

# Coronary Artery Disease

Take Control,  
Live Better





# Coronary Artery Disease

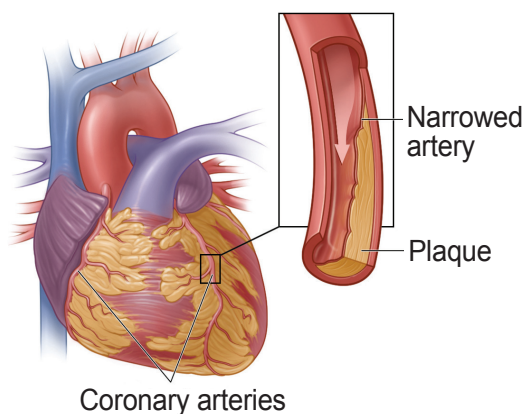
## What is coronary artery disease?

Coronary artery disease means that the blood vessels that bring blood to the heart (coronary arteries) have become narrow. They get narrowed by plaque, which is a buildup of fat and other substances.

When you have this type of heart disease, your arteries cannot bring as much blood and oxygen to your heart. Poor blood flow can cause chest pain or other symptoms when your heart has to work harder. If the blood flow gets completely blocked, a heart attack happens.

With poor blood flow over time, your heart may get weaker and not pump as well as it should. This can lead to dangerous heartbeat problems and heart failure.

You may not feel sick at all until your heart disease gets a lot worse. Some people have coronary artery disease for years without having chest pain or any other symptoms. This may make it hard to feel like you need to pay attention to the problem.



Plaque is a buildup of fat and other substances in your arteries.

But try not to ignore the fact that you have heart disease, even if you feel fine right now. The goal is to keep feeling good for a long time. You have a better chance of doing that if you start living healthier today. **What you do can make a big difference.**

## How to avoid a heart attack

For many people with heart disease, their biggest fear is a heart attack. To avoid a heart attack and live longer and better, you will need to take steps to improve your health. The good news is that you are in control.

Here are things you can do now to get healthy and stay that way:

- ▶ If you smoke, quit.
- ▶ Eat healthy food. Eat more fiber, and cut down on cholesterol, saturated and trans fats, and salt.
- ▶ Try to get some exercise throughout the week. Start with short walks or any other activity you enjoy.
- ▶ Take any medicines your doctor prescribes, such as medicines to control high blood pressure or high cholesterol.

## When to call the doctor

### Call 911 if:

- ▶ You have symptoms of a heart attack. These may include:
    - o Chest pain or pressure, or a strange feeling in your chest.
    - o Sweating.
    - o Shortness of breath.
    - o Nausea or vomiting.
    - o Pain, pressure, or a strange feeling in your back, neck, jaw, or upper belly, or in one or both shoulders or arms.
    - o Lightheadedness or sudden weakness.
    - o A fast or irregular heartbeat.
- After you call 911, the operator may tell you to chew 1 adult-strength aspirin or 2 to 4 low-dose aspirin. Wait for an ambulance. Do not drive yourself.
- ▶ You typically use nitroglycerin to relieve angina and if one dose of nitroglycerin has not relieved your symptoms within 5 minutes. Do not wait to call for help.

### Call a doctor if:

- ▶ You have angina more often than usual, or it is worse or different than usual.
- ▶ You have any problems with your medicines.

Knowing how high **your heart attack risk**



is can help you and your doctor make better decisions about your treatment. To find out your risk for having a heart attack in the next 10 years, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **J965** into the search box.





# Symptoms

## Dealing with angina

Many people with coronary artery disease have no symptoms. But others may feel chest pain or pressure or other symptoms when their hearts have to work harder. These symptoms are called **angina**.

Angina is a signal that your heart is not getting enough oxygen. The pain or pressure usually is mild at first and gets worse over several minutes. You may feel it in your chest, back, neck, jaw, upper belly, shoulders, or arms.

If you have had angina for a while, you may be able to predict almost exactly how much activity will cause your symptoms. You know what things cause your angina, and you know what to expect and what to do when it happens. This is called **stable angina**.

Watch for changes in your angina. If your angina is worse or lasts longer than usual, or if you start getting it more often, it could mean that your heart disease is getting worse. Call your doctor right away. You may need a checkup or tests, or your doctor may need to change your treatment.

