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Avoid the Common Medications That Raise the Risk of Heart Failure

Many drugs can cause heart problems or make them worse.

Some are prescription drugs, while others are over-the-counter medications.

The American Heart Association recently issued a list of medications that may cause heart failure or worsen it. These include drugs for serious diseases, such as cancer and Parkinson's. The list also includes common over-the-counter medications, with nonsteroidal anti-inflammatory drugs (NSAIDs), antacids and decongestants being most worrisome.

"There are hundreds of drugs that directly or indirectly affect the heart. However, the magnitude of potential effects and the level of evidence supporting the risk vary greatly," says Cleveland Clinic heart failure specialist David Taylor, MD.

How Drugs Can Harm Your Heart

Drugs can cause heart failure, worsen it or make it harder to treat by:

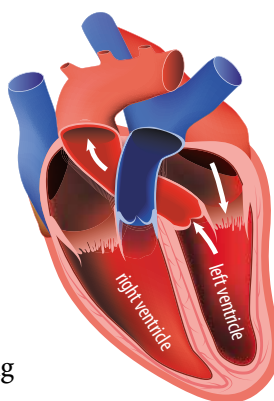
- Being toxic to cells in the heart
- Preventing the heart from beating as strongly as it should or relaxing between beats
- Slowing the heart rate
- Worsening hypertension
- Delivering a high sodium load
- Preventing your heart failure medications from working as well as they should.

Drugs that can directly harm the heart include anthracyclines used to treat breast

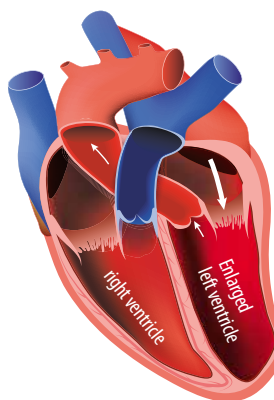
cancer and TNF-a inhibitors used to treat rheumatologic diseases. Doctors are aware of these and do everything they can to modify the risk of developing heart failure. Nevertheless, it can happen.

"We will try to ameliorate the damage by paying close attention to your heart failure or altering your heart failure medications to compensate," says Dr. Taylor.

NORMAL HEART



HEART FAILURE



In heart failure, the extra work done by the heart can cause the left ventricle to enlarge and weaken.

Indirect Ways of Causing Harm

Over-the-counter (OTC) drugs aren't necessarily harmless, either. Diet pills, decongestants and bodybuilding drugs can contain amphetamines and epinephrine—stimulants known to cause heart failure. Sodium bicarbonate-based antacids can cause sodium and water retention, aggravating heart failure symptoms.

Use of NSAIDs is a red flag. "We recommend patients with heart failure avoid NSAIDs and take acetaminophen for pain," says Brad Williams, PharmD, a Cleveland Clinic heart failure and heart transplant pharmacist.

Drug-drug Interactions

A serious problem can occur when the combination of two drugs produces an

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HEART BEAT**FULL ADHERENCE TO MEDICATION THERAPY CUTS CARDIAC EVENT RISKS, COSTS**

Not surprisingly, a recent study found that full adherence to guideline-recommended therapies leads to fewer major adverse cardiac events and lower healthcare costs. The study, published in the *Journal of the American College of Cardiology*, included more than 4,000 post-heart attack patients and almost 13,000 individuals with atherosclerotic disease. In the heart attack group, patients who were fully adherent had a significantly lower risk of major events than those who did not strictly follow their medication regimen. The study specifically focused on patients who were prescribed statins and angiotensin-converting enzyme (ACE) inhibitors. The financial costs were also less severe in the fully adherent group, as researchers noted the greater likelihood of hospitalizations for those who did not follow their physician's recommendations. The difference in financial costs and event risks were even greater between the the atherosclerotic disease patients who did not adhere fully to their doctor's treatment plan and those who didn't. Researchers acknowledged that there are often very good reasons why some individuals can't or don't stick with their treatment plans. The number of pills a person must take daily, the costs of medications, whether the patient lives alone, and other health problems can all interfere with strict adherence. The researchers also stressed the importance of physicians working more closely with their patients to develop strategies that will improve adherence in the long term. If you have trouble paying for your medications or having difficulty taking them, talk with your doctor. There are many programs that can help patients with the costs of their medications. Likewise, there are therapies to help with swallowing problems and products to help people take the right number of pills each day.

**GALLSTONE DISEASE MAY INCREASE YOUR RISK OF CORONARY HEART DISEASE**

A history of gallstone disease may put you at higher risk for developing coronary heart disease, according to a study published recently in the American Heart Association journal *Arteriosclerosis, Thrombosis and Vascular Biology*. Gallstone diseases is one of the most common gastrointestinal disorders. It shares many of the same risk factors as coronary heart disease, including diabetes, obesity, high cholesterol, high blood pressure and a poor diet. In an analysis of seven studies involving more than 840,000 people, researchers found that a history of gallstone disease was linked to a 23 percent increased risk of developing heart disease. The researchers emphasized that anyone with gallstone disease should be particularly aware of his or her heart health and should work to minimize or control all risk factors. Interestingly, even people with gallstone disease who were otherwise healthy and did not have risk factors such as hypertension, diabetes, were also at higher risk for heart disease. The risks of developing heart disease were about the same for men and women with gallstone disease.

