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Unscrambling the message on eggs

Advice about eating eggs has evolved over the years. Should you go easy on this popular protein source?

Over the years, eggs have taken a bit of a beating, starting in the late 1960s. That's when the American Heart Association advised people to cut back on cholesterol in their diets and to eat no more than three whole eggs a week.

Decades later, eggs got a break after studies suggested that for most people, an egg a day was A-OK for heart health. But a recent report cracked down on eggs once again, suggesting that we return to the yolk-rationed days of yore (see "No yolk: Eggs linked to slightly higher risk of heart disease").

"In those days, high-cholesterol foods were the prime suspect for increasing blood cholesterol. Eggs were singled out because they have quite a bit of cholesterol, and people ate them fairly often," says Dr. Teresa Fung, adjunct professor in the Department of Nutrition at the Harvard T.H. Chan School of Public Health. Back then, the evidence linking heart attacks and strokes to higher levels of LDL cholesterol in the blood was already pretty clear.

It's best to eat eggs sparingly and along with healthful foods—for example, as part of a salad rather than in a greasy breakfast sandwich.

The cholesterol connection

Since that time, the connection between heart disease and elevated blood cholesterol has gotten stronger. But our understanding of cholesterol metabolism has evolved. This whitish-yellow, waxy fat is so important for various body functions (making vitamin D and hormones, for instance) that your liver makes all you need to stay healthy.

If your liver makes too much cholesterol, it's usually the result of eating too much saturated fat, which raises blood levels of harmful LDL cholesterol far more than cholesterol-rich foods like eggs do. Meat and full-fat dairy products are the biggest sources of saturated fat, but baked and fried foods also provide a fair amount of saturated fat

continued on p. 7 ▸▸

No yolk: Eggs linked to a slightly higher risk of heart disease

A report in the March 19 *JAMA* re-examined the relationship between eggs and heart disease. Here's a summary of the findings:

- **Why:** To see if there is a link between dietary cholesterol (and eggs in particular) and heart disease or death from any cause.
- **Who:** Nearly 30,000 people from six separate studies, whose average age was 52 when the studies began.
- **How:** Researchers relied on a single dietary questionnaire from each person to assess egg and cholesterol intake. They then tracked participants' heart health for a median of 17.5 years.
- **Key findings:** Eating about three large eggs per week may raise a person's risk of heart disease by 6% and of dying from any cause by 8%. Every 300 milligrams of cholesterol added to the daily diet raised heart disease risk by 17% and dying from any cause by 18% during the study period.

INSIDE

FIVE THINGS TO DO THIS MONTH

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ASK THE DOCTOR

by **DEEPAK L. BHATT, M.D., M.P.H.,** *Editor in Chief*

Pacemaker concerns

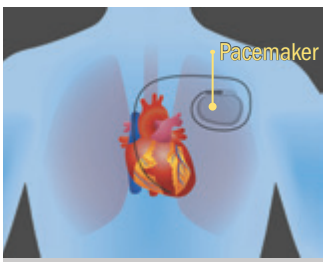
Q *I'm getting a pacemaker to treat a slow heart rate and am wondering how it might affect my daily life. For instance, can I still exercise? Is it safe to go through airport security scanners and to have medical imaging tests?*

A Pacemakers are small, implanted electronic devices that monitor your heart's rhythm and, when necessary, generate a painless electrical impulse that triggers a heartbeat. The latest models not only help people stay active later in life, they're also more compatible with today's technology.

Pacemakers have two basic working parts: the generator, which is implanted under the skin between the shoulder and chest, and one or more wires that stretch from the generator to the heart. These wires, called leads (pronounced leeds), are built to flex and move freely when the arm or shoulder nearest the pacemaker moves.

Like all mechanical devices, leads are subject to wear and tear, which is minimal during everyday movements. But using arm-strengthening machines, rowing, lifting weights, and other repetitive arm movements can cause a lead to bend and relax repeatedly at the same spot. Over time, this can damage the lead. Excessive extension of the arm nearest the pacemaker (such as doing overhead arm presses or certain yoga positions) poses a different problem: it can crush the lead between the collarbone and the first rib.