## Tips for reducing angina

- ▶ If an activity causes angina, stop and rest. Avoid doing heavy activity that causes symptoms.
- ▶ Ease into your day. Warm up slowly before activity.
- ▶ Give yourself time to rest and digest right after meals.
- ▶ Change the way you eat. Eat smaller meals more often during the day instead of two or three large meals.



- ▶ See if family members or hired help can assist with heavy chores such as shoveling snow or mowing lawns.
- ▶ If your job involves heavy labor, think about changing the kind of work you do.
- ▶ If you are not taking nitroglycerin for angina, ask your doctor if it could help you.

## What to do when you have angina

- ▶ Stop what you are doing. Sit down and rest.
- ▶ If your doctor has prescribed a medicine like nitroglycerin, take one dose.
- ▶ If you are not feeling better within 5 minutes, call 911. Stay on the phone. The emergency operator will tell you what to do next.

## If you take nitroglycerin

Nitroglycerin is a medicine that opens blood vessels to improve blood flow. This relieves angina and reduces how hard the heart has to work.

Your doctor will tell you when to use your nitroglycerin. You may need to take it:

- ▶ To relieve sudden angina.
- ▶ Before stressful activities that can cause angina, such as exercise.

**Do not take erection-producing medicines** such as Cialis, Levitra, or Viagra if you are taking nitroglycerin. Taking any of them with nitroglycerin can be very dangerous. If you get angina and have taken one of these erection-producing medicines, tell your doctor so that you are not given nitroglycerin or a similar medicine.

To learn more about when and how to



use nitroglycerin, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **R390** into the search box.

## Watch for Drug Interactions

Always tell your doctor about all the medicines you're taking, including over-the-counter medicines and supplements. This will help reduce the risk of drug interactions and side effects.



# Treatment

Treatment for coronary artery disease focuses on taking steps to manage your symptoms and reduce your risk for heart attack and stroke. Some risk factors you can't control, such as your age and family history. Other risk factors you can control, such as high blood pressure, high cholesterol, and smoking.

Lifestyle changes are the first step and can help lower your risks. But you may also need to take medicines or have a procedure to improve blood flow to your heart.

## Medicines

Medicines can help control your symptoms and can lower your risk for heart attack and stroke. Some of the medicines that are

often prescribed for people with coronary artery disease include:

- ▶ Statins to help lower cholesterol.
- ▶ Beta-blockers or ACE inhibitors to lower blood pressure.
- ▶ Aspirin or other medicines to reduce the risk of blood clots.
- ▶ Nitrates to relieve angina.

If you take medicines, take them on a schedule and take the correct dose. Taking medicines properly can help you prevent a heart attack or stroke.

## Angioplasty and bypass surgery

If your chest pain or other symptoms keep getting worse even though you are taking

### Did You Know?

No matter what treatment you receive, you'll still need to make changes in the way you eat and how much you exercise. These changes, along with not smoking, will give you the best chance of living a longer, healthier life.



medicines, you may need procedures to improve blood flow to your heart. They are also done when the coronary arteries are blocked during a heart attack. These procedures include angioplasty with or without stenting and coronary artery bypass graft surgery.

**Angioplasty** is used to open narrowed arteries. It isn't major surgery. During angioplasty, the doctor guides a thin tube (called a catheter) into the narrowed artery and inflates a small balloon. This widens the artery to help restore blood flow. Often a small, expandable tube called a stent is placed to keep the artery open. A drug-eluting stent slowly releases a medicine that prevents the growth of new tissue. This helps keep the artery open.

**Bypass surgery**, which is major surgery, may also be used if arteries are narrowed. It uses healthy blood vessels to create detours around the narrowed arteries.

## Cardiac rehabilitation

Your doctor may want you to take part in a cardiac rehabilitation (rehab) program after you have had angioplasty or bypass surgery. But even if you haven't had one of these procedures, you can still benefit from the program.

A cardiac rehab program can help you make lifestyle changes. In cardiac rehab, a team of health professionals provides education and support to help you make new, healthy habits.

In cardiac rehab, you will learn how to:

- ▶ Manage your heart disease and other problems such as high blood pressure and high cholesterol.
- ▶ Exercise safely.
- ▶ Eat a heart-healthy diet.
- ▶ Quit smoking.
- ▶ Reduce stress and depression.
- ▶ Get back to work sooner and safely.

Taking part in a cardiac rehab program can help lower your chance of having a heart attack or stroke. It may also reduce your need for medicine and improve your overall health.

