

Harvard Health Publications
Trusted advice for a healthier life

Ask the Doctors

at Harvard Medical School

20 Common Health Questions

with answers from
the faculty doctors of
Harvard Medical School

Contents

1. Which is better, flaxseed or fish oil?	3	11. Why aren't drugs safe when they are approved?	8
2. Calcium supplements and heart attack risk.....	3	12. Can you tell me more about cellulitis?	8
3. Is it safe to take a pill that eliminates periods?.....	4	13. What can I do about my snoring?.....	9
4. Does having ridged and split fingernails mean I'm unhealthy?	4	14. "Low-dose" smoking.....	10
5. Can I keep myself from fainting when I have blood drawn?	5	15. Obesity and prostate cancer	10
6. Are all dark chocolates good for the heart?	6	16. Home defibrillators.....	10
7. Why do I yawn when I exercise?	6	17. Caught napping.....	11
8. How much should I limit my salt intake?	7	18. Bell's palsy	11
9. How many calories do I need?	7	19. Shy bladder syndrome	12
10. Does asthma go away?.....	8	20. If I am feeling chest pain, should I call 911?	12



HARVARD MEDICAL SCHOOL

ASK THE (HARVARD MEDICAL SCHOOL) DOCTOR

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1. Which is better, flaxseed or fish oil?

Q For the healthy omega-3 fats we hear so much about, which is better — ground flaxseed or fish oil capsules?

A Fish in the diet is generally preferred, but both sources you mention are also good for you. Studies have found an association between omega-3 fatty acids and a reduced risk for cardiovascular disease. There are several possible reasons for this. Omega-3s lessen the heart's susceptibility to arrhythmias, lower blood triglyceride and cholesterol levels, cut the risk of blood clots, help lower blood pressure, and slow the progression of atherosclerotic plaques.

The three main sources of omega-3s are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), found mainly in seafood and fish oil capsules, and alpha-linolenic acid (ALA), which comes from plants such as flaxseed, walnuts, and soy. ALA is converted to omega-3 fatty acids in the body.

There's some question about whether ALA has the same beneficial effects on the heart as EPA and DHA. Studies have been inconsistent. This is a concern for people who can't or won't eat fish or take fish oil supplements. More research is needed comparing the various sources of omega-3s, but for now, it's best to include all three in your diet.

The American Heart Association (AHA) recommends that healthy adults get omega-3s from diet. It advises eating at least two servings per week of EPA- and DHA-rich fish — for example, anchovies, bluefish, halibut, salmon, and mackerel. (One serving is about four ounces.) The AHA also recommends eating tofu and other soy foods, flaxseed, walnuts, and oils made from flaxseed, canola seed, olives, walnuts, and soybeans — all good sources of ALA. People who have heart disease are advised to consume one gram of EPA plus DHA per day — about the amount in four ounces of white tuna packed in water, drained — from fatty fish (preferably) or fish oil supplements. For healthy people who dislike fish or fish oil capsules, ALA is a reasonable alternative.

Don't consume more than three grams of omega-3s per day without discussing it with your doctor. These potent fatty acids inhibit blood clotting and may cause excessive bleeding, especially if you also take aspirin, warfarin (Coumadin), an antiplatelet drug such as Plavix (clopidogrel), anti-inflammatory drugs such as ibuprofen (Motrin, Advil) or naproxen (Aleve, Naprosyn), or certain herbal supplements (for example, ginkgo, ginseng, and St. John's wort).

2. Calcium supplements and heart attack risk

Q I read in the newspapers about a study that said older women taking calcium supplements are at increased risk for experiencing a heart attack, stroke, or sudden death. Should I be concerned?

A Good question, complicated answer. The study findings you are referring to also caught my eye. Researchers in New Zealand reported the results in the journal *BMJ* (the initials are now the official name of the *British Medical Journal*) in January 2008. Their study included 1,471 postmenopausal women, half assigned to take 1 gram of elemental calcium (as calcium citrate) daily; the other half, a placebo pill. The main goal was to see whether the calcium pills would influence bone loss and fracture risk over a five-year period. But once a study has created lots of data, researchers often sift through it, conducting “secondary analyses” to see if there might be other effects from the intervention.

This study was one of these secondary analyses. The conclusion was that the women assigned to take calcium supplements were more likely to have heart attacks, strokes, or sudden death compared with those who took a placebo. How much more likely? By one count, 47% more, although when information from a hospital database was added in, the figure dropped to 21%. Because randomized trials are the gold standard for assessing a treatment, these results got a lot of attention.

On the other hand, you can't go by just one study. And at least three previously reported randomized trials of calcium supplements haven't found an increase in the risk of cardiovascular disease. The largest, the Women's Health Initiative (WHI), found that the calcium supplementation didn't increase the risk for diabetes and high blood pressure, both of which increase cardiovascular disease. The women in the WHI were younger on average than the women in the New Zealand study (62 vs. 74 years old), heavier (body mass index of 29 vs. 26.5), were taking vitamin D along with the calcium, and half were taking hormone therapy. Even so, it's hard to see how those differences might explain the divergent conclusions of the two studies.

An interesting wrinkle in the New Zealand study gave me pause: the cholesterol levels of the group taking the calcium supplements *improved*, which would usually translate into lower, not higher, cardiovascular risk. It's also worth noting that the study was pretty small for measuring something like cardiovascular events. Statistically speaking, the results aren't as reliable as they might be in a larger study.

My bottom line is that I don't think the current evidence indicates that calcium supplements increase the risk of heart attacks, strokes, or sudden death for people with or without known heart disease. But I reserve the right to change my mind if new and stronger evidence emerges.

3. Is it safe to take a pill that eliminates periods?

Q Some of my friends are excited about the new oral contraceptive that eliminates periods. But it worries me. Does anyone know what happens when you stop menstruating for a long time? It just seems unnatural.