OMEGA-3 FATTY ACIDS FROM FISH OIL MAY HELP HEALING AFTER HEART ATTACK

Taking high-dose supplements of omega-3 fatty acid supplement from fish oil may help improve heart function and reduce scarring after a heart attack, according to research published in the American Heart Association journal *Circulation*. Following a heart attack, the shape of the heart and its ability to function can change. This process, known as remodeling, is linked with poor outcomes and could eventually lead to heart failure. While cardiac rehab and a heart-healthy lifestyle can often help improve cardiovascular health after a heart attack and extend life, there are few proven therapies that can truly improve healing and prevent adverse remodeling. Previous studies have touted the benefits of fish oil, both from dietary sources and supplements, but the mechanisms by which omega-3s actually aid the heart were unknown. In the OMEGA-REMODEL clinical trial, patients took either a placebo or a dose of four grams of omega-3 fatty acids for six months. Compared to those taking the placebo, heart attack patients who took the omega-3 supplements experienced significant reductions in remodeling and in a measurement of scarred connective tissue formation in the part of the heart that was not damaged during the heart attack. Researchers said that omega-3 fatty acids allow the heart to contract better and reduce scarring in the undamaged region of the heart—an area that can often suffer in the wake of a heart attack. ■

How to Work with a Dietitian to Achieve a Heart-healthy Lifestyle

Dietitians can help with meal planning, nutrition education, weight control, and be a resource for questions about heart and diabetes health.

Calories, sodium, cholesterol, healthy fats, unhealthy fats...there's a lot to consider when you're trying to develop a more heart-healthy eating plan. If you need some help in that department, you may want to turn to a dietitian for help.

Your doctor may have even suggested working with a dietitian, or you learned some about how dietitians work in cardiac rehab. Dietitians work with heart patients in a variety of settings, though they all have the same goal of helping individuals adopt a heart-healthy eating strategy and an overall lifestyle that will improve their cardiovascular health, says dietitian Katherine Patton, RD, LD, with Cleveland Clinic's Preventive Cardiology & Rehabilitation Section.

"Here at Cleveland Clinic we have dietitians who work inpatient (for patients who are admitted to the hospital), as well as outpatient," she explains. "For example, in the Preventive Cardiology Clinic where patients see their cardiologist, in the same office there is a dietitian who will see patients. There are also private practice dietitians who provide nutrition therapy to heart patients."

How to Get Started

If your doctor doesn't refer you to a registered dietitian (RD), you may be able to refer yourself. Talk with your doctor about it, and investigate whether the nutrition counseling program at your local hospital or private dietitians would be the best option for you. Some dietary services are covered by insurance, but if you're not eligible, keep in mind that the per-visit sessions are usually priced reasonably if you're paying out of pocket.



A dietitian can help you work out a healthier eating plan and educate you about nutrition, weight management, cholesterol and blood pressure control.

The first session involves a lot of information gathering: weight history (highest weight, lowest weight, usual body weight, goal weight); previous weight loss/diet strategies (previous diets, plans, programs or education); and diet recall.

"We obtain typical day-to-day eating habits, food frequency, likes and dislikes," Patton says. "That's followed by education on cholesterol-lowering and blood pressure-lowering strategies, carbohydrate counting, how to read a nutrition facts label, and meal plan development. Then you go through some goal setting and summarize everything you covered."

Throughout the Program

Subsequent sessions address goals that were established at the initial consult.

Patton says your dietitian will go over with you whether the goals are being met, not met, partially met, and will address questions and concerns you have. "This may require clarification or education on a new topic," she says. "We'll review any recent lab values to assess if dietary interventions have had a positive or negative impact. Often we have to establish new or modified goals."

In between sessions, you have

"homework" to help you meet your goals and simply to become more educated about a heart-healthy diet. Among the assignments is keeping a food journal, either on paper or with a computer or smartphone application. By tracking your food intake, you can often get a clearer picture of what aspects of your diet and lifestyle need attention.

Other work during the program involves becoming a smarter consumer and approaching shopping with an eye on heart health.

"They start reading nutrition facts labels to assess saturated fat, sodium, and carbohydrate content," Patton says of her patients. "They start measuring portions. They start eating more consistently breakfast, lunch, dinner and snacks if need be. They eat out less often and eat more at home."

If the program is going well, most heart patients start increasing their intake of fruits and vegetables, while consuming fewer sugary drinks and foods with lots of added sugar.

Frequency and Finishing

The number and frequency of sessions with a dietitian varies considerably, Patton says. "It's often dependent on how often they come to our clinic to follow up with the cardiologist or nurse practitioner (NP)," she says. "When they come to see a doctor or NP, they schedule follow-up with the dietitian also, which could be every three, four or six months. Some patients who want to focus on weight loss will come once per month."

Once you feel you've transitioned into a healthier way of eating and living, you may put things on hold with your dietitian. Patton says it's common for that relationship to be left open, which means you can resume sessions as circumstances dictate.

"A patient may achieve weight loss goals or lower cholesterol and blood pressure to within normal limits, but a few years down the road things may change and the doctor or nurse practitioner will refer a patient to see the RD again," Patton says. 📌



Laugh More to Give Your Heart More to Smile About

The cardiovascular benefits of laughter are more valuable than you think.

