

# Bypass Surgery for Coronary Artery Disease

Your heart pumps blood to your body, but it also uses blood to get oxygen and nutrients so it can stay strong and keep pumping.

The arteries that feed your heart muscle are called coronary arteries.

When you have coronary artery disease, the arteries that feed your heart muscle may become narrowed or blocked.

This can slow or even stop the flow of oxygen-rich blood to the heart muscle, and cause chest pain or a heart attack.

Bypass surgery can help by giving your blood a new path to reach the heart muscle.

Most often, the doctor will start the surgery by making a large cut in the middle or side of your chest and may cut through your sternum—your breastbone—to spread apart your rib cage.

Typically, a heart-lung machine is used during the surgery to circulate the blood through your body, so the doctor can work on your heart.

Your doctor will also cut open the pericardium, which is the sac that protects your heart.

A retractor can be used to keep the heart exposed and give access to the coronary arteries on the surface of your heart.

The doctor removes a healthy blood vessel from another part of your body—such as a vein from the leg—and attaches or "grafts" it to the blocked artery.

Once it's attached, blood flows to your heart through the new, healthy blood vessel and bypasses the blocked part of the artery.

That's why the surgery is called a bypass. You may need more than just one bypass graft.

If so, you may hear your doctor refer to your surgery based on the number of grafts you need—as in a "double bypass" or "triple bypass."

Once your surgery is done, you'll be taken off the heart-lung machine, and your chest will be closed using wire and stitches.

Healing takes time.

And recovery has many steps, including time in the hospital, time at home, and taking part in cardiac rehab.

Everyone heals at their own pace, but it can help when you know what to expect.

And remember to be kind to yourself.