A Oral contraceptives (OCs) have been available since the early 1960s and are the most common form of birth control in the United States. "The pill" suppresses ovulation, thickens the cervical mucus (which blocks passage of the sperm), and alters the lining of the uterus, preventing implantation of a fertilized egg. Most OCs come in packets of 21 pills containing the hormones estrogen and progesterin, along with seven placebo pills that contain no medication. Women seeking to prevent pregnancy take a hormone-containing pill daily for three weeks, then a week's worth of placebo pills (or no pills). A menstrual period occurs during the seven-day placebo phase in response to the drop in hormone levels.

In May 2007, the FDA approved Lybrel, the first OC designed to be taken 365 days a year. Developed by Wyeth Pharmaceuticals, Lybrel comes in a 28-day pack of tablets containing 20 micrograms (mcg) of ethinyl estradiol (an estrogen) and 90 mcg of levonorgestrel (a progesterin). This is about equal to the lowest level of hormones found in combination OCs today: the products Aviane, Sronyx, Lutera, Lessina, Levlite, and Alesse all have 20 mcg of ethinyl estrogen and 100 mcg of levonorgestrel. Women who use Lybrel don't have regular periods, although they can have breakthrough bleeding (spotting or light bleeding). During the last month of the one-year studies leading up to the FDA's approval of this pill, about 40% of the women taking the drug were still having breakthrough bleeding. Periods returned (or pregnancies occurred) within three months of stopping it.

The idea of suppressing menstruation isn't completely new. Conventional OCs will also stop periods if they are taken continuously and without the placebo pills. For many years, doctors have suggested this approach if a woman wanted to skip her period at a particularly inconvenient time, such as her honeymoon, an athletic event, or a long vacation. The notion of suppressing menstruation over a longer term has become increas-

ingly attractive, partly because this strategy has been successful in the treatment of endometriosis and the management of the hormonal swings associated with perimenopause. In 2003, the FDA approved Seasonale, an OC that's taken for 84 days, followed by seven days of placebo pills. Women who take Seasonale have four periods a year instead of the 13 that occur with standard OCs.

There's some theoretical justification for reducing the number of periods a woman has — or eliminating them altogether. For one thing, menses bring considerable discomfort to some women, including severe cramps, mood swings, headaches, and heavy bleeding, which may result in anemia. In cultures where women bear and breastfeed children throughout their reproductive years, it's normal to have few menstrual periods. On the other hand, many women, like you, are uncomfortable with the notion of not having periods. Moreover, if you're taking conventional birth control pills, a period during the placebo week reassures you that you're not pregnant. One of the concerns about Lybrel is that if it fails, a woman may not know she is pregnant.

There are no long-term safety data on Lybrel, but its risks are thought to be similar to those of conventional OCs — an increased incidence of blood clots, heart attacks, and stroke, especially in women who smoke. (Findings on the relationship between breast cancer and OCs have been inconclusive.) On the plus side, birth control pills appear to lower the risk for ovarian cancer and endometrial cancer; Lybrel might do the same. But keep in mind that the effects of taking Lybrel for more than a year are unknown. The use of continuous birth control has to be considered largely uncharted territory.

4. Does having ridged and split fingernails mean I'm unhealthy?

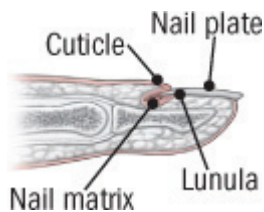
Q I'm 63, and I've begun to notice a decline in the quality of my fingernails. They have numerous up-and-down ridges, and at the tips, they're always splitting. I've heard you can tell a lot about a person's health from the condition of her nails. What does this say about mine?

A Some changes in nails can be a sign of an underlying health problem, but the lengthwise nail ridging you describe is usually not one. It's simply a common sign of normal aging. The growth of fingernails and toenails slows as we get older, and their appearance may change. Some nails become yellowed or dull and brittle, and some or all may develop tiny longitudinal ridges. Fingernails tend to become thinner and more fragile, while toenails usually become thicker and harder.

Fingernails don't always change with age, and they

don't necessarily change at any particular age. But brittle nails are very common, occurring in 27% of women. The nails may separate at the tips in thin layers, peeling like layers of an onion, a condition called onychoschizia. If the nails are ridged and brittle, they may split lengthwise. The problem tends to increase with age, as nails lose their water content. Dehydration is a risk in cold, dry climates and with frequent washing and drying of the hands and exposure to cleaning agents and solvents like nail polish removers.

How nails grow



Growth originates from the nail matrix, a clump of specialized cells at the base of the nail (see illustration). The only part of the matrix that's visible is the whitish half-moon (lunula) near the nail base. The hard part of the nail — the actual fingernail — is called the nail plate. It's made of densely packed layers of protein. As new cells grow, the older cells harden and push outward. The cuticle is the skin that overlaps the nail plate at its base and protects it as it emerges from the nail matrix.

The adult fingernail grows about three millimeters (about one-tenth of an inch) per month, with a lot of variability. Toenails grow at about one-third to one-half that rate. Generally, adult fingernails take four to six months to grow out fully, that is, to replace all the original cells. Toenails take 12 to 18 months. Fingernails grow fastest in children; the rate peaks around puberty and declines after our 20s, eventually decreasing by 50% over a lifetime.

Several conditions affect the rate of nail growth. It increases during pregnancy (courtesy of pregnancy hormones) and decreases during lactation, after chemotherapy, and in a person suffering from limb paralysis, prolonged diminished circulation, or malnutrition. Nail changes are rarely the first sign of a systemic disease; you'd probably see other symptoms long before you'd see changes in your fingernails. But nail changes sometimes do reflect an underlying disorder, so it's worth showing them to your doctor. Psoriasis, for example, can cause pitting or splitting. Thyroid disorders, autoimmune problems, lung conditions, and malnutrition may cause brittleness, flattening, scooping, or splitting.