That said, it's fine to exercise your upper arms, but don't overdo it. Ask if a trainer can show you exercises that are suitable for someone with a pacemaker. If you do yoga, stick to gentle classes or chair yoga and tell the instructor you have a pacemaker. In general, moderate-intensity aerobic exercise such as brisk walking or cycling is fine for people with pacemakers. Check with your doctor if you have any concerns about how much and how intensely you can exercise.



Today's pacemakers are more compatible with technology.

As for airport security, be sure to have your pacemaker wallet ID card handy to show the screener. The millimeter wave advanced imaging technology used by the Transportation Security Administration (TSA) is safe for people with pacemakers; the high-frequency waves hardly penetrate the body. But people with pacemakers should not use walk-through metal detectors, according to the TSA. They will instead receive a pat-down screening.

Until about seven years ago, most pacemakers were not FDA-approved for MRI scans, which are used to diagnose certain diseases, especially those affecting the brain or spinal cord. But since 2000, the FDA has approved newer devices that are designed to be safe for MRI. These "MRI-conditional" devices still need to be checked and monitored before, during, and after the scan, however. The American Heart Association has more information about other devices that may interfere with pacemakers; see www.health.harvard.edu/pacemaker.

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Even light physical activity may help your heart

Mounting evidence suggests that all movement—even low-effort activity—counts for preventing cardiovascular disease as people age.

Light-intensity physical activity may help stave off heart disease in older adults.

When exercise experts talk about physical activity, they often focus on moderate and vigorous exercise—the types that get your heart pumping. But there's a growing appreciation that any type of activity that gets you up and off the couch also may benefit your heart.

One recent study found that doing light physical activity (preparing a meal or strolling through a park, for example) may lower the risk of cardiovascular disease among women in their early 60s and older (see "Low-intensity activity and heart disease risk"). The new study directly measured how much time people spent moving, using a device that tracked body movements and could assess light-intensity activity accurately, says study coauthor Dr. I-Min Lee, professor of medicine at Harvard Medical School.

Every little bit helps

"Historically, light physical activity hasn't been well reported. People can tell you fairly accurately if they typically go for a 30-minute walk after dinner. But if you ask them how much time they spend cleaning up after dinner or doing other light housework, it's more of a guesstimate," says Dr. Lee. These new results are another reminder to spend less time sitting and more time moving—even if it's gentle, slow movement. It's especially good news for people in their 70s and 80s who may not be able to walk briskly or do other moderate exercise, says Dr. Lee.

Sitting for long stretches of time has been linked to a higher risk of obesity, diabetes, and heart disease. And this sedentary behavior is becoming more common: a nationally representative federal survey found that in 2016, adults were sitting for nearly an hour more per day than they did in 2007. No matter what your age, replacing some of your sedentary time with light activity will likely help your heart and overall health, Dr. Lee says.

Light-intensity activities include chores people do often anyway, such as shopping, cooking, and doing light housework. But many hobbies, including playing music, sewing, or billiards also count as light activity, even if you're sitting down part or all of the time (see "What counts as light physical activity?"). Doing volunteer work such as helping in a soup kitchen, library, or school is another good way to add more movement to your routine.

What counts as light physical activity?

Light physical activity refers to movements that require 1.6 to 2.9 metabolic equivalents (METs). Exercise researchers often use METs as a standard way to gauge exertion. The measure is based on how much oxygen the average person uses during a particular activity: A single MET is the amount of energy you expend when you're sitting quietly. Activities rated at 2 METs use twice as much oxygen as sitting, 3 METs use three times as much oxygen, and so on.

The following are examples of light physical activity:

- light housework (such as making a bed, preparing food, cleaning up the kitchen, doing laundry)
- easy gardening (such as pulling weeds and planting flowers)
- hobbies (such as sewing, knitting, painting, or doing arts and crafts)
- playing a musical instrument
- playing cards
- casual walking (such as strolling around a museum or window-shopping at a mall)
- fishing (sitting down)
- playing darts
- billiards
- gentle or chair yoga.

