



Patient education: Diabetes and heart disease (The Basics)

Written by the doctors and editors at UpToDate

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Can diabetes cause heart disease?

Yes. If you have diabetes, you have an increased risk of something called "coronary artery disease." This is when the arteries that supply blood to the heart get clogged with fatty deposits ([figure 1](#)).

Coronary artery disease increases your risk for serious problems like heart attack and stroke. But there are things that you can do to help lower this risk.

Is there a test for heart disease?

If you have diabetes, your doctor will do regular blood tests to check your:

- Blood sugar
- Blood pressure
- Cholesterol levels

They might also do other tests to check your heart. These include:

- Electrocardiogram ("ECG") – This measures the electrical activity in your heart.
 - Stress test – This is also called an exercise test. You might be asked to run or walk on a treadmill while you also have an ECG. Physical activity increases the heart's need for blood. This test helps doctors see if your heart is getting enough blood. If you cannot walk or run, your doctor might give you a medicine to make your heart pump faster.
 - Echocardiogram – This uses sound waves to create images of your heart as it beats.
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What can I do on my own to protect my heart?

If you have diabetes, there are things you can do to lower your risk of heart disease. If you already have heart disease, these things can also help keep it from getting worse.

You should:

- Manage your blood sugar – This includes taking your diabetes medicines as instructed.
- Manage your blood pressure and cholesterol – High blood pressure or cholesterol increases your risk of heart attack or stroke. Improving your diet and exercise habits can help with this, too. Your doctor might also prescribe medicines.
- Take [aspirin](#), if your doctor recommends it. If you have coronary artery disease or had a heart attack or stroke, your doctor might prescribe daily low-dose aspirin. Some people also take another medicine to help prevent blood clots.
- Make lifestyle changes, like:
 - Eating healthy food
 - Getting regular physical activity
 - Quitting smoking, if you smoke
 - Losing weight, if you have excess body weight
 - Limiting alcohol
- Getting enough sleep

What other treatment might I have?

If medicines alone do not work, some people with heart disease also need a procedure.

Examples include:

- Stenting – The doctor puts a thin plastic tube into the blocked artery, and uses a tiny balloon to open the blockage. Then, they place a tiny mesh tube called a "stent" inside the artery to hold it open. The doctor prescribes medicines to prevent blood clots from forming in the stent.
- Bypass surgery – This is also known as "coronary artery bypass grafting" ("CABG"). The doctor removes a piece of blood vessel from another part of the body. Then, they reattach the blood vessel above and below the area that is clogged. This re-routes blood around the clog and lets it get to the part of the heart that was not getting blood.

If you need treatment for heart disease, your doctor will talk to you about your options.

When should I call the doctor?

Call for emergency help right away (in the US and Canada, **call 9-1-1**) if you think that you might be having a heart attack.

Symptoms of a heart attack might include:

- Chest pain, pressure, or discomfort – The pain can be worse with activity, like walking up stairs. People with diabetes might be less likely to have chest pain with a heart attack than other people.
- Trouble breathing
- Sweating, or cold and clammy skin
- Pain or numbness in the arms, jaw, neck, or back
- Nausea, vomiting, or indigestion
- Fast or irregular heartbeat
- Feeling dizzy, faint, or weak

More on this topic

[Patient education: Type 1 diabetes \(The Basics\)](#)

[Patient education: Type 2 diabetes \(The Basics\)](#)

[Patient education: Coronary artery disease \(The Basics\)](#)

[Patient education: Keeping track of your blood sugar \(The Basics\)](#)

[Patient education: High blood pressure in adults \(The Basics\)](#)

[Patient education: High cholesterol \(The Basics\)](#)

[Patient education: ECG and stress test \(The Basics\)](#)

[Patient education: Diabetes and diet \(The Basics\)](#)

[Patient education: Stenting for the heart \(The Basics\)](#)

[Patient education: Coronary artery bypass graft surgery \(The Basics\)](#)