You can't do anything about age-related nail changes, but you can reduce the risk of splitting and breaking that often accompanies them:

- Avoid long hot baths or showers.
- If you wash your hands a lot, moisturize them as often as you can after drying.
- Use a moisturizer (petroleum jelly is fine) on your hands and nails at bedtime.
- Avoid prolonged exposure to cold, dry weather, and wear gloves outdoors.
- Apply sunblock to your hands to avoid sunburn.
- Avoid frequent use of nail polish remover; make sure yours doesn't contain acetone.
- Wear protective gloves for household cleaning and washing dishes.
- Trim your nails only after soaking them or after a bath or shower. They'll be less likely to split.
- File your nails in one direction only, and use a fine emery board or file.
- Don't bite or pick at your nails or the protective cuticles around them.

Evidence from a small controlled study suggests that oral supplementation of the B vitamin biotin may increase the thickness of brittle nails and reduce splitting, although it's unclear whether it's more effective than moisturizers. There's no evidence that eating gelatin, calcium or other minerals, vitamins, or supplements has any effect on age-related changes in fingernails.

5. Can I keep myself from fainting when I have blood drawn?

Q I want to donate blood, but I faint or come close to it nearly every time I have blood drawn at the doctor's office. Can I do anything to keep myself from fainting?

A Fainting when having blood drawn is very common. Doctors call this a vasovagal episode. These are caused by the sight of blood, an injection, standing up for too long, or other triggers that stimulate the vagus nerve. It slows the heart rate and causes blood vessels to dilate. The sudden drop in blood pressure means not enough blood gets to the brain. Complete or near loss of consciousness for a few seconds often follows.

I teach my patients who have experienced these frightening or aggravating episodes some tricks that can help minimize their chances of fainting when they know they are going to be in circumstances that put them at risk, such as donating blood.

An hour beforehand, drink a quart of a sports drink, which has some salt, sugar, and other substances that will keep the liquid in your bloodstream longer. Eat a salty food like potato chips. (How often does your physician tell you to have potato chips?) You can also wear support stockings that press on your legs — these help keep fluid in your blood vessels.

If you feel a fainting spell coming on, the first thing you should do is sit down if you aren't already seated. Once you've done that, or if you can't sit down, you can use your muscles to try to ward off a faint. Cross one leg over the other and tense your leg, abdominal, and buttock muscles. Tense your arms by gripping the fingers of one hand with those of the other and trying to pull them apart. Or make fists and squeeze your hands as tightly as you can. These strategies, all tested in an international trial, helped people who routinely fainted reduce how often their lights went out.

I think it's great that you want to donate blood enough to risk fainting again. With these maneuvers, it is worth a try.

6. Are all dark chocolates good for the heart?

Q Dark chocolate is supposed to be good for the heart. But how do I know which chocolate is “dark”? Some labels list percent dark chocolate, others percent cocoa solids. Can you help me pick the best one?

A Chocolate makers are promoting dark chocolates to cash in on two different trends. One is a growing demand for “gourmet” chocolates, described in mouth-watering detail by food writer Bill Buford in his essay, “Extreme Chocolate,” in the October 29, 2007, *New Yorker*. The other trend has to do with the growing perception that chocolate improves blood flow through arteries nourishing the heart, brain, and other parts of the body.

Chocolate's artery-opening activity is attributed to compounds called flavanols that are abundant in cacao beans, as well as in onions, apples, berries, beans, and some types of tea.

Just because cacao beans contain flavanols doesn't mean that chocolate does. In fact, the bitter-tasting flavanols are traditionally removed. “Dutched” cocoa, which has been treated with alkali, has few active flavanols.

You can't tell the flavanol content from the color of a chocolate bar or the percent cocoa it contains. “Specifically, what the world needs is a label on each package that describes the flavanol content of the chocolate,” writes

Dr. Norman K. Hollenberg, a Harvard professor who has been studying the physiologic effects of chocolate since the mid-1990s, in an article in the November 20, 2007, *Circulation*.

Until that happens, look for the least-processed chocolate you can find. Skip those that have been treated with alkali. And keep in mind that you don't need much. Studies showing the benefits of cocoa have used an ounce — sometimes less — of flavanol-rich chocolate. The tough part of this dietary “therapy” is stopping with a small piece. But stop you should. An ounce of dark chocolate delivers about 150 calories. Eat that much every day without cutting back elsewhere and the girth you gain would far outweigh any benefit from chocolate.

7. Why do I yawn when I exercise?

Q I'm 40, and for the past few years I've been starting to yawn whenever I get an intense aerobic workout. Is this something I should worry about?

A We usually think of yawning as a sign of sleepiness or boredom, but experts say that isn't the whole story. True, we tend to yawn toward bedtime as we get sleepy, but we also yawn in the morning when we wake up. Athletes yawn before they compete — not a time associated with boredom or sleepiness. And we yawn in response to seeing someone else yawn, even if we're not sleepy or bored.

Yawning is a semi-voluntary action — partly a reflex — that's under the control of several neurotransmitters in a part of the brain called the hypothalamus. All vertebrates yawn, and in humans, yawning starts as early as 12 weeks after conception. We know that yawning distributes surfactant, a biochemical that coats tiny air sacs (alveoli) in the lungs, helping to keep them open. So yawning in fetuses may help prepare them for life outside of the womb.

One novel theory is that yawning cools the brain, helping keep it at the right temperature for optimal function. In a study in 2007 in the journal *Evolutionary Psychology*, researchers reported that subjects who cooled their brains by breathing through their noses or holding cold packs to their foreheads — proven brain-cooling strategies — were less likely to yawn when shown videos of other people yawning.