Low-intensity activity and heart disease risk

A study published online March 15 by *JAMA Network Open* explored the role of light physical activity for preventing heart disease in older women. Here's a summary of the findings:

- **Who:** 5,861 women ages 63 to 99 without heart disease, with an average age of 78.5.
- **Why:** To see if—and how much—light physical activity could prevent heart attacks and similar events in older women.
- **How:** The women wore motion-detecting devices (accelerometers) on their hips for seven consecutive days. Researchers then tracked the women's health for up to nearly five years.
- **Key findings:** Women who spent the most hours in light activity (an average of 5.6 hours a day) were 42% less likely to have heart attack or die from heart disease compared with those who spent the least hours active (3.9 hours daily, on average). The more active women were also 22% less likely to develop new cardiovascular disease.

Hands-only CPR: A lifesaving technique within your reach

The simple version of cardiopulmonary resuscitation—pushing hard and fast on the chest—can double a person's odds of surviving cardiac arrest.

People of all ages can benefit from learning CPR, especially since most cardiac arrests occur in the home.

If someone suddenly collapses and stops breathing, the most likely cause is cardiac arrest. An electrical malfunction causes the heart to beat rapidly and chaotically—or to stop beating altogether. But if a bystander immediately begins chest compressions, which mimic the heart's pumping action, blood keeps flowing to the person's brain.

For more than a decade, guidelines have recommended this simpler version of cardiopulmonary resuscitation (CPR), which does not involve the mouth-to-mouth breathing used in standard CPR.

Now, a large Swedish study confirms that just like standard CPR, hands-only CPR doubles a person's odds of surviving at least 30 days after cardiac arrest. Researchers analyzed data from more than 30,000 cases of out-of-hospital cardiac arrest from 2000 to 2017, when hands-only CPR was gradually adopted into Sweden's CPR guidelines. Hands-only CPR use rose sixfold over the course of the study, published online April 1 in the journal *Circulation.*

Overcoming barriers

"We need to do a better job encouraging people to perform bystander CPR, and learning this simpler version seems to help," says Dr. Charles Pozner, associate professor of emergency medicine at Harvard-affiliated Brigham and Women's Hospital. Hands-only CPR eliminates worry about contracting a disease, one of the main reasons people say they'd hesitate to perform CPR.

People also say they're afraid of injuring the person by doing compressions incorrectly or on someone who doesn't actually require CPR. "It's true that even correctly done CPR can crack a person's ribs," says Dr. Pozner. But it's better to perform chest compressions on somebody who doesn't need them than to withhold compressions from someone who does, he adds.

Chain of survival

To be clear, CPR does not restart a person's heart, but it's a crucial step in the chain of survival. CPR keeps blood circulating until the person's heart can be shocked back into a normal rhythm with an automated external defibrillator (AED). Although emergency personnel will bring and use this device, bystanders must be trained to obtain and use a public-access AED if we want to have the most favorable outcomes, Dr. Pozner says. In urban and suburban areas of the United States, the average emergency response time is about seven to eight minutes. In rural areas, the average is nearly double that time. Many public areas—airports, malls, casinos, sports arenas, and office buildings—have AEDs. The devices use voice prompts, lights, and text messages to guide users through the required steps.

Remember these two steps

Another reason people hesitate to perform CPR is that they don't know how. The American Heart Association (AHA), American Red Cross, and other organizations offer classes in CPR and the use of a public-access defibrillator. In recent years, the AHA has simplified layperson CPR to just two steps. If you witness a cardiac arrest: (1) call 911 and (2) push hard and fast (but not too fast) on the center of the chest. For more detailed instructions, see "How to do hands-only CPR."

How to do hands-only CPR

If someone suddenly collapses, shake them and yell "Are you okay?" If you don't see what appears to be normal breathing, call 911. If you put your phone on speaker, the 911 operator can talk you through what to do, but here are the basic steps:

1. Place the person on the floor.
2. Kneel beside the person.
3. Place the heel of one hand on the center of the person's chest. Place the heel of the other hand on top of the first hand and lace your fingers together.
4. Position your body so that your shoulders are directly over your hands. Keeping your arms straight, push down with your arms and hands, using your body weight to compress the person's chest.
5. Push hard enough to press the chest down approximately two inches.
6. Continue pressing the chest at a rate of 100 to 120 compressions per minute. This rhythm corresponds to the beat of two (appropriately titled) songs popular in the late 1970s, "Stayin' Alive" and "I Will Survive." New York–Presbyterian Hospital created a curated list of more recent (as well as some older) songs with similar beats; see www.nyp.org/cpr.
7. Continue hands-only CPR until emergency medical personnel arrive. If possible, enlist another person to take over for you after a few minutes because doing the compressions can be tiring.

