tsp. (6 grams) without any low-calorie sweeteners.

**Pad Thai.** Most restaurant chains disclose numbers for only total—not added—sugar. But judging by many supermarket pad Thai sauces and entrees, at least three-quarters of the dish’s total sugar may be added. In the hefty portions at P.F. Chang’s, Pei Wei, and Noodles & Company, the pad Thai has roughly 40 to 50 grams (10 to 12 teaspoons) of total sugar, along with 1,000 to 1,500 calories. How much of that total is added sugar? Our guess: plenty.

**Nutella.** The so-called “hazelnut spread” is more like chocolate frosting than nut butter. Two tablespoons have more palm oil and added sugar (19 grams, or 4½ teaspoons) than nuts.

**LESS THAN YOU THOUGHT**

**Peanut butter.** Two tablespoons of regular Jif or Peter Pan have just 2 grams (½ teaspoon) of added sugar—4 percent of a day’s max. Skippy has 3 grams.

**Pasta sauce.** “You won’t believe how much sugar is in these supermarket pasta sauces,” says thedailymeal.com. “Your tomato sauce shouldn’t taste like dessert.” But the 4 to 7 grams of sugar in a half cup of most marineras is naturally occurring (from slow-cooked tomatoes). Plenty of great-tasting sauces skip the added sugar. But even marineras that add sugar typically only tack on another gram or two. You call that dessert?

**MORE THAN YOU THOUGHT**

**Saturated Fat**

**80 percent “lean” beef.** Why do beef labels list “% lean” along with “% fat”? Because it sounds good. But a 3 oz. cooked patty of 80 percent lean beef delivers roughly 6 grams of saturated fat—30 percent of a day’s limit. That’s not “lean.” It’s McDonald’s Quarter Pounder territory.

**Stick margarine.** Land O Lakes margarine sticks say “80% vegetable oil.” But that oil is mostly palm and palm kernel. That’s why you get 5 grams of saturated fat per tablespoon—not much better than butter’s 7 grams. Spreads sold in tubs, on the other hand, need less palm oil to stay solid. Many have just 1 to 3 grams of sat fat.

**“Yogurt” nuts or fruit.** The coatings have more palm kernel oil (and sugar) than yogurt powder. That’s why two tablespoons of Ocean Spray Greek Yogurt Cranberry Bites, for example, deliver nearly a quarter of a day’s sat fat (4½ grams).

**LESS THAN YOU THOUGHT**


**Sodium**

**Poultry with solution.** Target’s Good & Gather frozen raw “all natural” chicken breasts have 300 mg of sodium in 4 oz. But only 50 of those milligrams are naturally occurring. What’s up? The chicken “contains up to 15% solution of water & salt.” Translation: Chicken (or turkey) that looks plain may be pumped with saltwater.

**Shrimp or scallops with solution.** Four ounces of salt-soaked raw scallops may have double the usual 180 mg of sodium. Salty shrimp often has double or triple the usual 140 mg. And both can taste rubbery and be harder to sear. At the seafood counter, ask for “unteated” shrimp or “dry-pack” scallops. In the freezer aisle, avoid ingredients like sodium tripolyphosphate, not just salt.

**LESS THAN YOU THOUGHT**

**Salted nuts.** Don’t like snacking on unsalted nuts? Don’t sweat it. Nuts don’t need much salt to taste salty, since it’s sprinkled on top. Take Blue Diamond roasted salted almonds. An ounce has just 4 percent of a day’s sodium (85 mg). And their “lightly salted” almonds have just half that.

**Fresh mozzarella.** An ounce of most cheeses (like cheddar, provolone, or shredded mozzarella) has 150 to 250 mg of sodium. But fresh mozzarella—often sold in tubs of water—has just 80 to 100 mg. **Swiss cheese** is even lower (40 to 60 mg).
Roasting luxuriously ripe late-summer tomatoes before puréeing them yields a rich, tangy salsa that can double as a dynamite taco topping or sandwich spread.

Beans & Rice with Roasted Cherry Tomato Salsa

1 pint cherry tomatoes, halved
1 red bell pepper, seeded and chopped
1 jalapeño or serrano pepper, seeded and chopped (optional)
2 Tbs. + 1 Tbs. extra-virgin olive oil
¼ tsp. + ¼ tsp. kosher salt
1 clove garlic, sliced
a pinch of dried oregano
1 cup no-salt-added black beans with their liquid
1 cup cooked brown rice
½ avocado, sliced
2 cups shredded romaine

1. Preheat the oven to 425°F. On a rimmed baking pan, toss the tomatoes, bell pepper, and jalapeño (if using) with 2 Tbs. oil. Season with ¼ tsp. salt. Roast until tender and charred in spots, 15–20 minutes. Transfer to a food processor and purée into a salsa.

2. In a medium pan, heat the remaining 1 Tbs. oil over medium heat until shimmering. Sauté the garlic and oregano until fragrant, about 1 minute. Add the black beans with their liquid and bring to a simmer. Season with the remaining ¼ tsp. salt.