There's no ready explanation for your “aerobic yawn.” Perhaps your alveoli need a boost to stay open. Or maybe your brain needs cooling to stay alert. Or it may simply be a reflex. Whatever the case, there's probably no reason to worry about it, and you should keep up with your aerobic exercise.

8. How much should I limit my salt intake?

Q If I want to lower my blood pressure, how much salt can I afford to take in?

A The link between high blood pressure (hypertension) and sodium — in particular, in the form of sodium chloride, or table salt — is well established. The Dietary Approaches to Stop Hypertension (DASH) study, sponsored by the National Institutes of Health, concluded that in adults with mild hypertension, a low-fat, high-fiber, calcium- and potassium-rich diet containing no more than 2,300 milligrams (mg) of sodium per day (about a teaspoon of table salt) can lower blood pressure as effectively as an antihypertensive drug. Bringing that down to 1,500 mg of sodium per day (about two-thirds of a teaspoon of table salt) was even better.

According to a study published in the April 28, 2007, *British Medical Journal*, a low-sodium diet not

only reduces blood pressure but also appears to cut the risk for cardiovascular events — such as stroke and heart attack and the chance of death from such causes. Studying long-term results for more than 3,000 participants in two randomized hypertension-prevention trials, researchers found that those who cut their sodium intake to between 2,000 and 2,600 mg per day and continued to watch their salt intake had almost 30% fewer cardiovascular events in the following 10 to 15 years.

If you have high blood pressure, aim for a daily sodium intake of no more than 1,500 to 2,300 mg. First, stop using table salt. But that's only a beginning. Sodium is found naturally in some foods and is added to many others. In fact, processed foods account for most of the salt in our diet, so it's important to check nutrition labels for sodium content. You may be surprised at the sodium load in some processed foods. For example, a single serving of many soups, including cream of mushroom and even some vegetable soups, contains 800 to 1,000 mg of sodium or more per serving — half your allotted amount for the day.

The taste for salt is partly hard-wired, but mostly learned or acquired. So you can train your taste buds to be satisfied with less salt. Start slowly, with simple changes like substituting herbs, spices, or lemon juice for some of the salt you've been using. If you'd like help

Tips for reducing sodium in your diet

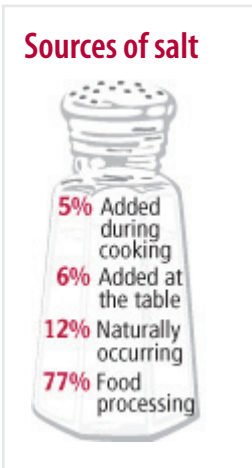
- Don't add salt during food preparation. For example, don't sprinkle it into the water you use to cook pasta, rice, hot cereals, and vegetables. At the table, taste your food before adding any salt.
- Flavor your food with fresh or dried herbs and spices instead of salt. You can find ready-made salt-free herb and spice blends in most grocery stores. A dash of hot pepper sauce or a squeeze of lemon juice also adds flavor.
- Buy fresh vegetables whenever possible. If you use frozen or canned vegetables, make sure they don't have any added salt.
- Use fresh rather than canned or processed poultry, fish, and lean meat. If you use canned tuna, rinse it to remove some of the salt.
- When buying prepared foods, look for low-sodium options, which contain less than 5% of the Daily Value of sodium. Avoid high-sodium foods (those containing 20% or more of the Daily Value of sodium).
- Snack on fruits and vegetables rather than chips or pretzels. Or try a handful of salt-free nuts or a cup of plain popcorn.
- In restaurants, order your salad with oil and vinegar on the side.
- Avoid prepared salad dressings, deli meats, canned or dried soups, sauces, and snack items. Processed seasonings, such as soy sauce, Worcestershire sauce, steak sauce, and bouillon cubes are also loaded with sodium. Go easy on salt-containing condiments such as ketchup, mustard, pickles, and olives.

in preparing healthy, low-sodium meals, look for the American Heart Association's *Low-Salt Cookbook*, now in its third edition. For a copy of *Your Guide to Lowering Your Blood Pressure with DASH*, an eating plan featuring ways to lower your sodium intake, visit the National Heart, Lung, and Blood Institute's Web page: www.nhlbi.nih.gov/health/public/heart/hbp/dash.

9. How many calories do I need?

Q How can I figure out how many calories I should take in every day?

A Clinicians use several equations to calculate how many calories a person should eat each day to maintain a stable weight. The most precise ones include height, weight, age, sex, activity level, and stressors like an injury or disease. The simplest way to



estimate your daily target for calories is to multiply your weight by:

- 12 if you are sedentary (little or no exercise)
- 13.5 if you are somewhat active (light exercise one to three days a week)
- 15.5 if you are moderately active (moderate exercise like brisk walking three to five days a week)
- 17 if you are very active (vigorous exercise or sports six to seven days a week)
- 19 if you are highly active (daily vigorous exercise or sports and a physical job).

For example, a somewhat active woman who weighs 145 pounds needs about 1,950 calories a day (145 times 13.5) to keep a steady weight.

To lose weight, start by reducing your intake by 250 calories per day. That's one can of sugared soda and two butter cookies, or a two-ounce bag of potato chips, or a cup of eggnog. If you keep that up for a year, you could shed 20 pounds. Add in more exercise, and you could make it 30.

10. Does asthma go away?

Q I was diagnosed with asthma five years ago, and my doctor prescribed an inhaler to use daily. I haven't had any symptoms for a year now, even though I stopped using my inhaler. Can asthma go away?

A Asthma can go away, although this happens more often when asthma starts in childhood than when it starts in adulthood. When asthma goes away, sometimes that's because it wasn't there in the first place.