Replacing a failing aortic valve: No surgery needed?

A procedure called TAVR has an easier, shorter recovery and is becoming the go-to treatment for aortic stenosis. But surgery may still be a better choice for some people.

Illustration by Scott Leighton

Last April, Rolling Stones frontman Mick Jagger, 75, underwent a procedure that may soon replace surgery as the best way to treat a failing aortic valve. Called transcatheter aortic valve replacement (TAVR), the procedure delivers a new valve to the heart through a catheter that's passed through an artery in the upper leg (see illustration).

Most valve replacements are done to treat aortic stenosis, which usually results from an age-related buildup of calcium deposits on the valve. About 3% to 4% of people ages 75 and older have severe aortic stenosis, which can leave them dizzy, breathless, and tired.

The first TAVR procedures were done on people who were too old and frail to withstand open-heart surgery, the gold-standard treatment for aortic stenosis at the time. As a result, the 2011 FDA approval of TAVR was limited to those high-risk patients, although the approval was expanded to include people at intermediate risk from surgery within several years.

TAVR: More satisfaction?

But most people who need a new aortic valve are considered to be at low risk from surgery—for example, people in their mid-70s with no other major health problems. Now, two new studies of these low-risk patients suggest that the minimally invasive TAVR procedure has quite a few advantages over open-heart surgery.

"The data were really striking. Compared with people who had surgery, those who had TAVR had lower rates of stroke and were less likely to be rehospitalized or to die within a year," says Dr. Tsuyoshi Kaneko, a cardiac surgeon at Harvard-affiliated Brigham and Women's Hospital. The findings, published March 16 in *The New England Journal of Medicine*, mean that TAVR soon will be approved for most people with symptoms of severe aortic stenosis, he predicts.

Time is on your side

Traditional valve replacement surgery usually involves sawing through the sternum (breastbone), although some people qualify for less invasive surgery that requires only a small incision (about 2 to 3 inches long). But both types of surgery require the use of general anesthesia and a heart-lung bypass machine, followed by a week or so in the hospital and a lengthy recovery.

In contrast, more than half of TAVR procedures are done under conscious sedation, in which a person remains awake yet relaxed. People spend far less time in the operating room compared with surgery, and they're often able to go home the day after the procedure, says Dr. Kaneko. For those reasons, the total hospital costs are far lower than with surgery. As a result, TAVR is actually more cost-effective, despite the fact that the valves used in TAVR cost about $30,000, or about 10 times as much as valves used in surgery.

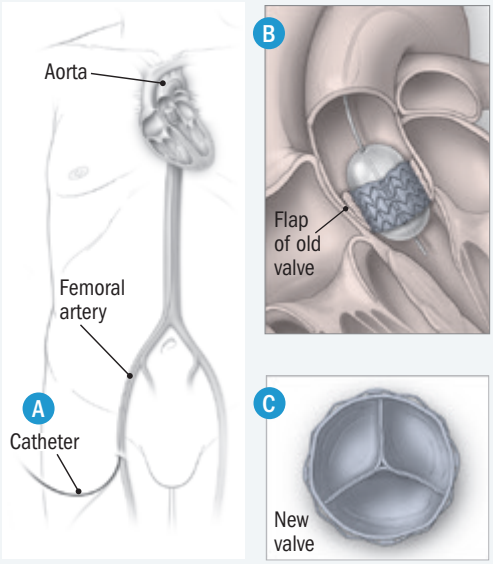
You can't always get what you want

Although most people would certainly prefer TAVR over surgery, it might not be appropriate for everyone, cautions Dr. Kaneko. One disadvantage seen with TAVR is a 10% or possibly higher risk of later needing a pacemaker (an implanted device that regulates the heart rate) compared with surgery. One of the heart's electrical systems sits just beneath the aortic valve. As the new valve deploys during TAVR, the frame of the device can push on that area. That can disrupt the heart's ability to maintain a regular rhythm. Surgery can avoid that area, thus posing less risk of this problem. So people who definitely don't want a pacemaker might consider surgery.