[Patient education: Type 1 diabetes: Overview \(Beyond the Basics\)](#)

[Patient education: Type 2 diabetes: Overview \(Beyond the Basics\)](#)

[Patient education: Preventing complications from diabetes \(Beyond the Basics\)](#)

[Patient education: Glucose monitoring in diabetes \(Beyond the Basics\)](#)

[Patient education: High blood pressure in adults \(Beyond the Basics\)](#)

[Patient education: High cholesterol and lipids \(Beyond the Basics\)](#)

[Patient education: Type 1 diabetes and diet \(Beyond the Basics\)](#)

[Patient education: Type 2 diabetes and diet \(Beyond the Basics\)](#)

[Patient education: Stenting for the heart \(Beyond the Basics\)](#)

[Patient education: Coronary artery bypass graft surgery \(Beyond the Basics\)](#)

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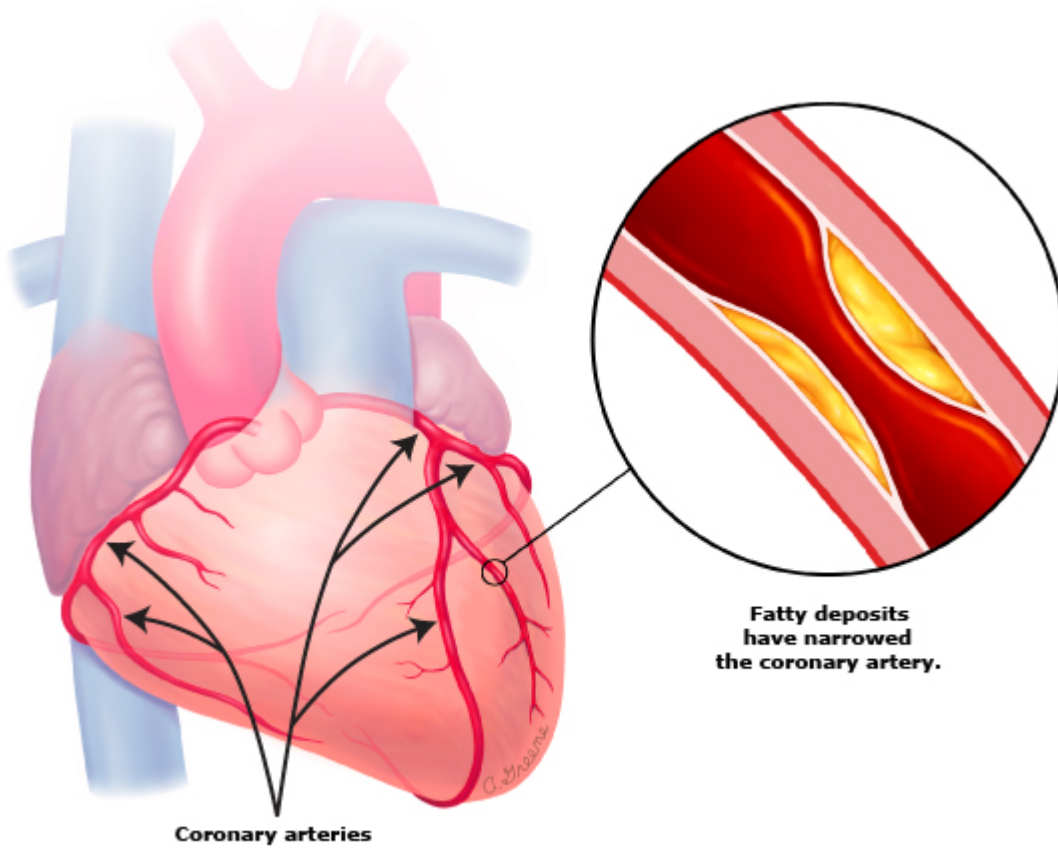
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GRAPHICS

Coronary heart disease



In people with coronary heart disease, the coronary arteries get clogged with fatty deposits called plaques.

Graphic 61785 Version 5.0

