



While organs in your body each have a specific job to do to keep you healthy, they still rely on each other to function well. When one organ isn't working well, it can put stress on other organs, causing them to stop working properly. Your heart and kidneys are two important organs in your body. They work together to keep you healthy. When one is affected, the other is too. In other words, your heart can affect the health of your kidneys, and your kidneys can affect the health of your heart.



### About your heart

The heart is a muscle that pumps blood filled with oxygen to all parts of your body. This job keeps every cell, organ, and system alive within your body. To move blood to each part of your body, your heart relies on your blood vessels. Together, the heart, blood and blood vessels make up a system called "the cardiovascular system." Think of it as a delivery system. The delivery system moves blood from the heart carrying oxygen and nutrients throughout your body and also picks up waste products so that your body can get rid of them.



### About your kidneys

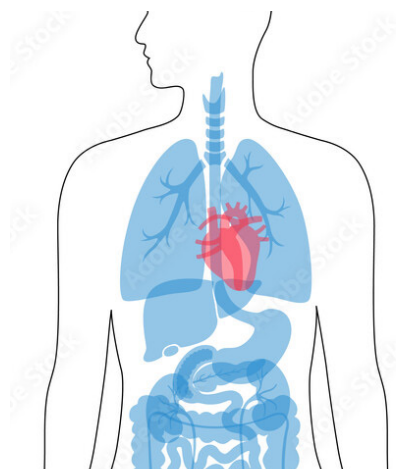
Your kidneys are two bean-shaped organs and are usually about the size of your fist. They are located a little below your rib cage and to the left and right of your spine. Your kidneys are powerful chemical factories and have the following jobs:

- Clean your blood of waste products and extra water
- Help control blood pressure
- Keep bones healthy and strong
- Help make red blood cells
- Keep the balance of minerals in your blood (like sodium, phosphorous, and potassium)

### Heart and kidneys work together

The heart pumps blood filled with oxygen through all parts of your body, including your kidneys. Your kidneys clean the blood, removing waste products and extra water. Without kidneys, your blood would have too much waste and water.

Without your heart, your kidneys would not have the oxygen-filled blood needed to do its many important jobs. Without the help of your kidneys, your heart would be working too hard or would not function at all. A healthy functioning cardiovascular system is important for your kidneys to their job.



## Kidney disease/heart disease connection

These tips can help keep your kidney and heart health on track. You should always speak with your healthcare provider before making any changes to your diet and lifestyle.



- Regular physical activity



- Lose weight if you need to
- Eat less fat



- Keep your blood pressure, blood sugar, and blood fats under control



- Stop smoking
- Reduce stress

Heart disease refers to several types of heart conditions. The most common condition, coronary artery disease, leads to changes in blood flow to the heart, and can cause a heart attack.

## Kidney failure and heart disease

Over time, kidney disease usually becomes worse and can lead to kidney failure. A person with kidney failure will need regular dialysis (a treatment that filters the blood) or a kidney transplant to survive.

Although dialysis is needed because of kidney failure, heart disease is the most common cause of death for someone on dialysis. This is because when kidneys don't function properly, the heart has to work harder to circulate blood, leading to high blood pressure and possibly heart disease.

If you or a loved one needs dialysis, look at these heart-protecting tips:

- Choose foods that are healthiest for your heart and your kidneys. Ask your doctor for a referral to a dietitian who's trained in kidney disease nutrition to understand which foods and beverages are best for you. You can learn more about dialysis and a healthy diet here.
- Regular physical activity helps to lower your blood pressure and improve your heart health. *Moving more doesn't have to be strenuous!* Some great ways to get active are gardening, yoga, or a brisk walk around the block.
- Manage your weight and blood sugar—this can be done with diet and exercise!

Meet with a dietitian to create an eating plan that works for you and your kidneys or check out these resources to help you manage your blood sugar.

## About heart failure

Heart failure is a serious condition in which the heart cannot pump blood as well as it should. It can be caused by other conditions, including arrhythmias (irregular heartbeat), heart valve disease, uncontrolled blood pressure, or damaged heart muscle such as after a previous heart attack. As a result, the rest of the body cannot receive enough blood that is rich in oxygen and nutrients. It does not mean that the heart has stopped beating, but the heartbeat is weaker.

Signs and symptoms of heart failure can include effort intolerance (unable to do physical exercise), trouble breathing, fatigue, swelling (ankles, feet, legs, abdomen, neck), cough, loss of appetite, weight gain, irregular pulse, and/or palpitations (sensation of feeling the heartbeat).

A good way to keep the heart and kidney connection in mind is to remember, what is good for your kidneys is also good for your heart. Keeping up the health of your heart is good for the health of your kidneys.

For more information, contact the National Kidney Foundation

Toll-free help line: **855.NKF.CARES** or email: **nkfcares@kidney.org**