Asthma can be surprisingly hard to diagnose. The three main symptoms are wheezing, coughing, and shortness of breath. However, not all people with asthma have all three symptoms. And a number of other diseases — chronic obstructive lung disease, heart failure, pulmonary sarcoidosis (an inflammatory condition), gastroesophageal reflux disease (GERD) — can cause each of the symptoms.

The best way to diagnose asthma is with lung function tests, not by symptoms. By measuring how much air you can exhale and at what rate, a spirometer shows whether your airways have narrowed, the classic feature of asthma. Peak flow meters, which measure how fast you can exhale but not the total volume, are simpler instruments that you can use at home. A peak flow test is a good first step, but a definite diagnosis of asthma usually requires other kinds of tests.

If you start having breathing problems again, and you haven't had lung function testing, you might ask your doctor about it.

11. Why aren't drugs safe when they are approved?

Q First it was Vioxx and now Avandia. Why can't doctors and the government screen out unsafe medicines?

A The FDA requires testing for effectiveness and safety before it approves a drug. As citizens, we want the agency to thoroughly examine the safety of a drug before approving it, but we also want the FDA to move as quickly as possible to approve new medicines. You see the dilemma.

When a drug has a serious but rare side effect, very large studies may be needed to uncover it. Even then, sometimes side effects are discovered only after the drug is on the market, and many people have taken it. There's a great deal of interest in beefing up systems for post-approval surveillance of drugs so doctors and patients know about dangerous side effects as soon as possible.

Avandia (rosiglitazone) lowers the blood sugar of people with type 2 diabetes. A meta-analysis, which combines the results of smaller studies, found Avandia increases the risk for heart attack. A couple of weeks later, the drug's manufacturer, GlaxoSmithKline, reported interim results from a large randomized trial that's scheduled to last another three years. Those results showed a clear increase in certain types of heart problems, particularly heart failure, but were inconclusive for some others, such as heart attacks.

When we went to press, Avandia was still on the market, although the FDA had asked Glaxo to add a "black box" warning about the heart failure risk.

Ultimately, Avandia's fate will be determined by the results from Glaxo's randomized trial. If it shows no increase in heart disease risk, most people will believe that the company and FDA did the right thing keeping the drug on the market.

12. Can you tell me more about cellulitis?

Q I developed cellulitis in my arm and didn't realize it was such a serious infection. It took three months to heal without treatment. Can you tell me more about cellulitis?

A Cellulitis is a bacterial infection of the skin and the soft tissues underneath. It usually affects the skin of the legs and feet, so your experience is a little unusual, but cases affecting the arms, the trunk — even the face — occur often enough. You probably experienced the redness, swelling, tenderness, and warmth that are the main symptoms. Some people also run a fever and have a general rundown feeling.

Sometimes it's pretty obvious how the bacteria managed to get into the skin. There's a cut, a bite, or a burn of some kind. Other times, though, there's no visible breach in the skin, so it's a mystery how exactly the infection got started.

Many different types of bacteria can cause cellulitis. Most of the time, though, the culprits are *Streptococcus pyogenes*, the same type of bacteria that causes many cases of strep throat, and *Staphylococcus aureus*. Most staph bacteria live on our skin and don't cause any trouble, but not *Staphylococcus aureus*.

I'm glad to hear that your cellulitis cleared up, but it's unfortunate that you didn't get any treatment. Most cases improve dramatically with a single course of oral antibiotics. You were also running the risk that the bacterial infection would get into the blood. Sometimes cellulitis seems to be getting worse during the first couple of days of antibiotics but that's only because bacteria release toxins when they are killed off by the antibiotics.

If oral antibiotics don't work, or if it's a very serious case of cellulitis, then intravenous antibiotics may be necessary, but that's rare.

I don't think cellulitis is any more common these days, but there are more cases caused by antibiotic-resistant strains of bacteria, a worrying trend. One of the most common is methicillin-resistant *Staphylococcus aureus* bacteria, or MRSA.

Doctors usually don't have a problem diagnosing cellulitis. But I saw a patient recently who had been given three courses of antibiotics for cellulitis. None of them worked. She had lymphedema, an accumulation of lymphatic fluid that causes redness and swelling. Cellulitis is a problem for many patients with lymphedema but a small number, including this patient, develop a condition called pseudoerysipelas, which is inflammation without any sort of infection.

13. What can I do about my snoring?

Q My wife says I snore a lot. I don't think I have sleep apnea, but I'm not sure. Is there anything I can do for a serious snoring problem?

A People snore when the airways in the nose and throat get too small, so the air rushing in and out as they inhale and exhale gets funneled through a narrower passageway. The noise is mainly from the vibration of loose tissue, often the soft palate, the slender piece of tissue in the back of the throat.

Some people are snorers because they have too much throat and nasal tissue. Others have floppy tissue that's more likely to vibrate. The tongue can get in the way of smooth breathing. And being overweight is a cause: Extra fat tissue in the neck and throat sometimes presses in on airways.

If you snore with your mouth closed, then it's probably a problem with your tongue. If you snore with your mouth open, then it's more likely to be related to tissues in the throat.

The causes of snoring and sleep apnea overlap. But when someone has sleep apnea, the airway gets blocked completely — or very nearly so. All the little interruptions in breathing can lead to a lack of oxygen that puts a strain on the heart. That's why people with sleep apnea have a higher-than-normal risk for heart attack and heart failure.

Snoring doesn't pose any health risks, but it's still a problem if your bed partner can't sleep! We've had many patients who are bedroom exiles, banished because their snoring was so loud.

