

## Exercising Like Your Life Depends on It

*Activity is a key defense against a heart attack—one of the greatest risks of diabetes*

Having diabetes boosts your risk of a heart attack. Diabetes and heart disease have some of the same risk factors. These include high blood pressure and low HDL (“good”) cholesterol. Yet, there is also good news. Exercise can help your heart even if you’ve had a heart attack in the past.

### Many Benefits

There is no magic bullet to prevent heart disease. But, exercise is the next best thing. Here are some ways that regular exercise improves heart health:

- It lowers blood pressure.
- It raises levels of HDL (“good”) cholesterol.
- It cuts LDL (“bad”) cholesterol.
- It brings down levels of blood fats (“triglycerides”).
- It reduces inflammation. This process plays a role in both heart disease and stroke.
- It aids in weight control.
- It battles belly fat.
- It boosts mood. People who have diabetes are more likely to be depressed. So are those who have had a heart attack.

If you already have heart disease, exercise has extra benefits:

- It helps prevent future heart problems.
- It helps cut back on pain and discomfort from hardening of the arteries.
- It even helps you to live longer.

Think of exercise as a free magic pill. And all of the side effects are good for you!

## Getting Started

You may be able to start moderate exercise with just your doctor's OK. This is likely true if you've never:

- suffered a heart attack or stroke
- had heart surgery
- had symptoms of heart disease, like chest pain

But if you want to do more intense exercise, you should have an [exercise stress test](http://www.onetouch.com/articles/healthyexercise) first. (Read more at: [http://www.onetouch.com/articles/healthyexercise.](http://www.onetouch.com/articles/healthyexercise))

When you exercise, your heart should beat at a certain rate. This is called your target heart rate. Here's how to figure it out:

- Estimate your maximum heart rate. To do this, subtract your age from 220. A 55-year-old person would have an estimated maximum heart rate of 165 beats per minute (BPM).
- Multiply your maximum heart rate by 0.65. This is the low end of your target heart rate (Ex.  $165 \times 0.65 = 107$  BPM).
- Multiply your maximum heart rate by 0.80. This is the high end of your target heart rate (Ex.  $165 \times 0.80 = 132$  BPM).
- So, a 55-year-old would have a target heart rate of 107 to 132 BPM.
- It's easy to find your BPM. Just take your pulse for 10 seconds. Then multiply by 6.

How do you know if you are working hard enough? How can you tell if you are working too hard? Try the "talk test." While exercising, you should be able to talk with ease. But, you should not be able to belt out a song.

Moderate exercise is just fine for most people. Vigorous exercise, such as running, can make you a better athlete. But, it can also raise the risks of heart attack and injury.

## **Choose the Right Activities**

A good choice is brisk walking. Want to join an exercise program? Your best bet is one that does both aerobic exercise and strength training. Aerobic exercise includes:

- walking
- swimming
- biking

Strength training works your major muscle groups. The exercises often use weights. You should be able to lift a weight comfortably 12 to 15 times.

Exercise programs may meet a few times a week. But, you should try to be active every day.

## **Stay Active after a Heart Attack**

If you've had a heart attack, you can and should safely exercise. You should talk to your doctor first. The right kind of exercise could protect your heart from more damage.

There are special programs for people who have had a heart problem ("cardiac rehabilitation"). Such programs can be tailored to your needs. People in these programs tend to live longer. That's because they are less likely to die from another heart problem.

Exercise also helps with blood vessel health outside of the heart. One study looked at people who had pain in the legs with exercise. They walked for half an hour three times a week. Then they felt less pain during exercise. And they had better blood flow to their calves.

## Top Tips to Start Exercising for Heart Health

1. **Check with your doctor.** This is key if your blood sugar levels are usually high (200 to 300 mg/dL).
2. **Schedule exercise.** Put workout times on your calendar. Don't accept schedule conflicts! To gain benefits, you should be active at a moderate pace at least half an hour most days of the week.
3. **Get a workout buddy.** It's harder to skip exercise when someone is relying on you.
4. **Start slowly.** Set small, doable goals. For example, walk for half an hour three days a week for a month. Then you can build from there.
5. **Join a program.** If you've had a heart attack, consider an exercise-based rehab program. Such programs often do both aerobic exercise and strength training.
6. **Adjust insulin.** Talk to your doctor to learn how to adjust the dosage before you start an exercise program.

## Know the Signs and Symptoms of Heart Disease

Common signs and symptoms include:

- Pain or tightness in the chest
- Dizziness
- Palpitations (irregular heartbeat, skipped beat or a flip-flop feeling in the chest)
- Weakness
- Shortness of breath or extreme fatigue
- Burning sensation in the chest or upper abdomen
- Women's symptoms can be different from men's. Women may have more gastrointestinal symptoms. And some don't have chest pain.

**\*\*Authored by Johns Hopkins University and Johns Hopkins Health System\*\***