“Laughter is the best medicine” may be the oldest health cliché around, next to “an apple a day keeps the doctor away.”

But there is plenty of truth in the idea that laughing actually has medicinal value. And the heart is one of the main recipients of that joyful prescription.

“The benefits of laughter cannot be understated,” says Cleveland Clinic cardiologist Benicio Barzalai, MD.

“Laughter leads to an immediate reduction in the body’s negative response to stress and causes the blood vessels of the body—including the heart—to increase blood flow as needed.”

Better Blood Flow

When you laugh, your brain pro-

duces beta-endorphins, which are chemicals that trigger the release of nitric oxide. This compound dilates your blood vessels, which increases blood flow.

Nitric oxide is also helpful in protecting the heart from inflammation and in inhibiting the formation of cholesterol plaque on artery walls, according to the American Heart Association.

Laughter may also help reduce the production of stress hormones, such as cortisol and epinephrine. Stress can cause blood vessels to constrict, limiting the flow of blood.

Boosting Immunity

Laughter increases the number of immune cells and infection-fighting

WHAT YOU CAN DO

- Find video clips online of comedians. Take time to watch your favorite funny TV shows and films, or look for some titles that are new to you.
- Attend a comedy club, or look for a laughing meditation or laughing yoga class. Being around others who are laughing can make it easier to laugh yourself.
- Spend more time around funny people, or talk on the phone with friends or relatives who make you laugh.

antibodies, which can result in a stronger immune system.

Laughing during the day may also help you sleep better at night. And that can be a boost for your overall health.

While laughing certainly can’t take the place of a good diet, regular exercise and taking your medications, it may complement those steps and put a smile on your face in the process. 📌

Quitting Smoking at Any Age Improves Cardiovascular Health

Your heart and lungs benefit no matter what age you kick the habit.

If you’re a lifetime smoker, you probably know all too well the great difficulty of trying to quit, and you may already be dealing with the health consequences of cigarettes. But if you think that it’s too late to experience any real health benefits from quitting, you’re wrong.

Research shows that within hours of quitting, blood pressure, pulse rate and oxygen levels in the blood all improve. And within a couple of days, many damaged nerve endings start to repair themselves, while smell and taste sensations improve. The irritability and anxiety



Once you stop smoking, the health of your heart and circulatory system starts to improve. Benefits can be seen regardless of age, but quitting sooner is always better.

that can often accompany quitting usually peaks at around 48 hours after quitting, so getting through the first few days is often the biggest hurdle.

As much as anything, quitting cigarettes can help you live longer.

The greatest benefits are achieved if you quit by age 40, but quitting at any age can extend your life and help you avoid problems such as lung cancer, emphysema and atherosclerosis (hardening or stiffening of the arteries).

“We have always counseled patients to quit smoking to avoid these negative consequences,” says Cleveland Clinic vascular surgeon Lee Kirksey, MD. “We have very compelling evidence that patients who make the prudent decision can effectively add years to their life expectancy.”

Ask for Help

There are more effective and lasting products, therapies, and support programs available to help people quit than ever before. Talk with your doctor about what might help you. Successfully quitting, at any age, takes some assistance. Turn to what has worked for so many others. 📌



Poor Sleep Can Raise Your Risk of Heart Disease

Your sleep habits are closely connected to your heart health.

In their younger years, women are at much lower risk of developing coronary artery disease (CAD) than men. But after menopause, when the protective effects of estrogen disappear, the likelihood a woman will develop CAD accelerates rapidly.

How well do you sleep? If you are one of millions who have trouble falling asleep, staying asleep or getting enough sleep, you may be at increased risk for heart attack and stroke.

Poor sleep habits are intimately connected with cardiovascular disease. In one study of 130,000 adults, those who did not sleep well an average of three nights per week were 98 percent more likely to have coronary artery disease, 80 percent more likely to have had a heart attack and 102 percent more likely to have had a stroke than sound sleepers.

For women, the risk is highest with obstructive sleep apnea, a major sleep disorder. But sleeping too few hours a night, or having trouble staying asleep due to restless legs syndrome, can also impact heart health.



Poor quality sleep or an insufficient amount of sleep can be a risk factor for stroke, heart attack and generally worsening cardiovascular health.

of heart disease and type 2 diabetes. The response is significantly strong in women.

Compared with people who sleep six to nine hours a night, those who get six hours of sleep or less show higher levels of three inflammatory markers that influence the development of cardiovascular disease: fibrinogen, interleukin-6 (IL-6) and C-reactive protein (CRP).

Less than six hours of sleep a night and sleep that is frequently interrupted also increase the risk of stroke.

The Perils of Sleep Apnea

People with obstructive sleep apnea (OSA) stop breathing when excess soft tissue in the back of the mouth

collapses during sleep, blocking their airway. This causes them to awaken suddenly, often with a gasp. It can happen hundreds of times a night, preventing them from getting deep, restful sleep.

Excess weight increases the risk of OSA, so weight gain that can accompany menopause often triggers it. Women with OSA are also more likely than men to also have insomnia, depression or an underactive thyroid.