There are some simple things you can try to dial down the decibels. If you sleep on your back, switch to your side. When you are on your back, your tongue and other soft tissues in the back of the throat tend to slide back, creating a narrower airway. If you drink alcohol in the evening, try drinking less. Alcohol is a muscle relaxant, and it may be affecting the muscles around your airways. Sleeping pills sometimes have the same effect.

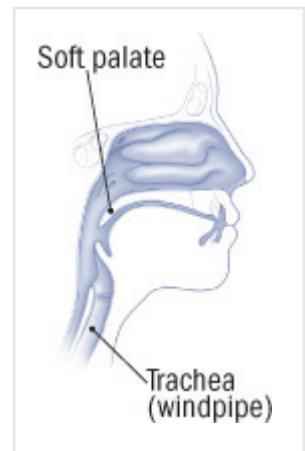
Trying to breathe through a stuffed-up nose can create a small vacuum that pulls the walls of the upper airway in. If you're stuffed up a lot, you might have allergies that could be prevented or treated.

Dental "appliances" that look like the mouth guards worn by athletes can reposition the jaw and the tongue.

If none of this helps or is relevant, there are several operations that can help snorers. Doctors can laser away excess tissue, or shrink it with instruments that deliver high-frequency radio waves. These procedures are reasonably effective, but the sore throat during the recovery period can be pretty painful.

A new procedure that's the better choice for many snorers involves inserting slender plastic implants that are less than an inch long into the soft palate. Scar tissue forms around the implants, which stiffens up the tissue so it doesn't vibrate and make noise. The doctor uses a syringe-like instrument to push the implants in. Local anesthesia means there's little, if any, pain. It's done in the doctor's office and takes about 10 minutes.

The brand name is Pillar, so it's often referred to as the Pillar procedure, not by its generic name, palatal implantation. The implants are also used to treat mild cases of sleep apnea.



So far the results look very good. It helps with snoring, and the sore throat afterward is mild and lasts only a couple of days. In about one in every 100 cases, the implants fall out. Of the 100 patients we've had so far, one had the implants removed because he found them uncomfortable.

Expense is an issue. The procedure costs about \$2,000. Most health insurance policies won't cover the procedure if it's done for snoring because snoring isn't considered a medical condition. Still, it might be money well spent if your snoring is keeping your spouse awake at night — and has you looking for someplace else to sleep.

14. “Low-dose” smoking

Q know that smoking is very bad for me. I've cut down to one cigarette after lunch and another after dinner each day, with two or three more on most Friday and Saturday nights when I socialize. I really enjoy smoking, but I want to know if I'm harming myself.

A Sorry to say, you are. The more you smoke, the greater your risk of lung cancer, emphysema, heart attacks, and many, many other medical problems ranging from mouth and throat cancer to bladder cancer and from premature skin aging to erectile dysfunction. But even at the low end of the scale, smoking is dangerous. That's why secondhand smoke is such a huge problem in the United States as well as around the world.

Living with a smoker is one thing, indulging in two or three cigarettes a day quite another. A study from Norway should convince you to quit. People who smoked just one to four cigarettes a day were nearly three times more likely to die from heart disease than nonsmokers. Low-dose smoking nearly tripled the risk of dying from lung cancer in men, and it was associated with a 50% increase in the overall death rate in both men and women.

The only safe dose of smoking is zero, and the best time to quit is now.

15. Obesity and prostate cancer

Q Your newsletter convinced me that obesity increases the risk of prostate cancer. It depresses me a bit, since I'm overweight, so my question is both personal and practical: If I lose weight, will I undo the harm?

A You are not alone in being concerned, since obesity is a big problem in the United States and in much of the world. But a 2007 study may lift your spirits. Researchers evaluated body mass index (BMI) and prostate cancer in 69,991 men who were enrolled in the Cancer

Prevention Study II Nutrition Cohort. Confirming other studies, they found that obesity was associated with an increased risk of aggressive, widespread, and fatal prostate cancers. But there's good news, too. Compared to men who held their weight steady, men who lost weight enjoyed a 42% lower risk of being diagnosed with high-grade prostate cancer.

Weight loss may help reduce your risk of prostate cancer, and it will also help protect you from a host of problems, from coronary artery disease and hypertension to diabetes and erectile dysfunction. But losing weight is easier said than done. The best way is to adopt a healthy lifestyle for the long term instead of buying into a crash diet. The key is to burn up more calories with exercise than you take in with food. And in addition to cutting calories, your diet should be prostate — and heart — friendly. That means reducing saturated fat and trans fat, keeping your calcium intake moderate (1,000–1,200 mg a day), and eating lots of fish, whole grains, fruits, and vegetables (especially for the prostate, cooked tomatoes). Judicious supplements of selenium and vitamin D may help your prostate, if not your heart or your waistline.

16. Home defibrillators

Q Every time I walk through a mall or airport, I see machines for reviving heart attack victims. My husband has had two heart attacks. He's doing very well now, but I wonder if I can get a device like this for our home. And if I get one, would I be able to learn how to use it?

A It's an important question. About 166,000 sudden cardiac arrests occur in the U.S. each year, and only about 6% of these patients survive long enough to make it out of the hospital. Any attempt to do better should start at home, since about 80% of sudden cardiac arrests occur at home.

Automatic external defibrillators (AEDs) are self-contained, battery-operated devices that can automatically detect *ventricular fibrillation* and *rapid ventricular tachycardia*, abnormal heart rhythms that cause immediate loss of consciousness and collapse leading to death unless treatment is started promptly.

AEDs provide automatic treatment by delivering a jolt of electric current to restore normal cardiac action. They come with clear directions and are safe and easy to use, even without prior training. Studies in airports, shopping malls, and (it's true) gambling casinos have found that patients who receive AED treatment fare better than those who receive only conventional CPR (cardiopulmonary resuscitation).