3. Divide the beans and rice into 2 bowls. Top with the salsa, avocado, and romaine.

PER SERVING (2 cups): calories 510 | total fat 28 g | sat fat 4 g | carbs 56 g | fiber 14 g | total sugar 7 g | added sugar 0 g | protein 13 g | sodium 510 mg

For more tomato recipes Go to nutritionaction.com/tomatoes2 for Roasted Tomatoes, Tempeh, & Broccoli and Roasted Tomatoes & Fennel on Beans & Greens

For cooking advice Write to Chef Kate at healthycook@cspinet.org
Get It To Go?

When the coronavirus hit, in-restaurant dining evaporated. And many of us are still leaning on takeout to keep our distance. Here’s a quick guide to placing healthier orders.

BY LINDSAY MOYER

Takeout 101

■ Stick to one starch (or none). The default is often double refined carbs. Think burger buns & fries, rice & naan, pasta & bread, or tortillas & chips or rice. Solution: Go with your favorite...and try to make it a whole grain.

■ Replace red meat. Get beans, tofu, poultry, or seafood.

■ Pump up the veggies. Most dishes could use extras from the menu’s sides...or from your fridge. Sauté some broccoli, spinach, etc., while you wait for the delivery.

■ Mind the sodium. Nearly all restaurant food is too salty. More veggies bump up the potassium (to help counter sodium’s blood-pressure boost) and stretch your portions.

■ Save half for later. When researchers analyzed takeout from non-chain restaurants in Boston, the average entrée with sides had roughly 1,300 calories. It wasn’t just burgers & fries, but popular dishes from Mexican, Chinese, Italian, Thai, Indian, Greek, and other restaurants.

■ Watch out for delivery-app fees. Take UberEats. They display a “delivery fee” when you choose a restaurant but also tack on up to a 15 percent “service fee” when you check out. (And that doesn’t include a tip for the driver.) Uber also charges the restaurant fees. So call or check the restaurant’s website first, to see if it now delivers.

Thai

■ Garden rolls beat spring rolls. Most entrées have enough calories to let you skip the appetizer, but if you get one, go unfried with salads, lettuce wraps, or garden rolls.

■ Head for the veggie stir-fries. Try pad pak (mixed vegetables), pad king (ginger, mushrooms, onions), or pad prik king (green beans) with sautéed chicken, seafood, or tofu. They can shave hundreds of calories off the pile of white-rice noodles you get in pad see ew, pad Thai, or pad kee mao (drunken noodles).

■ Creamy curries are swimming in saturated fat. Blame their coconut milk. Just half a cup has 15 to 20 grams of sat fat (a full day’s worth), so that red, green, yellow, panang, or massaman curry could rack up more than a day’s supply.

What’s a curry fan to do? You can sidestep some sat fat if you spoon the vegetables and meat over your rice and leave most of the sauce behind. Like it hot? Spicy, brothy kaeng pa (aka jungle curry) is free of coconut milk.

Middle Eastern or Greek

■ Dip wisely. Getting a starter or side of hummus, baba ganoush, or tzatziki? Scoop it up with veggies, not pita, to save hundreds of calories. Goodbye, white flour.

■ Go grilled. Best bets: chicken, salmon, or shrimp kebabs, or chicken souvlaki. Second best: falafel (more calories, less protein). All beat fatty lamb or beef gyros.

■ Be choosy with salads. Cucumber-tomato salads don’t have the salty feta, olives, or pepperoncini of Greek salads.

■ Look for whole grains. Whole wheat pitas can be hard to come by. On the upside, tabbouleh (bulgur, tomatoes, herbs) offers whole grains that a side of rice (typically white) doesn’t.
**Pizza**

- **Flatten out.** Order a thin or flatbread crust instead of deep-dish, pan, or hand-tossed to save on refined carbs (and calories) per slice. Whole-grain crust available? Try it.
- **Bypass pepperoni, sausage, etc.** That’s a no-brainer.
- **Halve a personal pie.** At customizable spots like Pieology, MOD, and Blaze Pizza, typical pizzas have 800 to 1,000 calories because the crust alone has 350 to 600. Cauliflower crusts may be no lower (thanks to rice flour and cheese).
- **Stick to one type of cheese.** It takes about 200 calories’ worth of mozzarella to cover an 11-inch crust.
- **Salad, anyone?** Round out your plate with a cheeseless salad to fill up. Toss leftover pizza slices in the freezer.

**Salads or Bowls**

- **Start with darker greens.** Spinach and kale pack more nutrients per serving than romaine or iceberg.
- **Get mostly veggies (or fruit).** They lower the calories per bite. Bumping up the cals: grains, cheese, dressing, avocado.
- **Lose the refined flour.** Get some crunch from nuts or seeds rather than fried wontons, pita crisps, or croutons.
- **Get the dressing on the side.** It’s good fat but probably more tablespoons than you need. Try half to start.
- **Hold back on salty toppings like olives, cheese, and pickled veggies.** Pick just one to shave sodium. Avocado beats cheese because it’s sodium-free and healthy-fat-rich.
- **Split your “grain bowl” or “warm bowl.”** Half grains, half greens saves room for toppings. Some chains will swap grains for lentils (Cava) or cauliflower “rice” (Sweetgreen).