OSA leaves people feeling unrested, unrefreshed and sleepy during the day. Worse, OSA increases the risk of developing an aggressive form of atherosclerosis that increases the risk of heart attack by 30 percent within five years. As OSA worsens, it also doubles the risk of sudden cardiac death. Any degree of OSA is a significant risk factor for stroke in men, but only severe OSA is associated with stroke in women.

In severe OSA, apnea episodes occur hundreds of times a night, causing blood oxygen levels to drop. This stresses the heart, blood vessels and lungs. The risk for developing high blood pressure, pulmonary hypertension and arrhythmias rises. Insulin production and glucose metabolism are interrupted, potentially leading to type 2 diabetes.

Restless Legs Syndrome

Restless legs syndrome (RLS) produces creepy-crawly sensations in

See Sleep on page 8...

How Poor Sleep Hurts Arteries

Everyone has occasional sleepless nights. No one remembers them fondly. So it should be no surprise that chronic sleeplessness causes tremendous psychological distress. Such stress triggers inflammation in the arteries that can increase the risk

ALSO IN THIS ISSUE

- **Fitness:** Finding it hard to exercise with heart failure? Here's why you should try it.
- **Awareness:** 9 Keys to Surviving—and Thriving—After a Heart Attack
- **Ask the Doctor:** Why didn't I get a clot-buster for my stroke?... Is niacin no longer advised for cholesterol control?... How does endometriosis affect heart health?

Finding It Hard to Exercise with Heart Failure?

Here's why you should try anyway.

Heat failure is often the result of a chain of events that starts with a heart attack or high blood pressure. Lifestyle issues—obesity and lack of exercise among them—can cause or aggravate the problem.

There are two kinds of heart failure. Women tend to develop heart failure with preserved ejection fraction (HFPEF). In this form, the heart ejects a normal amount of blood with each beat, but cannot refill with blood properly. Patients with the syndrome tend to be hospitalized frequently and have limited physical ability due to shortness of breath. Eighty percent of patients with HFPEF are obese.

Treating with Lifestyle Changes

HFPEF is hard to treat with medications, but diet and exercise can help relieve symptoms.

Many people with heart failure are afraid to exercise. It seems wrong—even dangerous—to suggest that exercise might benefit a weakened heart. But exercise makes the heart stronger. Unfortunately, shortness of breath often makes exercising difficult.

Diet is another matter. Because patients with heart failure actually fare better when they carry a few extra pounds, the effect of diet on this population is rarely studied. Finally, a paper published in January 2016 provided guidance on this important issue.

Encouraging Results

The study randomized 100 obese women with HFPEF to one of four groups: diet alone, exercise alone, diet plus exercise or no treatment at all. The diet consisted of three heart-healthy meals a day prepared by dietitians.



Light yard work or other exercise can often help relieve heart failure symptoms.

Exercise routines were individualized and supervised, but generally involved walking for one hour on a treadmill three times a week. Exercise intensity was gradually increased as the ability to exercise (exercise capacity) rose.

At the end of 20 weeks, the women who had either dieted or exercised found their ability to exercise before becoming short of breath had increased significantly.

But those who had dieted and exercised also dropped 10 percent of their weight—much more than any other group—and increased their lean body mass.

Who, Me? Yes, You

With medications unlikely to relieve shortness of breath, the ability to increase your exercise capacity may be the key to keeping you out of the hospital or nursing home.

If you think a diet and exercise program might be more than you can do on your own, check you local hospital for a cardiac exercise program. Your quality of life may depend on it. And don't forget that everyday activities, such as yard work or housekeeping—anything that gets you up and moving—can be considered helpful and healthy exercise. ❤️

Learn to Love Exercise: Any Amount is Better Than None

A sedentary lifestyle can lead to heart attack or heart failure. The good news is that after a heart attack, physical activity may reduce your risk of dying.

A study of postmenopausal women in the Women's Health Initiative was revealing. For those who sat for less than eight hours a day, every one-hour increase in sitting after their heart attack increased the likelihood of dying by 11 percent.

The more they moved, the more benefit they gained. It wasn't necessary for these women to become athletes: Doing whatever they were able was beneficial. As their exercise capacity increased, so did the amount of time spent moving about.

Over time, some achieved the equivalent of 150 minutes of moderate-to-intense exercise a week. Eight years after their heart attack, these women had a 57 percent lower risk of dying from any cause, an 83 percent lower risk of coronary artery disease and a 67 percent lower risk of dying from heart disease. Those who took up walking had a 49 percent lower risk of death, a 78 percent lower risk of heart disease and an 88 percent lower risk of dying from it.

"If patients can reduce their sitting time after a heart attack and move more, or even replace sitting with light-to-moderate physical activity, they would see great benefits," say Leslie Cho, MD, director of Cleveland Clinic's Women's Cardiovascular Center. ❤️





9 Keys to Surviving— and Thriving—After a Heart Attack

*Take charge of your life to prevent
another cardiac event.*

Nearly 3 million women in this country have survived a heart attack, only to find their lives will never be the same. Unless they make changes that will alter the natural course of their heart disease, more than 25 percent of them will die within a year.

