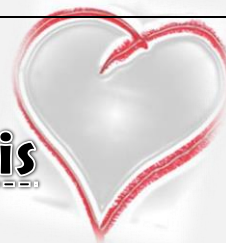




Take Steps to Keep Your Heart Healthy on Dialysis

Excerpted from www.kidney.org



What is cardiovascular disease?

Cardiovascular disease means having problems with your heart and the blood vessels throughout your body, including brain, lungs and legs. Heart and blood vessel disease is common in people with chronic kidney disease (CKD). Over time, the blood vessels that bring blood to the heart and brain can become blocked from a buildup of cells, fat and cholesterol. This reduces blood flow to the heart and brain and can cause heart attacks and strokes.

Do dialysis patients have an increased risk for heart and blood vessel disease?

Yes. Dialysis patients are much more likely than the general population to develop heart and blood vessel disease. This increased risk is related to kidney disease and other health problems like diabetes and high blood pressure. For this reason, it's very important for dialysis patients to follow the necessary steps to help prevent heart and blood vessel problems (see next section). If heart and blood vessel problems occur, patients need to follow their treatment plan carefully to avoid complications like heart attacks and strokes.

Can dialysis patients do anything to help prevent heart and blood vessel disease?

Yes. Take steps to control health problems that can lead to heart and blood vessel disease, especially diabetes and high blood pressure. Follow a healthy lifestyle—eat the right foods, exercise regularly and stop smoking.

Should dialysis patients have tests for heart and blood vessel disease?

Yes. To check how well your heart is working, you should have an electrocardiogram (ECG) when you first start dialysis and then once a year after that. An echocardiogram is done when you first start dialysis.



Here are some steps that can help prevent heart and blood vessel disease. Speak to your doctor about them. The doctor and other members of your health care team will work with you to develop a care plan that meets your needs.

- **Control blood sugar if you have diabetes**

Check your blood sugar as often as your doctor tells you to. Follow your treatment plan of medications, diet and exercise.

- **Keep high blood pressure controlled**

Follow your treatment plan carefully to control high blood pressure. Be sure to follow your fluid and sodium (salt) limits to keep fluid from building up in your body and increasing your blood pressure. Ask your health care team about other steps to help prevent fluid buildup.

- **Reduce high cholesterol levels**

High blood levels of fats like cholesterol increase your chance of developing heart and blood vessel problems. If your levels are too high, you may need to follow a low-fat diet and exercise more.

- **Follow a heart-healthy diet**

Your diet should have the right amount of protein and calories to keep you at a healthy weight.

Your doctor and dietitian may also ask you to:

- **Reduce foods that are high in saturated fats and cholesterol** like eggs, whole milk, cheese and fried foods. Speak to your dietitian for more information.
- **Eat more foods that are rich in heart-healthy omega-3 fatty acids.** These include cold water fish like salmon, albacore tuna, lake trout and sardines, and other foods like flaxseed oil, canola oil and walnuts. If you are on a protein or potassium modified diet, speak to your doctor and dietitian before making any changes in your diet.
- **Increase physical activity**
Be sure to ask your doctor about an exercise program that is right for you. Regular exercise helps you:
 - ✓ Lower high cholesterol levels
 - ✓ Control blood sugar levels if you have diabetes
 - ✓ Reduce high blood pressure
 - ✓ Lose excess weight
 - ✓ Improve the fitness of your heart and lungs
 - ✓ Increase your energy level
 - ✓ Improve emotional well-being.
 - ✓ Treat anemia- Correcting anemia helps to keep your heart healthy.
- **Keep important minerals—calcium and phosphorus—in balance.**
 - ✓ Follow a diet that is low in high-phosphorus foods like cola drinks, dairy foods, dried beans and peas and nuts and seeds. Discuss this diet with a registered dietitian.
 - ✓ Take medications called phosphate binders. These help to keep your blood phosphorus level in a healthy range.
 - ✓ Take an active form of vitamin D if your doctor orders it for you.
 - ✓ Speak to your doctor about taking aspirin to prevent heart attacks

Your doctor may ask you to take aspirin to help prevent heart attacks. Sometimes aspirin can cause bleeding problems. Ask your doctor what signs and symptoms you should look for to check for bleeding problems caused by aspirin.

- **Stop smoking if you are a smoker**

If you are a smoker, ask your doctor about a program to help you quit. Smoking makes you more likely to develop heart and blood vessel disease.

- **Maintain emotional well-being**

At times, dialysis patients may feel depressed, angry or upset. These feelings can make it harder for you to follow your treatment plan, improve your health and return to your normal routine. They may also increase your chance of developing heart disease or of making it worse. It's important to get treatment if you have these feelings. Talk to your dialysis social worker or your doctor to find out if counseling and/or medications may be helpful.



The analyses upon which this publication is based were performed under Contract Number HHSM-500 2013 NW003C, entitled "End Stage Renal Disease Network Organization Number 3", sponsored by the Centers for Medicare & Medicaid Services, Department of Health and Human Services." The conclusions and opinions expressed, and methods used herein are those of the author. They do not necessarily reflect CMS policy. The author assumes full responsibility for the accuracy and completeness of the ideas presented. This article is a direct result of the Health Care Quality Improvement Program initiated by CMS, which has encouraged identification of quality improvement projects derived from analysis of patterns of care, and therefore required no special funding on the part of this contractor.

Ideas and contributions to the author concerning experience in engaging with issues presented are welcomed.