About 2% of people develop a leak around the valve following TAVR, a problem that seems to be more likely among people with a specific pattern of aortic calcification. They too may fare better with surgery. And some people aren't good candidates for TAVR because of the size or condition of their blood vessels.

In the near future, when TAVR becomes mainstream, the challenge for doctors will be identifying people who would do better with surgery, because everyone will want TAVR, Dr. Kaneko says. "But sometimes, the easy way isn't always the right way," he says.

Transcatheter aortic valve replacement (TAVR)



In a TAVR procedure, a replacement aortic valve made of pig or cow tissue is crimped onto a deflated balloon and placed at the tip of a thin, flexible tube (catheter). The doctor then inserts the catheter into a blood vessel at the top of the thigh (**A**) and threads it up to the opening between the heart and the aorta (**B**). Once it reaches the diseased aortic valve, the device expands and anchors to the old valve (**C**).

New insights about inflammation

Recent research reignited interest in inflammation, a major player in heart disease.

A buildup of cholesterol-rich plaque inside arteries—known as atherosclerosis—is the root cause of most heart attacks and strokes. Researchers have long recognized that chronic inflammation sparks this artery-damaging process (see "Understanding inflammation"). Now, they're zeroing in on better ways to tackle that aspect of the problem.

Addressing inflammation is vital. Even when people take steps to lower their risks for heart disease, such as reducing their cholesterol and blood pressure, they may still face life-threatening cardiovascular events.

"Even if you're on a statin and your LDL cholesterol is quite low, you're not home free. You may still have inflammatory risk," says Dr. Paul Ridker, director of the Center for Cardiovascular Disease Prevention at Harvard-affiliated Brigham and Women's Hospital. A blood test that detects C-reactive protein (CRP), a byproduct of inflammation, is just as good at predicting heart disease as an LDL measurement, he says.

The hsCRP test

Results from the test—known as a high-sensitivity CRP (hsCRP) test—are categorized into three levels: below 1 milligram of CRP per liter of blood (mg/L) is considered low risk, 1 to 3 mg/L means average risk, and above 3 mg/L signals high risk. So why don't most doctors do this test routinely? One reason is that cholesterol-lowering statins (the mainstay treatment for reducing heart disease risk) also lower CRP. That's also true for recommended lifestyle approaches, such as exercising, eating a diet that includes lots of plants, controlling your weight, and avoiding tobacco. As a result, knowing your CRP level wouldn't necessarily change your doctor's advice. That's directly related to the second reason: aside from statins, there aren't any currently available drugs proven to lower CRP and related cardiovascular problems.

But two large clinical trials led by Dr. Ridker have helped pave the way for some possible new treatments. A 2017 study found that a drug called canakinumab (Ilaris), which targets a specific molecule involved in inflammation known as interleukin-1, cut the risk of heart attacks, strokes, and other cardiovascular events by 17% in people with heart disease who were already taking standard heart drugs. The benefits were even better among people with the biggest drops in their CRP levels. However, in Dr. Ridker's trial, the drug led to far more striking reductions—up to 70% lower—in lung cancer among the participants. As a result, the drug's maker, Novartis, has changed priorities and is now focusing exclusively on that application, Dr. Ridker explains.

The second study, funded by federal grants, also focused on people with heart disease but tested an older drug called methotrexate (Trexall), which is used to treat rheumatoid arthritis and other inflammatory types of arthritis. But methotrexate did not lower inflammatory markers, CRP levels, or cardiovascular events. Despite that somewhat disheartening result, the finding provided important clues for future drug development, says Dr. Ridker. "Putting the two studies together, we have a road map for the future, because we now recognize the inflammation target for heart disease prevention is somewhere along the pathway from interleukin-1 to CRP," he says.