Typical AEDs cost between \$1,500 and \$2,000. One model has been FDA approved for over-the-counter sale,

and others can be purchased for home use with a doctor's authorization. However, although you *can* buy an AED and learn to use it, that doesn't necessarily mean you *should* get one.

For one thing, cardiac patients who are at high risk for life-threatening rhythm disorders are best served by implanted cardiac defibrillators (ICDs) that operate at home, at work, and everywhere else because they are placed right in the patient's body. Vice President Dick Cheney is a famous example of a heart attack survivor who is doing well with an ICD. Medication can also help protect high-risk patients.

High-risk patients need protection — but might low-risk patients benefit from home AEDs? The 2008 Home Automated External Defibrillator Trial (HAT) helps answer the question. Between 2003 and 2005, 7,001 heart attack survivors enrolled in the study; their average age was 62, and 83% were men. Half the group was randomly assigned to receive standard medical care, while the others received the same care plus a home AED. During a follow-up period that averaged 37 months, 450 patients died; there was no difference in mortality between the two groups. A total of 123 cardiac arrests occurred at home; an AED was used in 29 patients, but just 14 received shocks and only four were long-term survivors.

The HAT study suggests that someone like your husband is not likely to benefit from a home AED. But you can help in other ways. Talk to your husband's doctor to find out if he is at risk for a dangerous rhythm disorder, then do everything you can to help him reduce his risk. Learn basic CPR; the American Heart Association's new "hands-only" technique is simple and effective. And keep an eye out for more studies looking at whether or not home AEDs might help certain patients. Above all, perhaps, remember that modern medical treatment has greatly improved the outlook for heart attack survivors like your husband. In the HAT experience, for example, the annual mortality was only 2%; just a few short years ago, doctors would have found that figure shockingly low.

17. Caught napping

Q Ever since I retired last year, I've enjoyed taking an afternoon nap whenever it's convenient. My wife says napping will turn me into an old man. I can easily give up my naps if she's right — but is she?

A Daytime sleepiness can result from insufficient nighttime sleep. Causes range from simply not devoting enough time to sleep to medical problems that impair the quality of sleep; restless legs syndrome, obstructive sleep apnea, and conditions that produce excessive nighttime urination are examples. And in some cases, daytime

sleepiness can result from medical problems such as depression or an underactive thyroid.

Fortunately, your situation sounds completely different. People who are sleep deprived feel groggy during the day and may fall asleep when they least want to, perhaps at their desks or behind the wheel. Voluntary napping, on the other hand, is not a sign of sleep deprivation, illness, or aging. In fact, a "power nap" can be helpful as well as enjoyable.

NASA and the Federal Aviation Administration found that strategic naps can help. They studied 200 airline flight crews, each of which conducted eight nine-hour trans-Pacific flights during a span of 12 days. Half the crews stayed awake as usual, while the others took 40-minute naps in rotation. Intensive evaluations showed that napping improved subsequent alertness and performance.

These high-flying conclusions don't stand alone. In fact, many studies in shift workers and other volunteers have reported that a nap as brief as 20 minutes can improve alertness, psychomotor performance, and mood.

Naps, however, can produce problems of their own. One problem is sleep inertia or grogginess and disorientation that may accompany awakening from deep sleep. The second potential problem is nighttime wakefulness.

To get the benefit of a quick snooze without being caught napping, plan to take your nap at a good time in your daily sleep-wake cycle; for many people, sometime between noon and 4 p.m. is best. Don't sleep too long; a 20- to 40-minute nap may refresh your day without keeping you up at night. And give yourself 10 or 15 minutes to wake up fully before you resume a demanding task.

I hope your wife won't lose sleep over my answer. Perhaps the best way to win her over would be to get her to take a nap or two — if she tries it, she may like it.

18. Bell's palsy

Q Last month I developed severe weakness on the whole left side of my face. My doctor diagnosed Bell's palsy and referred me to a neurologist. I recovered before I got to see her, so I didn't keep the appointment. Although my face is now back to normal, I'd like to know more about the condition. What can you tell me?

A Although it sounds exotic, Bell's palsy isn't all that rare, occurring in one of every 4,000 adults per year. And while it sounds very serious, it's usually a mild condition that resolves almost completely in most people.

The problem is caused by the inflammation of the facial, or seventh, cranial nerve. It begins abruptly with a weakness on one side of the face that increases to its maximum over 1–2 days and then stabilizes. Many patients complain of pain behind the ear on the affected

side of the face, and some experience abnormally acute hearing in that ear. A less common symptom is a diminished sense of taste on half the tongue. Because the eyelid muscles are weak, patients can't blink or close their eyes fully, so eye dryness and irritation can be troublesome. The weakness involves the entire face from head to chin, but it ranges in severity from mild weakness to a nearly complete paralysis. About 85% of patients recover completely, but improvement can be slow, taking several months. Facial weakness can sometimes persist, especially in patients with the most severe cases.

Neurologists are not sure what causes the facial nerve inflammation, but herpes simplex type 1 is the leading candidate; it's the virus that causes common cold sores, not the infamous type 2 herpes virus that causes genital infections. In an important study, scientists detected type I herpes in nearly 80% of patients with Bell's palsy.

Although most patients recover on their own, medication can improve the outcome. Most neurologists prescribe an antiviral medication such as *acyclovir* (Zovirax) or *famciclovir* (Famvir) for 5–7 days along with a powerful anti-inflammatory such as prednisone for 7–10 days. Patients who cannot close their eyes completely should wear an eye patch to protect their corneas.

It's good that you have followed the rules and made an excellent recovery, even without treatment. And if you're like most patients you'll stay well; unlike cold sores, which often recur, Bell's palsy is usually a once-in-a-lifetime event.