Your doctor may talk to you about



having an **angiogram**.

This can be a very useful test to show how serious your coronary artery disease is and how best to treat it. But there are also reasons why you may not need or want an angiogram. For help deciding, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **J525** into the search box.

Ask your doctor about joining a



cardiac rehabilitation (rehab) program. Many people who have heart disease find this type of program helpful. To learn more about cardiac rehab, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **F634** into the search box.



# Heart-Healthy Eating

A heart-healthy diet can help you keep your heart disease from getting worse. A heart-healthy diet means that you:

- ▶ Eat more fruits, vegetables, whole grains, and other high-fiber foods.
- ▶ Try to limit salt (sodium).
- ▶ Choose foods that are low in saturated and trans fats and cholesterol.
- ▶ Stay at a healthy weight by balancing the calories you eat with how much physical activity you get.
- ▶ Eat more foods that are high in omega-3 fatty acids, such as fish.

To learn other easy ways to add heart-healthy foods to your diet, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **F869** into the search box.



## Heart-Healthy Tips for Your Diet

| Instead of:   | Try this:   |
|---|---|
| Frying your food  | Bake, broil, steam, poach, or grill your food.  |
| Eating convenience foods (canned soups, TV dinners, frozen pizza) | Eat fresh fish, skinless chicken, fruits, and vegetables.   |
| Using butter, shortening, or oil high in saturated or trans fats  | Use products low in saturated and trans fats, such as olive oil, vegetable oil, canola oil, or chicken broth. |
| Using salt, soy sauce, or BBQ sauce                               | Use salt-free spices.   |
| Eating all of the meat product                                    | Trim fat from meat and skin from chicken.   |
| Eating egg yolks  | Eat egg whites or egg substitutes.  |



## Easy ways to add fruits and veggies

- ▶ Add fresh or frozen berries or a sliced banana to breakfast cereal or yogurt. Put apple slices in oatmeal.
- ▶ Have a glass of juice with breakfast. One 6-ounce glass is a serving. (Don't depend on juice for all of your fruit servings, though. Most juices have a lot more sugar and calories than plain fruits.)
- ▶ Add lettuce, tomato, cucumber, and bell peppers to sandwiches. Get pizza with veggies—try mushrooms, peppers, spinach, or broccoli.
- ▶ Add vegetables to soups, stews, and stir-fries. Puree them in a blender or food processor first if it makes them easier to use.
- ▶ Keep carrots, celery, and other veggies handy for snacks. Buy them already sliced and ready to eat if it makes you more likely to eat them.
- ▶ Have a salad with dinner every night. Make sure it's mostly vegetables, rather than mostly cheese, croutons, and salad dressing.
- ▶ Have fruit for dessert. If a piece of fruit doesn't seem like dessert to you, try baked apples or pears with cinnamon, or have fresh berries or melon with some vanilla yogurt.
- ▶ Make a fruit smoothie. Blend bananas, berries, or oranges with fat-free or low-fat yogurt or milk.

## Get more whole grains

You can add whole grains to your diet by choosing:

- ▶ Whole wheat bread instead of white bread.
- ▶ Whole-grain crackers and cereals.
- ▶ Oatmeal.
- ▶ Brown rice instead of white rice.
- ▶ Whole wheat pasta.

Don't be afraid to try other whole grains like bulgur, barley, and quinoa.

## Choose healthy fats

There are healthy “good” fats and unhealthy “bad” ones. For many people, the least healthy types of fats—saturated and trans fats—make up too much of their diet.

So it's best to choose foods and oils that have healthy fats, such as:

- ▶ Fish (salmon, mackerel).
- ▶ Nuts and seeds, and soybeans.
- ▶ Vegetable oils (canola, olive, peanut, corn, safflower, sunflower, walnut, flaxseed).
- ▶ Avocados and olives.

It's best to avoid unhealthy saturated and trans fats as much as you can. These fats can be found in whole milk, whole-milk cheese, whole-milk yogurt, butter, margarine, red meat, and processed and packaged foods like cookies, crackers, and chips.



# Stop Smoking

Quitting smoking is one of the best things you can do if you don't want to die of heart disease. Your risk of dying from a heart attack or stroke will start to go down very soon after you quit. In time, your risk will be about the same as that of someone who has never smoked.