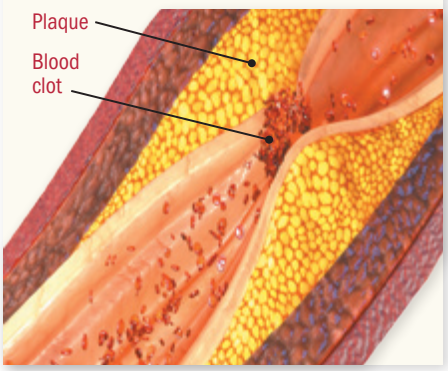
What you can do

In the meantime, if your LDL cholesterol level is in a good range (less than 70 mg/dL if you've had a heart attack or less than 100 mg/dL if you haven't) but you have other risk factors, including a family history of heart disease, ask your doctor whether an hsCRP test would better assess your risk. A high level should give you even more incentive to follow Dr. Ridker's advice: "Throw out your cigarettes, go to the gym, and eat more vegetables." You also might want to ask your physician about increasing your statin dose or switching to a more potent statin, he adds.

Understanding inflammation

Inflammation refers to the immune system's response to an injury or infection. For example, if you sprain your ankle or scrape your knee, your immune system unleashes an army of white blood cells to engulf and protect the area, causing visible redness and swelling. Infections such as the flu or pneumonia trigger a similar response to eliminate the harmful pathogens.

Chronic inflammation often begins with a similar cellular response but morphs into a lingering state that persists far longer. Toxins such as cigarette smoke or an excess of fat cells (especially around the belly area) can also trigger inflammation. So can the fatty plaque inside arteries, which causes inflammatory cells to cover and wall off the plaque from the flowing blood. But the plaque may rupture, mingle with blood, and form a clot. These clots are responsible for the majority of heart attacks and most strokes.



Eggs ... from p. 1

in the average American diet. But for most people, dietary cholesterol isn't that closely connected to blood cholesterol levels, though for some it can make a large difference. This is reflected in the current Dietary Guidelines for Americans, which dropped its earlier suggestion to limit dietary cholesterol (see "Forty years of hard-boiled advice about eggs").

The best-laid plan for eggs

Other evidence also seemed to exonerate eggs. For example, a large, long-term Harvard study showed that people who reported eating an egg a day were not at especially higher risk of heart attack or stroke. However, if you struggle to control your blood cholesterol level, be cautious about eating egg yolks—stick to egg whites instead. The same goes for people with diabetes, as a few studies have documented a higher heart disease risk among people with diabetes who eat more than one egg a day.

For the average person who likes eggs and eats them regularly, there's no need to panic, because the increased risk is quite small, says Dr. Fung. But to play it safe in terms of heart health, limit yourself to about two eggs a week. And focus on your entire diet, not just one particular food, she emphasizes.

"If you have an egg on an English muffin or croissant made with white flour and top it with bacon and cheese, that's bad news," says Dr. Fung. Instead, have an egg fried in a little olive oil alongside a bowl of oatmeal. Another idea: swap one of your meat-based dinners for an egg-based supper, such as chopped, sautéed vegetables added to scrambled eggs. Or top a salad with a few slices of hard-boiled egg.

Forty years of hard-boiled advice about eggs

First published in 1980, the Dietary Guidelines for Americans are updated every five years. The original guidelines advised people to avoid consuming too much cholesterol. But it wasn't until 1995 that the report suggested a specific limit—less than 300 milligrams (mg) per day—for cholesterol. The average large egg contains just under 200 mg of cholesterol, all in the yolk. The 2010 guidelines added an even lower daily limit (200 mg) for cholesterol for people at high risk of cardiovascular disease.

However, the 2015 guidelines removed all mention of limiting cholesterol, acknowledging that too much saturated fat and other unhealthy habits likely play a greater role in raising blood cholesterol.

Here's what the guidelines have said about eggs over the years:

Date	Advice about eggs
1980	Moderate your use of eggs.
1985	Moderate your use of egg yolks.
1990	Try using two egg whites (which contain no cholesterol) in place of a whole egg in baking.
1995	Limit intake of egg yolks.
2000	Use egg yolks and whole eggs in moderation. Use egg whites and egg substitutes freely when cooking since they contain no cholesterol and little or no fat.
2005	No specific advice about eggs.
2010	One egg yolk per day does not raise blood cholesterol levels; nor does it increase the risk of cardiovascular disease in healthy people.
2015	No general recommendation, but notes that men and teenage boys may be eating too many eggs. Suggests that ovo-vegetarians may eat up to three eggs per week.