A major study found that 96 percent of heart-attack risk in women can be attributed to 9 modifiable risk factors: smoking, high blood pressure, diabetes, waist-to-hip ratio, diet, physical activity level, alcohol use, psychosocial factors and plasma apolipoproteins (a type of fat in the blood). Almost half of women have three or more of these risk factors before their heart attack.

If you have had a heart attack, you should be motivated to make some changes that could prevent another event. We list 9 things you can do to help you survive—and thrive—after your heart attack.

1 Stop Smoking.

You've heard it before, but if you like to smoke, you ignored the message. Smoking is the single most important preventable cause of heart attack in women. Get help to quit—it will increase your chances of success. As soon as you quit smoking, your risk of heart attack will start to drop. Within 10 to 15 years, it will equal that of a nonsmoker.

2 Lower Your Blood Pressure.

Hypertension is a major player in heart attack in women.

High systolic blood pressure (the upper number) triples the risk of dying from heart disease. Take medications prescribed to keep your blood pressure below 135 mm Hg. It may take some trial and error, and more than one medication may be needed, but your efforts will pay off.

3 Choose Foods Wisely.

Too many calories and a diet high in saturated fats and triglycerides can cause obesity and type 2 diabetes. Both conditions triple or quadruple the risk for heart attack. If you need help revising your diet or making healthy food choices that your family will embrace, ask your doctor to refer you to a dietitian. One or two sessions may be all you need.

4 Seek Help for Depression or Other Emotional Stress.

There is growing evidence that emotional stresses and psychological factors play a role in causing heart attacks in women and determining their outcome. Depression alone doubles the risk of heart attack. More recently, physical and sexual abuse in childhood were found to influence the development of heart disease in women. If you feel depressed or stressed, ask your doctor for advice. Counseling or medications can help lower your risk of heart attack while improving your quality of life.

5 Move It or Lose It (heart muscle, that is).

Regular exercise is one of the best things you can do for your heart. (See “Learn to Love Exercise” on page 6.)

6 Stop hormone therapy.

After a first heart attack, hormone therapy appears to increase the risk of a second heart attack in postmenopausal women. If you can tolerate the hot flashes, stop hormone therapy. If you can't, try to take a periodic break from the hormones.

7 Take a Statin.

A daily statin can lower the likelihood of a second heart attack or death from heart disease. If it causes muscle aches, talk with your doctor about switching the type of statin you take or moving to a lower dosage. Other solutions to side effects include taking the medication every other day. Also, if your cholesterol gets under control, it's because of the statin. It's not a signal that you can stop taking it.

8 Take Medications as Directed.

Your doctor will prescribe several medications to reduce the likelihood of developing a heart attack-causing blood clot and relax the heart muscle. Take these medications as directed for as long as recommended. If they make you uncomfortable for any reason, tell your doctor. Taking them may save your life, and stopping them abruptly without permission may trigger a rebound heart attack or other complication.

9 Complete a Cardiac Rehabilitation Program.

If you are referred to cardiac rehab, take advantage of it. For various reasons, too many women fail to enroll or fail to complete a course. These programs of supervised exercise not only strengthen the heart and vascular system, but include dietary guidance, medication education, and even stop-smoking advice if that applies to you. Women who complete cardiac rehab after a heart attack report significant improvement in health and quality of life, feel better mentally and physically and enjoy the camaraderie. ❤️

Women's Heart Advisor
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Have a general question about women's heart health for Dr. Cho?

E-mail it to CCFWomensHeart@aol.com.

We value comments from our readers, but we regret that we cannot answer each question personally.

IN COMING ISSUES

Breast cancer treatments and how they affect heart health.

10 things women should know about their heart.

Healthy and unhealthy fats.

Q When I had a heart attack, I was treated with angioplasty and a stent. Why didn't they give me a clot-buster, like they did my husband?

A Clot-busting medications like tPA are powerful drugs that are highly effective in breaking up blood clots causing heart attacks or strokes. In heart attacks, however, whether you are a man or a woman, these drugs are not as effective as angioplasty and stenting—a treatment we call percutaneous coronary intervention (PCI). PCI is much better than tPA. PCI also lowers the risk of intracranial bleeding. That's why standard heart-attack protocol for both men and women calls for opening the artery with PCI. If further work is needed, the patient may undergo another PCI or coronary artery bypass grafting at a later date.

Q I've used niacin and a statin for years to control my lipid levels. At my last visit, my doctor told me that the FDA no longer recommends niacin. Why?

A Niacin has a modest effect on lowering "bad" LDL-cholesterol levels, but has been prescribed to raise "good" HDL cholesterol. Fenofibric acid has little effect on LDL, but can raise HDL and lower triglycerides. These products were thought to be complementary

to statins, which are powerful LDL-cholesterol-lowering drugs. But three new studies of niacin plus a statin, as well as fenofibric acid plus a statin, have shown no benefit in lowering the risk of heart and stroke beyond what a statin alone can offer. Therefore, the FDA decided there is not enough good data to support the claim that lowering triglycerides or raising "good" HDL levels in patients who are taking statins is beneficial. They have moved to withdraw their approval of products that combine niacin or fenofibric acid with a statin. Talk with your doctor about the need to continue taking niacin.

Q My daughter has endometriosis. Why would her gynecologist advise her to see a cardiologist?