If you have had angioplasty or bypass surgery to improve blood flow to your coronary arteries, those arteries will be less likely to get narrowed again if you quit smoking.

You will also feel better after you quit smoking. Your angina may get better. You will have more energy and breathe easier. And you may feel more hopeful about your future and have less fear of getting cancer or dying suddenly from heart disease.

## Smoking and heart disease

Smoking is bad for everyone, but it is even worse for people with coronary artery disease.

- ▶ It makes your blood cells more likely to form clots. This can cause a heart attack or stroke.
- ▶ It can cause a sudden narrowing in your coronary arteries, which can reduce the blood flow to your heart.
- ▶ It can make your heart beat in an odd rhythm.
- ▶ It lowers "good" (HDL) cholesterol and lets "bad" (LDL) cholesterol build up in your arteries more easily.
- ▶ It reduces how much oxygen your blood can carry to your heart and the rest of your body.

Smokers have a higher risk of heart



attack compared to nonsmokers. To see the difference based on your age and gender, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **X395** into the **search box**. The good news is that stopping smoking can lower your risk, even if you've smoked for a long time.



Quitting smoking is not easy. Many people have to try several times before they quit for good. But the point is that they do finally succeed. And with the right help, so can you.

## Thinking about quitting?

If you're thinking about quitting, it may help to know that you don't have to quit smoking through willpower alone.

There are:

- ▶ Treatments that can help with the physical effects of giving up smoking and nicotine.
- ▶ Resources that can help with the emotional side of quitting.

## Nicotine replacement and medicines

When you try to stop smoking, you may have trouble sleeping, strongly crave nicotine, or feel grumpy, depressed, or restless. These symptoms of withdrawal are at their worst during the first week or so after you quit, but they may last up to a few weeks.

Treatment can reduce withdrawal symptoms and help you quit. You can try:

- ▶ Nicotine replacement products, such as gums, patches, inhalers, sprays, and lozenges. They help your body slowly get

used to less nicotine until you do not need it at all. You can buy these products without a prescription.

- ▶ Medicines that don't have nicotine but can help you cope with cravings and mood swings. Your doctor can prescribe them for you.

## It's not just the nicotine

If you are like many smokers, smoking is part of your daily routine. You enjoy it. It's relaxing. When you quit smoking, you have to give all that up (or at least find something to replace it).

The good news is that you don't have to do it alone. Lots of ex-smokers have found support in:

- ▶ Stop-smoking programs (call your health plan, your local hospital, or the American Lung Association).
- ▶ Telephone "quitlines," such as 1-800-QUIT-NOW (1-800-784-8669).
- ▶ Online quit groups.
- ▶ Support groups, such as Nicotine Anonymous.
- ▶ Counseling from doctors, nurses, or therapists.

## Did You Know?

Smokers who quit cut their risk of heart attack in half within 2 years. In time, their risk of death from a heart attack is the same as if they had never smoked at all.

Using nicotine replacement



(gums, patches, inhalers, sprays, lozenges) and medicines makes it much more likely that you will quit for good. For help in deciding whether to try them, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **O231** into the search box.



# Get Active

If you are not active right now, starting to exercise may seem hard. But it's worth it. You don't have to do a lot to make a difference.

Being more active can:

- ▶ Help you control your weight and blood pressure.
- ▶ Make your heart stronger and reduce symptoms like chest pain.
- ▶ Help you avoid a heart attack or stroke and live longer.
- ▶ Reduce stress and give you more energy.

Walking is a great, easy way to get exercise. If your doctor says it's safe, start out with some short walks, then gradually make the walks a little bit longer.

If you don't enjoy walking, you might try swimming, biking, or water aerobics. Your doctor can help you make a plan. Use the form on the next page to record your goals and other details.

**The important thing is to try to get some exercise throughout the week.** Even a little bit of exercise can help if you have not been active at all.

Need help getting active?



For some ideas that might work for you, go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented) and enter **V167** into the search box.

## Be Safe When You Exercise

See your doctor before you start exercising. He or she may want to do a test to see how much activity your heart can handle.

If your doctor has prescribed nitroglycerin for you, be sure to have it with you whenever you exercise. Stop what you're doing right away if you have any chest pain or start to feel bad.



# Exercise Planning Form

Special tests I need before I begin an exercise program (if any):

Exercises to help with my chronic health conditions:

Exercises I should not do:

Should I change the time I take my medicines?