Legume of the month

Mung beans

Mung beans are popular in many Asian cuisines, where they're used in soups, curries, savory pancakes, and even desserts. These small, olive-green beans have a white speck at the center. Some say the mild flavor of mung beans is reminiscent of potatoes.

Natural food stores and some conventional grocery stores may carry dried mung beans, either packaged or in bulk bins. But Americans are probably more familiar with mung bean sprouts, which are used in Chinese and Thai stir-fries. You can often find these slender, crunchy white sprouts in the produce section of your supermarket. Studies show that mung bean sprouts contain slightly higher levels of beneficial antioxidants than the unsprouted beans.

Mung bean sprouts

Mung bean protein is the key ingredient in a plant-based alternative to scrambled eggs. Called Just Egg, this liquid product also contains canola oil and natural colors from carrots and turmeric, along with other ingredients. When cooked, it looks very much like scrambled eggs, and reviewers say the taste is fairly similar as well. (It's worth noting there are other plant-based egg substitutes on the market as well, including Vegg and VeganEgg, which contain soy protein and algal protein.)

To lower heart disease risk, swap beef for beans

© robynmac | Getty Images

Eating healthy, plant-based proteins such as beans and nuts instead of red meat may lower your odds of heart disease, new research finds.

Researchers analyzed data from 36 trials that involved more than 1,800 people to see how different diets affect cholesterol, blood pressure, and other heart disease risk factors. When they compared diets with red meat to all other types of diets combined, there weren't any notable differences in cholesterol or blood pressure (although red-meat diets did lead to high levels of triglycerides, a type of fat in the blood).

But diets rich in high-quality plant protein sources, such as beans and nuts, resulted in lower levels of both total cholesterol and harmful LDL cholesterol when compared with diets with red meat. In comparison to red meat, plant-based proteins contain no cholesterol, less saturated fat, and more unsaturated fat and fiber, as well as other heart-healthy nutrients. In addition to being high in unhealthy saturated fat, red meat also contains iron and other substances associated with cardiovascular risk. The study appeared in the April 9 issue of *Circulation*.

For most people, no need for niacin

Hundreds of thousands of people in the United States take prescription niacin (also known as vitamin B3) as part of a regimen to prevent heart disease. But a new analysis that was published April 12 in *JAMA Network Open* suggests this old drug offers no benefit for most people.

The analysis included 35,760 patients from 17 clinical trials documenting the effect of niacin on at least one cardiovascular disease outcome. About half of the people were taking niacin, and the remainder received placebo, usual care, or other lipid-lowering agents. Over all, niacin was not helpful in preventing any serious heart-related events, strokes, or deaths from heart disease.

The initial interest in niacin stemmed from the drug's ability to raise HDL cholesterol, once thought to protect against cardiovascular disease. But HDL is now considered more of a bystander than a helper when it comes to heart disease risk, according to current thinking.

Given niacin's weak record, the only possible role for this drug is for people who cannot tolerate statins. But other, newer medications would likely offer greater benefits.

Does drinking alcohol raise the risk of stroke?

© Terry J | Getty Images

Contrary to observations that moderate drinking (one or two drinks per day) protects against stroke, a new study finds that stroke risk may rise with increasing alcohol intake.

The findings, which were published online April 4 by *The Lancet*, come from a study involving 160,000 Chinese adults who reported their drinking habits. They also were tested for gene variants common in Asian populations that cause an unpleasant flushing reaction after drinking. Only 2% of women reported drinking alcohol, compared with 33% of men, so the findings focus mainly on men.

The gene variants affected how much alcohol people consumed, which ranged from zero to four drinks per day. Because the variants are unrelated to other lifestyle factors such as smoking, researchers were able to sort out the cause-and-effect relationship of alcohol. Moderate drinking did not protect against stroke but instead appeared to increase the risk when compared with no drinking. In this population, alcohol contributed to 8% of all strokes caused by a clot in the brain and 16% of bleeding strokes, according to the study authors.

What's coming up:

- Understanding salt sensitivity
- When to consider a coronary artery calcium scan
- E-cigarettes: Helpful or harmful?
- Smartphone apps for heart health