A Rather new research has revealed a strong connection between endometriosis and coronary artery disease (CAD). A study published earlier this year found that endometriosis raises the risk of CAD by 62 percent overall and 400 percent in women aged 40 and younger. Although the connection has not been completely explained, both diseases are characterized by the presence of chronic inflammation. Seeing a cardiologist now will allow your daughter to determine what steps she may need to take to prevent CAD from developing or worsening. ❤️

Sleep... *continued from page 5*

the legs that are only relieved by moving them. In middle-aged women, RLS is associated with a rise in blood pressure. The more nights a month RLS is experienced, the greater the risk. Severe RLS may also increase the risk of stroke.

Cardiovascular Risk Factors

Middle-aged adults who sleep less than seven hours a night are more likely to experience a rise in systolic blood pressure that, over time, culminates in hypertension.

Too little sleep also increases the risk of diabetes. People who sleep five hours a night or less are at highest risk, but the risk is still elevated in those who sleep up to six hours. The increased risk is likely due to a decrease in metabolic rate, increase in blood glucose level after eating and poor insulin secretion, which can result in a

weight gain of more than 10 pounds a year and trigger diabetes.

Speaking of weight gain, it appears that too little sleep creates the desire for high-carbohydrate junk foods, just like marijuana does.

What You Should Aim For

Poor sleep is not a normal aspect of aging. However, it does become more common as we age, due to the greater likelihood of taking a medication that causes insomnia or developing a painful condition that interrupts sleep.

The American Academy of Sleep Medicine recommends adults up to age 64 get seven to nine hours of sleep a night, and adults age 65 and up sleep seven or eight hours. If you have trouble getting this much restful sleep a night, or feel sleepy in the daytime, tell your doctor.

You might benefit from seeing a sleep specialist. ❤️

Know the Risks of Sedentary Time and How to Avoid Them

Recent research highlights the heart risks associated with too much sitting down time, but a little exercise daily may help a lot.



Too much sedentary time is unhealthy for your heart, muscles and outlook. The solution is easy. Get up and get moving. A walk, bike ride, swim, or even house cleaning or yard work will help.

on work schedules or physical limitations.

A study published recently in *The Lancet* suggests that one hour of physical activity can

offset a day of sitting down. And while some exercise is better than none, Crawford says a daily one-hour workout should be accompanied by activity throughout the day.

“A good tip is for every two hours of sitting (working, watching TV, driving), you should get up and walk a few minutes,” he suggests. “If you have difficulty walking, even progressively tightening your muscles from the ankles up to the waist can help circulate the blood.

Other things you can try include:

- Ankle/calf muscle pumping (rock your feet from heels to toes)
- Leg extensions (bend your knee to extend your foot out parallel with the ground)
- Hip flexing (put your arms/hands out above your knees, then raise your knees to touch your hands)
- Stand in place and march
- Arm circles
- Arm reaches above the head
- Deep breathing exercises. ❏

There have been several studies in recent years exploring the cardiovascular risks associated with a sedentary lifestyle and periods of prolonged sitting. A statement released by the American Heart Association in August, for example, makes the argument that too much sedentary time could be considered an independent risk factor for heart disease, stroke and diabetes.

A separate study, published in *Circulation*, noted that sitting and watching TV for five or more hours a day significantly raises your risk of developing a pulmonary embolism—a blood clot that forms in the leg and travels to the lungs, where it can put a strain on the heart muscles and lungs.

Sedentary doesn’t just mean a lack of exercise. It refers to long periods of little or no movement.

“Too much sedentary time leads to increased weight, weakness in muscles, arthritis, diabetes, high cholesterol and

hypertension,” says Michael Crawford, manager of the Cardiac Rehab Program at Cleveland Clinic. “This increases our risk of cardiovascular disease.

“Anything that is designed to be in motion but stays stationary for long periods of time eventually begins to break down,” he says. “Take a look at abandoned cars, boats, other machinery and what do they look like? There’s rust, corrosion, and suboptimal performance in the pumps, tubes, air exchange, electronics and other various mechanisms. Now think of our bodies. We are designed to move with muscles (mechanisms), tubes (blood vessels), nerves (electronics), lungs (air exchange) and heart (pumps). If our bodies are not being used, over time, they will begin to deteriorate.”

How and Why to Move More

The obvious solution is to be more active, but that isn’t always easy, based

Exercise, Separate From Weight Loss, May Help Prevent Diabetes

Individuals with pre-diabetes may find regular exercise has protective benefits that may lower their odds of developing full-blown diabetes.

If your blood glucose levels are elevated to the point at which you are considered to have pre-diabetes, regular exercise may prevent you from advancing to diabetes, even if you don’t lose weight. That was among the findings in a report released recently by the Diabetes Prevention Program (DPP) and its 12-year extension, the

DPP Outcomes Study. Researchers found that exercise, independent of weight loss, helped many people avoid diabetes. Exercise seems to help the body use insulin more effectively in reducing circulating glucose. Insulin helps cells absorb glucose for use as energy when you’re active.

While weight management is still a

key strategy in controlling blood glucose, Cleveland Clinic endocrinologist and diabetes expert Betül Hatipoğlu, MD, says staying active is essential.