Should I take my pulse when I exercise? If so, what range (target heart rate) is best for me?

Warning signs I need to watch for:

Personal supports (like family members or exercise partners) who might help me:

Other questions I have about starting an exercise program:

Physical activities I enjoy or would like to try:

In the beginning, my exercise program will be (what, how often, and how long):

**Long-term goals:** In the next 6 months I will:

- 1.
- 2.
- 3.

**Short-term goals:** In the next few weeks I will:

- 1.
- 2.
- 3.

As you reach your short-term goals, add new ones.



# Coping and Support

## Dealing with depression

There is a link between depression and coronary artery disease. People with heart disease are more likely to get depression. And if they have both depression and heart disease, they may not stay as healthy as possible. They are less likely to take their medicines and get regular exercise. And this may raise their risk of having a heart attack.

Depression causes you to feel sad and hopeless much of the time. It's different from normal feelings of sadness, grief, or low energy. Depression is a medical problem that needs treatment.

## Your doctor can help

If you have heart disease, your doctor will probably ask you some simple questions to check for any symptoms of depression. But if

you think you have symptoms of depression, do not wait to ask for help. Your doctor can help find out if you are depressed and talk to you about your options for treatment. The sooner you know if you are depressed, the sooner you can get treatment and start feeling better.

## Support can help

Whether you are recovering from a heart attack or changing your lifestyle so you can avoid one, emotional support from friends and family is important. Think about joining a heart disease support group. Ask your doctor about the types of support that are available where you live. Meeting other people with the same problems can help you know you're not alone.

# John's Story



For inspiration to exercise, John hasn't had to look far. His father rides his bike daily to prevent another heart attack. John's grandparents and others in his family also had heart disease.

John's doctor told him that his steady weight gain over the years was putting him in danger of heart problems as well. "He said, 'You want to live a long and happy life, right?'" John recalls. "'You've seen what your dad went through?'"

John, a commercial pilot, got that advice as he watched his dad recover from heart surgery in the 1990s. He started riding his bike too. "I followed my father's good example," he says.

He just didn't follow it regularly.

"Over the years, my weight was starting to creep up. I was fooling myself—I was in total denial about how much weight I was carrying," he says.

About 3 years ago, John, now 54, says he realized he had to do more. He was stressed at work. He didn't get enough sleep because his flight schedules changed constantly. He talked

with another doctor who told him that regular exercise would help with stress, sleep, and weight gain.

"You hear the mantra of losing weight, eating better, getting regular exercise, and it finally sank in," John says.

He joined a bike club. Having others to ride with motivated him physically and socially.

"I've made a lot of friends who have the same priorities," he says. No matter what the activity, doing it with a group makes it easier and much more fun, he believes.

He also joined a weight-loss group, which helped him slim down. By watching how he eats and getting daily exercise, he's lost 25 pounds. "I have another 10 to 15 to go. Even my wife says I look good now," he jokes.

He's so keen on the benefits of fitness, he encourages his coworkers and friends. "My mantra is 'Find a way to exercise.' It has made all the difference in my life."

*John's story reflects his experiences as told in an interview. The photograph is not of John, to protect his privacy.*



# Action Plan

Work with your doctor to fill out the information below.

|  |                                  |
|--|----------------------------------|
| Name:  | Doctor's Phone Number:           |
| Doctor's Name:   | Other Emergency Contact Numbers: |
| When should I call my doctor?  | Next doctor visit date:          |
| Call 911 if:   |                                  |
| List of my medicines:  | When to take my medicines:       |
| Does my doctor recommend any changes to my medicines?  |                                  |
| What do I need to check or keep track of? ( <i>healthy eating, physical activity, weight</i> ) |                                  |
| Do I need to change my diet or activities?   |                                  |



When you see this symbol, look for the four-digit code in bold print. Then go to [www.healthwise.net/patiented](http://www.healthwise.net/patiented). Type the code into the search box and get helpful, interactive decision-making tools and much more!



© 2018 Healthwise, Incorporated. Healthwise, Healthwise for every health decision, and the Healthwise logo are trademarks of Healthwise. This information does not replace the advice of a doctor. Healthwise disclaims any warranty or liability for your use of this information. Any references to commonly used brand-name medications or products are for example purposes only and are not endorsements. Illustrations and images are copyrighted by Healthwise or are under license and may not be reproduced.