



Keep Your Heart Healthy on Dialysis

What is cardiovascular disease?

Cardiovascular disease (CVD) affects your heart and the blood vessels throughout your body. CVD 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 if inflammatory cells, fat and cholesterol build up inside them. This reduces blood flow to the heart and brain, which can lead to a heart attack or a stroke.

I am a dialysis patient. Do I have a higher risk for cardiovascular disease?

Yes. Dialysis patients have a high risk of developing CVD. This increased risk is related to kidney disease and other health problems like diabetes and high blood pressure. Therefore, it's very important for dialysis patients to follow steps to help prevent heart and blood vessel problems. If problems do occur, you will need to follow your treatment plan carefully to avoid complications like heart attacks and strokes.

What can I do to help prevent cardiovascular disease?

Take steps to control health problems like diabetes and high blood pressure that increase your risk of CVD. Follow a healthy lifestyle: eat the right foods, exercise regularly, and if you smoke, stop. Members of your health care team will help you develop a care plan that meets your needs and that helps reduce your risk of CVD.

Control your 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. The blood pressure target for dialysis patients is less than 130/80 mmHg. Restrict your fluid and salt intake to keep fluid from building up in your body and increasing your blood pressure.

Reduce high cholesterol levels

High cholesterol increases your chance of developing CVD. If your levels are too high, you may need to follow a low-fat diet and exercise more. Your doctor may also prescribe medication to help lower your cholesterol levels.



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 dietician may also ask you to:

- ▶ **Eat less foods that are high in saturated fats and cholesterol like egg yolk, whole milk, cheese and fried foods.**
- ▶ **Eat more foods that are rich in heart-healthy omega-3 fatty acids, such as cold water fish like salmon, albacore tuna, lake trout and sardines. Other good sources of omega-3 fatty acids are flaxseed oil, canola oil and walnuts.**



If you are on a protein- or potassium-modified diet, speak to your doctor and dietician before making any changes in your diet

Increase physical activity

Regular exercise helps you:

- ▶ **Lower your cholesterol levels**
- ▶ **Control your blood sugar levels if you have diabetes**
- ▶ **Reduce your blood pressure**
- ▶ **Lose excess weight**
- ▶ **Improve the fitness of your heart and lungs**
- ▶ **Increase your energy level**
- ▶ **Improve your emotional well-being**



Ask your doctor about an exercise program that is right for you

Treat anemia

CKD patients often develop anemia, or low red blood cell count. This makes you feel tired and can cause the muscle on the left side of your heart to thicken. Anemia can be treated with a hormone called erythropoietin (EPO) and extra iron. Correcting anemia helps to improve your life quality.

Control your blood phosphate levels

It is important to keep important minerals—calcium and phosphorus—in balance. High levels of phosphate in your blood cause calcium to build up in soft tissue, your blood vessels, and the muscles of your heart. This can lead to heart disease, which is the leading cause of death. It is very important to prevent phosphate levels in your blood from getting too high. To keep your phosphate levels low, you may need to:

- ▶ **Limit the amount of high-phosphorus foods like cola drinks, dairy foods, dried beans and peas and nuts and seeds you eat. Discuss your diet with a registered dietician.**
- ▶ **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.**

Stop Smoking

Smoking increases your risk of developing CVD. If you smoke, stop. Ask your doctor about a program to help you quit.



**Institute of Kidney
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Patient Empowerment: A Success Story



Joyce Herzog was the first patient from the Scarborough Hospital (TSH) to go on home hemodialysis (home hemo). She has been on home hemo for over a year now and is a strong supporter of it. However, she remains one of only two patients currently doing home hemo through TSH. She would advise newly-diagnosed end-stage renal disease patients to seriously consider this treatment modality.

Q Was getting kidney disease a surprise to you?

Not at all. I have a long family history of polycystic kidney disease. My mother died of kidney disease and my twin brother was on dialysis for about 10 years before he passed away. I also have a cousin on my mother's side who started dialysis at age 30. I was diagnosed about 30 years ago with polycystic kidney disease, so I always knew that there was a strong possibility that I would end up on dialysis.

Q How long have you been on dialysis?

Altogether, I've been on dialysis for almost three years. That includes hospital hemo, peritoneal dialysis, and home hemo. I've been on home hemo for over a year now, and I love it. It works very well for me.

Q What was it like to be the charter member of the home hemo club at TSH?

It was a very positive learning experience for everyone. The medical staff was absolutely marvelous to work with. They still are. They came to my home to set me up with the machine, and we worked together to make the whole program work. I can still reach someone 24/7 if I have problems with my home hemo.

Q You are very positive about home hemo. What do you like about it?

Lots of things. First of all, it's very convenient. I don't have to travel to and from the hospital. Going to the hospital for dialysis was pretty much a whole-day affair, because by the time I travelled there and had my treatment, the total time was about seven hours, three days a week.

I can do home hemo on my own schedule, still three times a week, and be comfortable in my own home. The process takes about three and a half hours, so it cuts the time needed for the whole process in about half compared to hospital hemo.

Home hemo has given me a really good understanding of what is going on when I do my dialysis and it makes me feel like I'm actively involved in my own treatment.

Q Can you travel while on home hemo?

Yes! My husband and I have been on a 12-day Caribbean cruise since I have been on dialysis! In fact, there were 11 other dialysis patients on the cruise. I had dialysis five times—every second day—on that cruise, and the nurses and the doctor were wonderful. They ran three shifts a day.

My husband and I also get away regularly to our cottage on weekends during the summer. If I start my dialysis early Friday morning, say six o'clock, we can be away by noon and I'm good for the weekend.

Q What advice would you give to CKD patients facing or currently on dialysis?

I think a lot of people don't want to deal with the needles. Everything else about home hemo appeals to them, but having to actually stick themselves with the needles turns them off. My experience has been great, and I would encourage any patient to strongly consider home hemo.

Joyce has taken her need for dialysis in stride. She and her husband, Steve, plan to travel to Puerto Vallarta, México, in March of 2007.

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