**Chinese**

- **Veg out.** Chinese takeout menus are flush with items that feature more vegetables than meat (or noodles). Bravo! We’re talking dishes like Szechuan string beans, Buddha’s delight, moo goo gai pan, home style tofu, or chicken with broccoli. Without rice, expect 500 to 900 calories, rather than the usual 1,000 to 1,500 in other dishes on the menu.
- **Leave some rice behind (or save it for later).** Every cup adds 200 calories. A typical takeout carton holds two cups.
- **Play sodium defense.** Use a fork or chopsticks to transfer your takeout to a plate so you leave some sauce (and its sodium) behind. Or mix in a side of steamed broccoli, snow peas, or mixed veg to stretch the sauce into more servings.
- **Don’t coat your protein.** Order chicken, tofu, or seafood stir-fried rather than breaded, battered, or deep-fried.

**Mexican**

- **Opt for a la carte.** Instead of a starch-heavy combo meal or fajita platter, order a few chicken, bean, or fish tacos plus a side salad. Like crispy (fried) taco shells? Good news: they have slightly fewer calories than flour tortillas.
- **Choose cheese or sour cream (or neither).** Every quarter cup of cheese or sour cream adds about 100 calories and at least a quarter of a day’s saturated fat. Guac beats sour cream because it slashes the sat fat. Salsa or pico de gallo cuts calories and can double as salad dressing.
- **Skip the burrito tortilla at fast-casual spots like Chipotle.** It’s roughly 300 calories, largely from refined flour. A bowl has 200 calories of rice. A salad has 15 calories of lettuce.
Can’t find a grab-and-go breakfast that’s not virtually all carbs? Kashi GO Protein Waffles to the rescue.

Companies are tossing protein into everything from chips to ice cream. That doesn’t turn junk food into health food, of course. But Kashi’s frozen waffles look good even before you get to protein. For starters, they’re 100 percent whole grain. Among other pluses, that means 10 percent of a day’s magnesium in a (two-waffle) serving.

And the added sugar is lower than most cold cereals. The Wild Blueberry has just 4 grams (1 teaspoon). The Cinnamon Brown Sugar and Vanilla Buttermilk have 6 grams (1½ teaspoons). That’s waffle-excellent.

Soy, whey, eggs, and hemp seeds boost the protein to 13 grams. (Kashi’s regular waffles have 3 grams.) All that for 220 to 230 calories and just a single gram of saturated fat.

Taste seals the deal. Syrup? You won’t need it. Try a schmear of nut butter, buttery spread, or yogurt if you like.

And slice up some fruit while you wait for your toaster to pop ‘em out. (The blueberry waffles have real blueberries, but they’re few and far between.)

No Kashi at your store? Frozen Kodiak Cakes Power Waffles are another 100 percent whole-grain find. You get 10 to 12 grams of protein per serving, and most have no more added sugar than Kashi.

Looks like it’s time to L’Eggo of your Eggo.

kashi.com—(877) 747-2467

“’We are excited to be introducing The Cheesecake Factory At Home—a line of delicious products that can be enjoyed at home,’” gushes the company’s website.

So exciting.

Why wait for an occasional—and possibly far-off—restaurant visit when you can indulge in “generous Cheesecake Factory portion sizes” each and every day?

Take the At Home Salted Caramel Delight. Who wouldn’t want a personal plastic tub of “creamy salted caramel pudding” (largely whole milk, cream, sugar, modified corn starch, salt, and natural and artificial flavors) plus “rich caramel sauce” (mostly corn syrup, water, sugar, sweetened condensed milk, modified corn starch, butter, milk solids, natural flavors, caramel color, sodium benzoate, and potassium sorbate)? If that isn’t “delightfully decadent,” what is?

Each tub has 290 calories, 7 grams of saturated fat (a third of a day’s worth), and 8 teaspoons of added sugar (two-thirds of a day’s max). That’s like eating three Snack Pack Vanilla Pudding cups.

The other At Home flavors—Chocolate Black-Out, Cake Batter Strawberry Royale, and Vanilla Fudge Duet—are in the same ballpark.

“The Cheesecake Factory is the fantastical food experience that’s absolutely certain to satisfy,” says the label. Satisfy the shareholders, maybe.

lakeviewfarms.com—(800) 755-9925

Cool Cucumber Salad

Whisk together 1 Tbs. rice vinegar, 1 Tbs. soy sauce, 1 tsp. grated ginger, 1 tsp. chile flakes, and ½ tsp. sugar. Toss with 2 cups cucumber, ¼ cup red onion, and 1 Tbs. toasted sesame seeds. Serves 4.