“I always tell my patients to exercise,” she says. “Diet and weight loss are important, but diabetes prevention cannot be done without exercise. I explain this to my patients by showing them how being insulin resistant helps the body to hang on to fat. With each exercise session, you unlock the closed doors and help your body mobilize the fat by improving insulin resistance and utilize glucose and fat more efficiently. You have to improve energy use to get the best results.” ❏

Blood Thinners Key to Preventing Stroke from Atrial Fibrillation

With five options available, the oldest drug might be the best one for you.

If you have ever felt your heart racing or jumping, you have experienced the symptoms of atrial fibrillation (afib). It's a distressing—even frightening—sensation that usually resolves in a few seconds. But if it lasts more than several days or returns from time to time, it can increase your risk of stroke five-fold.

“In afib, the heart pumps weakly in an uncoordinated fashion. This can cause blood to pool in the left atrium and form a clot. If a contraction should send the clot into the bloodstream, it can lodge in one of the smaller arteries in the brain, block blood flow and cause a stroke,” explains neurologist Efrain D. Salgado, MD, Director of the Stroke Center at Cleveland Clinic Florida.

Although a racing heart is symptomatic of afib, it's possible to have afib and not know it. Sometimes, the arrhythmia is discovered during a routine EKG. But it's dangerous, whether you feel the symptoms or not. That's why if you suspect you might have afib, you should tell your doctor right away.



Managing atrial fibrillation and lowering your stroke risk may involve taking one or more medications. Ask your doctor what's right for you.

Anticoagulants

The risk of stroke from afib can be lowered by taking blood thinners (anticoagulants). These drugs don't actually thin the blood: They slow the rate at which the blood coagulates, or clots.

For decades, this task has been handled by warfarin (Coumadin, Jantoven). It does the job, but is not a convenient drug to take. The dose must be titrated, meaning gradually raised over time until the optimal anticoagulation level is achieved. After this, frequent blood tests are neces-

WHAT YOU CAN DO

Doctors add up CHA2DS2-VASc points to determine the risk of stroke. The higher the score, the greater the risk:

- Congestive heart failure (+1)
- Hypertension (+1)
- Age over 75 (+2)
- Diabetes (+1)
- Stroke or TIA history (+2)
- Vascular disease (+1)
- Age 65-74 (+1)
- Female (+1).

sary to ensure the right level of anticoagulation is maintained.

Convenience is the primary reason the newer blood thinners are challenging warfarin. Dabigatran (Pradaxa), apixaban (Eliquis), rivaroxaban (Xarelto) and edoxaban (Savaysa) eliminate the need for titration and frequent blood testing. But there are reasons warfarin is sometimes a better choice.

“We consider several patient characteristics when prescribing a blood thinner, primarily kidney function. Some anticoagulants can be used by patients with kidney disease, and some cannot,” says Cleveland Clinic heart rhythm specialist Oussama Wazni, MD.

Patients have a say in the matter, too. When they learn the difference in price between warfarin and the newer blood thinners, the inconvenience of frequent blood testing doesn't look so bad after all.

“The newer drugs are very expensive and can be prohibitive if they are not covered by insurance,” says Dr. Wazni.

Living with Blood Thinners

The primary reason warfarin levels need to be monitored is to make sure your blood does not get so

continued on bottom of page 11



Anticoagulant drugs work by targeting clotting factors, which are proteins involved in the clotting process.



Medications... *continued from page 1*

undesirable result—a so-called drug-drug interaction. It's a common problem in older patients, particularly those with more than one doctor.

"The average Medicare beneficiary with heart failure sees 15 to 23 different providers annually. This simply opens the door for drug-drug interactions," says Dr. Taylor.


A drug-drug interaction may raise or lower your blood pressure too far or make you retain sodium and water. It may prevent one of the drugs from doing its job, or cause a new problem to develop—for example, a cardiac arrhythmia. That's why it's important to carry a list of all drugs you take, both prescription and nonprescription, and show it to every doctor you see.

"Most interactions are not severe, but they can be," says Dr. Taylor.

Work with your doctor

It's rarely an all-or-nothing scenario. "A lot of people take these drugs and don't develop heart failure, or their heart failure doesn't worsen," says Dr. Taylor.

Don't take a chance. Be your own advocate. Ask your



Condition	Drugs
Arrhythmia	dronedaron, flecainide, disopyramide, sotalol
Cancer	anthracyclines and many other agents
Depression	citalopram, lithium
Diabetes	thiazolidinediones, dipeptidyl peptidase-4 inhibitors
Fungal infections	amphotericin B
Hypertension	doxazosin, diltiazem, verapamil, moxonidine
Malaria	chloroquine, hydroxychloroquine
Migraines	ergotamine, methysergide
Pain	prescription and nonprescription NSAIDs
Parkinson's	pergolide, pramipexole, bromocriptine
Platelet disorders	anagrelide, cilostazol
Pulmonary disease	bosentan, epoprostenol, albuterol
Rheumatologic diseases	TNF-a inhibitors

WHAT YOU SHOULD KNOW

If you have heart failure:

- Make sure every doctor has a list of every prescription and OTC drug you take.
- Notify your cardiologist when you start taking any new drug.
- When shopping for an over-the-counter drug, ask a pharmacist about its potential for interacting with the medications you are taking.
- If you are prescribed an NSAID, ask the doctor to call your cardiologist and make sure they are comfortable with your taking that medication.

cardiologist for a list of drugs that can worsen your heart failure. If you have a choice of drugs, take the one less likely to affect your heart.