19. Shy bladder syndrome

Q I hope you can help me understand a troubling and embarrassing problem. I often find it difficult, sometimes even impossible, to pass my urine in a public men's room. I'm 41 years old, and I'm very healthy. I have no problem urinating at home, and I rarely get up at night. But last week I couldn't even urinate at a friend's house, and I had to go home early just to use the bathroom. What can you suggest?

A Although your problem doesn't get much attention, it's far from rare. In fact, it's earned a medical name, *paruresis*, and a popular translation, the "shy bladder syndrome."

Paruresis is not a urologic problem but a psychological one. It's a variation on a common theme of social phobia disorders. Social phobias can take many forms. Perhaps the most obvious is performance anxiety or stage fright. Others can include fear of being seen eating or extreme shyness in personal encounters. In your case, the "performance" that triggers anxiety is urination. People with paruresis tense up when they think someone may

see them urinating, hear them urinating, or even know they're urinating, particularly when there is a line at the bathroom door. Anxiety tenses up the *sphincter muscles* at the bladder neck, and when these muscles won't relax, urination is a no-go.

Since the problem is psychological, the best treatments are also psychological. Options include traditional counseling, cognitive-behavioral therapy, relaxation training, biofeedback with bladder training, and medication such as the antidepressant *paroxetine* (Paxil) or a similar drug. But if your problem is mild, you can try to manage it yourself by thinking positively ("What's the worst thing that can happen if someone hears me?" "If I can't void now, I will later") and by practicing in restrooms.

Some tips may help tide you over. Be sure to empty your bladder in privacy before you set out. When you'll be at the mercy of public facilities for some time, drink sparingly and avoid alcohol and caffeinated beverages. If possible, use a stall rather than a urinal. The time-honored trick of leaving the water running may help if it's possible. Avoid decongestants like *pseudoephedrine* (Sudafed and other brands), which tighten the sphincter muscles. You can also ask your doctor about a trial of an alpha blocker, such as *tamsulosin* (Flomax), which relaxes the sphincter muscles.

It's always best to get at the root of the problem, but people suffering from paruresis have another choice: they can learn to self-catheterize their bladders to let the urine out in emergency situations such as a long airplane trip. Although there is a small risk of bladder infection, it's a surprisingly easy and safe technique.

All in all, if you have a shy bladder, don't be shy about discussing it with your doctor. There are many ways he can help you go when you're on the go.

20. If I am feeling chest pain, should I call 911?

Q I am a 73-year-old male. I've been diabetic for 50 years, and had a quintuple bypass eight years ago. I try to get an hour of exercise on a treadmill each day. While working out a couple of days ago, I developed a sudden sharp pain on my left side at about chest level, toward my back. Naturally I stopped, but I wondered when a person like me should call 911.

A Pain in the chest always deserves special attention, especially in someone like you who has coronary artery disease (atherosclerosis of the heart's arteries). Pain from coronary artery disease is felt as heaviness, or a squeezing, pressing or burning sensation, in the middle of your chest, under the breastbone. In many cases, the sensation spreads to either or both shoulders, arms, neck,

back, or jaw. You may also feel it high in the abdomen, just below the chest.

Angina is a particular type of pain caused by coronary artery disease. It usually lasts 2–10 minutes and is brought on by exercise, exposure to the cold, or psychological stress — particularly anger. Unstable angina is angina that may not have such a clear trigger. It's more serious, usually lasts longer — about 10–20 minutes — and may keep on coming back. Unstable angina can be an indication that the atherosclerosis in the arteries is worsening — waxing and waning in severity and intermittently getting in the way of smooth blood flow to the heart. It can be the prelude to a heart attack.

When coronary artery disease causes a heart attack — full blockage in one or more coronary arteries that results in damage to the heart muscle — the pain often begins when a person is at rest, lasts 30 minutes or more, and often goes into the neck, jaw, shoulders, and arms.

Other heart conditions that sometimes cause angina-like chest pain include aortic stenosis, the thickening and stiffness of the aortic valve. Pericarditis, a condition that involves inflammation of the membranous sac that surrounds the heart, can cause chest pain that feels like angina but persists for days and is relieved by sitting up and leaning forward. Aortic dissection, a sudden weakening of the wall of the main artery coming from the heart, can cause a severe and prolonged ripping sensation in the chest and back.

However, chest pain can be a symptom of problems unrelated to the heart or its blood supply. Lung conditions that may cause chest pain include pulmonary em-

bolism (a blood clot lodged in a pulmonary artery) and pleurisy (an infection of the lung's outer lining). Usually the pain emanates from one spot, not the middle of the chest as it does with heart disease, and it gets worse when you take a deep breath or cough. Injury to a rib or to muscles that hold the ribs together, or inflammation where the ribs connect to the breastbone, also can cause pain in one spot that worsens when you take a deep breath or cough.

Esophageal spasm, gallbladder disease, gastroesophageal reflux disease (GERD), stomach and intestinal ulcers — they all cause pain in the lower midchest that is sometimes mistaken for a cardiac problem. They can be hard to tell apart, but if the pain is accompanied by a bloated feeling and triggered by a meal, that's a clue that it's your gut, not your heart, that is giving you trouble.

Here is what I recommend about chest pain and calling 911: If the discomfort (pain, pressure, squeezing) is severe, felt in the midchest area, occurs when you're at rest, lasts at least five minutes, or is accompanied by lightheadedness, a sudden sweat, or unusual shortness of breath, make the call. If you have known coronary artery disease, and it feels like your typical angina, and it's not relieved by three nitroglycerin pills, make the call.

When none of these is true, but the chest pain keeps recurring with exertion, exposure to cold, or psychological stress, or if you have been diagnosed with angina and the pain has gotten more severe or lasts longer, you don't need to call 911, but you do need to call your doctor — pronto.