Your kidneys remove waste and extra water from the blood in your body. This waste and water then leave your body as urine. Without the kidneys, the waste would keep building up and, over time, you would die.

When the kidneys are not healthy, they have a hard time removing waste from the blood. Chronic kidney disease moves slowly from early stages (stages 1 and 2), which usually have no symptoms, to advanced stages (stages 3, 4, and 5). Stage 5 is called “end-stage kidney disease.” This is because the kidneys can no longer be saved.

**The best care can be hard to choose.**

Usually, people with chronic kidney disease also have other health problems. The most common are diabetes and high blood pressure. Anemia (low iron in the blood), bone disease, and heart disease are also common.

Because kidney disease can cause so many other problems, getting the right care can be complicated. You may need to see many specialists, and for many years. Your disease might get worse even if you are getting careful treatment. You may need dialysis or a kidney transplant when your disease has reached an advanced stage.

If you or a family member have chronic kidney disease, it may not be easy or clear how to choose among the many tests and treatments that are available. You may not even want or need some of them.

This brochure explains two treatments that are offered for chronic kidney disease. You, your family, and your health care provider should carefully talk through the benefits and risks of each.

**Anemia drugs.**

One important decision you may have to make is whether to treat anemia. Anemia is common in people with kidney disease.

Anemia is when you do not have enough red blood cells. Red blood cells carry oxygen to your body. Without enough red blood cells, your body does not get enough oxygen. You will likely feel tired and may have a hard time breathing.
Red blood cells contain hemoglobin. This is a protein with a lot of iron that gives your blood its red color. Your health care provider learns if you have anemia and how serious it is by measuring your hemoglobin level.

If a blood test shows that you have anemia, you will need to decide if you should take drugs to help your body make new red blood cells. These drugs are called erythropoiesis-stimulating agents (ESAs).

ESAs are sometimes used to raise the number of red blood cells, even when a patient does not have severe anemia or symptoms. But research shows that the drugs do not help people with chronic kidney disease live longer. And when they are used aggressively, they can actually raise the risk of death by causing heart failure, heart attack, or stroke.

**Bottom line:** You should consider an ESA only if you have symptoms of anemia, such as feeling tired or short of breath, and you also have a very low hemoglobin level. Very low is under 100g/l.

If you and your health care provider decide to try an ESA, you should take the lowest dose that relieves your symptoms and keeps your hemoglobin level just high enough that you do not need blood transfusions. Tell your health care provider all your symptoms and talk about how they will improve.

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**Deciding whether dialysis is right for you.**

Another important decision you may have to make is whether to have dialysis. This is something you may have to consider if your kidneys get close to failing.

Dialysis takes over some of the things your kidneys normally do, like removing waste and keeping a safe balance of water and salts in your blood. But dialysis is not a good idea for everyone with advanced kidney disease. Dialysis is hard on a person, and many people have to go to a hemodialysis centre at least three days a week. Each treatment session lasts three to five hours, and common side effects of hemodialysis include headaches, nausea, and feeling tired. In surveys of older adults on long-term hemodialysis, over half of them say they wish they had not started the treatment. Many say they only chose hemodialysis because their health care providers wanted them to.

In some cases, dialysis does not relieve your symptoms. It may not help you do your normal activities, stay independent, or live longer. That is especially true the older you are, and if you also have a heart disease or another condition that can shorten your life. In one study of more than 3,000 nursing home residents, more than half died within a year of starting dialysis. Of the people who survived, most felt a sudden drop in their ability to do routine tasks on their own. More information for patients about the options when your kidney fail (transplant, dialysis or conservative care) can be found at [http://www.cann-net.ca/patient-information/educational-tools](http://www.cann-net.ca/patient-information/educational-tools).

**Bottom line:** You should talk with your health care provider, your family, and any other caregivers you have before you decide if long-term dialysis is the right choice for you. Ask your health care provider to tell you all the benefits and risks of dialysis. Ask how well dialysis will manage your symptoms and how it will affect your lifestyle. And ask how your symptoms would be managed if you do not start dialysis.
How can you protect your kidneys?
There are things you can do to slow the progress of kidney disease and prevent complications. Take these steps:

Keep your blood pressure at a healthy level. Keep your blood pressure below 130/80 mm/Hg, or even lower if your health care provider has told you that you have protein in your urine. The two best types of blood pressure drugs for protecting the kidneys are:

ACE inhibitors
- ramipril (Altace® and generic)
- perindopril (Coversyl® and generic)
- enalapril (Vasotec® and generic)

ARBs
- candesartan (Atacand®)
- losartan (Cozaar® and generic)

Keep diabetes under control. If you already have diabetes, try to keep your long-term blood sugars under reasonable control. Discuss with your health care provider.

Exercise. Physical activity can help lower blood pressure, control diabetes, and prevent weight gain. Ask your health care provider about physical activities that would be right for you.

Avoid certain drugs and supplements. Some drugs, vitamins, and herbs can harm your kidneys. Ask your health care provider if anything you’re taking is unsafe. Harmful drugs include certain:
- Antibiotics
- Antivirals
- Pain relievers

Harmful supplements include those with:
- Aristolochia (used for arthritis and edema)
- Wild ginger

Do not smoke. Smoking can double how fast your disease progresses to end-stage kidney failure. If you smoke, talk to your health care provider about programs to help you quit.