If it's necessary for you to take a drug on the list, have an honest discussion with your doctor.

"Your doctor needs to determine the risk the drug will affect your heart, and weigh that risk against your need for the drug," says Dr. Taylor. 📌

Blood thinners... *continued from page 10*

thin as to cause unwanted bleeding. Fortunately, warfarin and dabigatran have reversal agents to restore the blood's clotting ability. Antidotes for the other anticoagulants are being developed.

If you take any anticoagulant, it will be harder to stop the bleeding from a cut, and a fall may cause internal bleeding. So you'll need to watch your step. Otherwise, you'll have no restrictions on activity.

Other meds for afib

In addition to an anticoagulant, you will be prescribed other medications.

One is a rate-control agent, such as a beta-blocker or a calcium-channel blocker. "These prevent the heart from beating too fast in afib," says Dr. Wazni.

The other is an anti-arrhythmic agent to help your heart maintain a normal rhythm.

Make Sure You Are Protected

Doctors use a formula to gauge the risk of stroke. If your risk for stroke is low, you may be prescribed daily aspirin or aspirin plus clopidogrel (Plavix). These antiplatelet drugs help prevent clots in a different way. But they do not provide sufficient

protection for patients at higher risk of stroke.

A study of 430,000 patients in the April 2016 *JAMA Cardiology* found that many patients leave the hospital after an afib diagnosis without the proper prescription for blood thinners. Most importantly, the researchers found that fewer than half the patients at high risk were given the medications they need to prevent stroke. Don't allow this to happen.

"If you have afib, don't hesitate to ask your doctor about your stroke risk and verify that you are taking the best medication to prevent stroke," says Dr. Wazni. 📌



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My primary care physician is conservative when it comes to treatment, but my cardiologist (I have 2 coronary artery stents) is more aggressive. They also disagree about my blood pressure and blood sugar. I'm at the higher end of normal for both and my primary physician says I'm doing fine. My cardiologist wants to really get those numbers down. How should I handle their different approaches?

The fact that you have already had coronary stents places you at higher risk for recurrent heart attack. Being aggressive to control factors which contribute to this future risk, including cholesterol, blood pressure and blood sugar, is appropriate. You did not mention your actual blood pressure or blood sugar levels and whether or not you have been diagnosed with diabetes. Remember that even if blood pressure is not significantly elevated, if you had a heart attack prior to the stents or have heart muscle dysfunction, medications such as beta blockers and ACE inhibitors or ARBs help to prevent heart attack and heart failure in addition to lowering blood pressure.

If you have diabetes, ACE inhibitors and ARBs may protect kidney function even if blood pressure is well-controlled. Similarly in your case low-dose aspirin and statins (even if cholesterol is not significantly elevated) would be recommended. Drugs are prescribed not just to treat the numbers but the underlying extent of heart disease and future risk. This may be why your cardiologist wants to be more aggressive with medication. I would ideally like to see your blood pressure under 130/80 and blood sugar measurements as close to normal levels as possible. If this is not achieved on your current therapy combined with an appropriate diet and exercise program or if you have suffered a heart attack, have reduced heart muscle function or diabetes, certain medications offer preventive benefits.

If you have a good rapport with your primary care physician do not hesitate to address

these differences of opinion directly and request that your physicians speak with each other to help come up with the best approach.

I have had a heart attack and I am on a statin medication for my cholesterol. I have a low HDL cholesterol (HDL-C). Should I be on a medication to raise my HDL?

The relationship between HDL-C and cardiovascular disease (CVD) has been known for many years. In population studies higher levels are associated with lower risk: for every 1 mg/dL increase in HDL-C there is a 2 to 3% decrease in CVD risk. Even on statin therapy recurrent CVD events can occur and are more common in those with the lowest HDL-C levels. Therefore there is interest in testing strategies to raise HDL-C with hopes of further reducing CVD events. Niacin, fibrates and investigational drugs called CETP inhibitors have been tested in clinical trials to determine if the HDL-raising properties of these drugs would further reduce cardiac events.

So far, in groups well-controlled on statin therapy, these added medications have not shown further benefit and in fact may have some detrimental effects. In certain subpopulations, those with low HDL-C associated with high triglycerides, treatment with niacin or fibrates may be beneficial, but routinely using medications to raise isolated low HDL-C or when cholesterol levels are otherwise well controlled on statins has not been proven effective. Research continues, particularly investigating therapies not just to boost HDL-C levels but to improve the function of HDL and its ability to clear cholesterol from the tissues. Until newer treatments are identified, lifestyle interventions including regular aerobic exercise (associated with 5-10% increase in HDL-C), weight reduction (1 mg/dL increase for every 6-7 pound weight loss) and discontinuation of cigarette smoking (5 to 10% increase) are the best ways to improve HDL-C and further reduce cardiovascular events. ■■

IN COMING ISSUES

New initiative seeks to cut second heart attack risks

Anemia and heart health.

Better blood pressure control preserves kidney health.

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