

Your Kidneys Aren't Working Properly.

What does this mean? How can you stay healthy?

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This booklet covers:

- The Kidneys: Your body's filtering system
- What happens when your kidneys slow down/stop working?
- Kidney Failure can be managed to keep you healthy
- Your healthcare team



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The Kidneys: Your Body's Filtering System

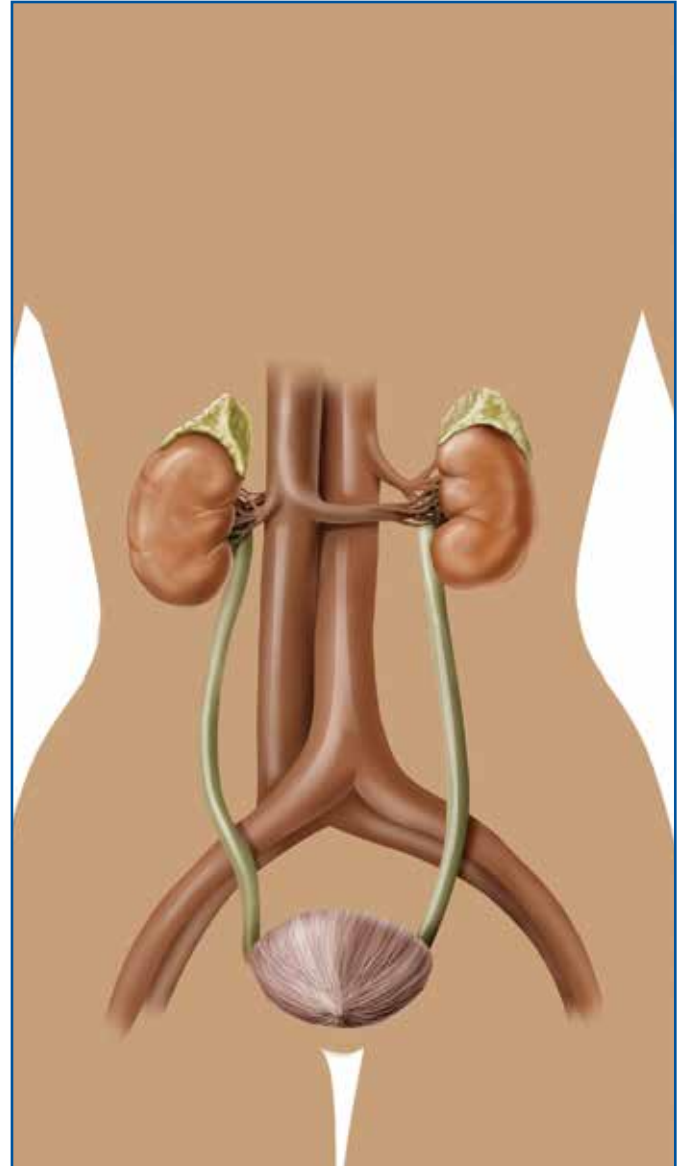
The kidneys play an important role in your health.

Human beings are born with 2 kidneys — one on each side of the backbone just below the rib cage. Shaped like kidney beans, each kidney is about the size of a small fist and weighs about 1/4 pound or 114 grams.

Normal healthy kidneys...

- Clean your blood and remove extra fluid to form urine
- Keep minerals (sodium, calcium, potassium, and phosphorous) in balance
- Help to control blood pressure
- Help to make red blood cells
- Produce Vitamin D to keep bones healthy

All you need to stay off the treatment is one kidney that works at least 20%.



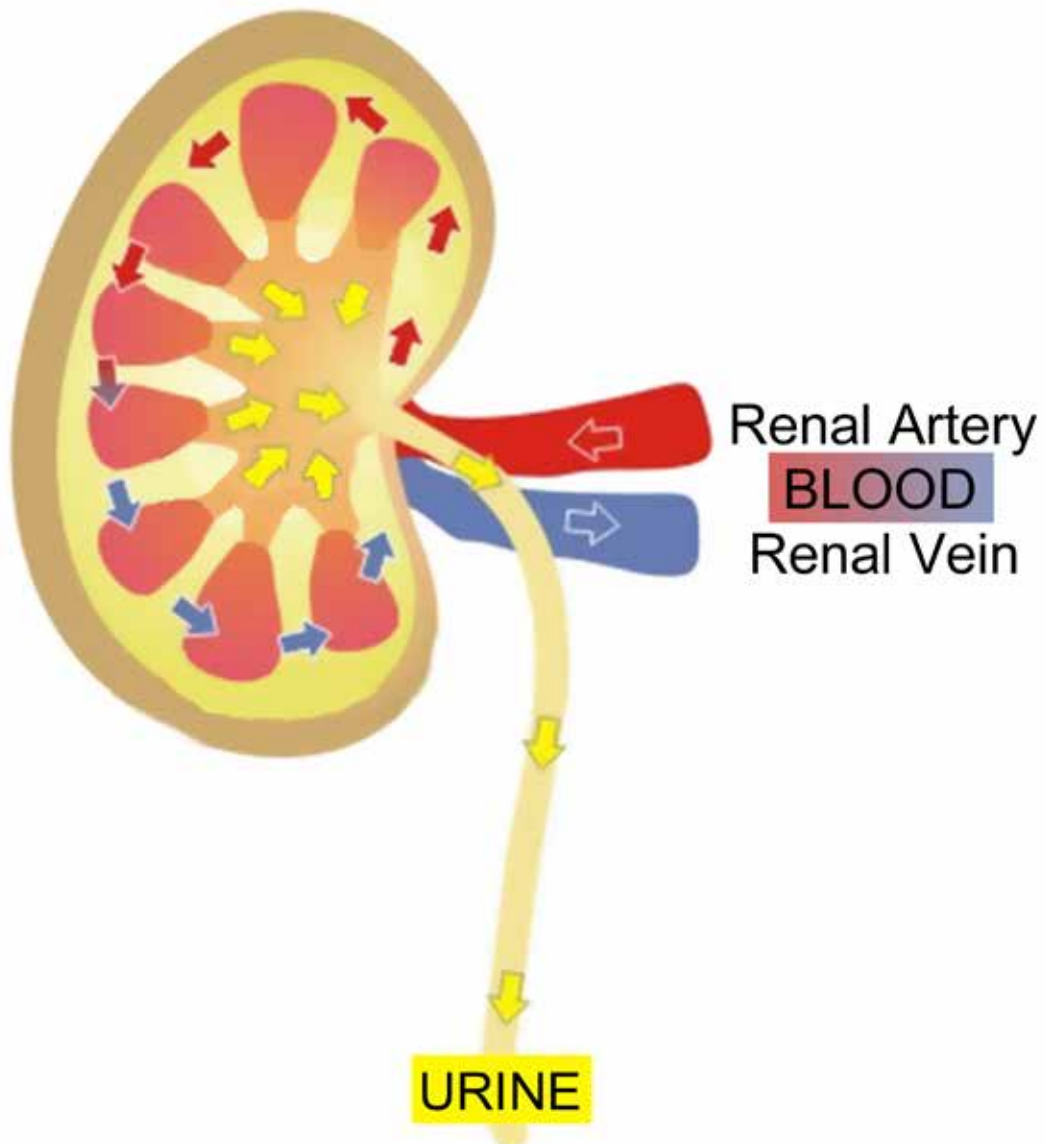
What Happens When Your Kidneys Slow Down or Stop Working?

When your kidneys aren't working properly, you may be developing kidney failure. When this happens, harmful wastes and fluids can build up in your body, your blood pressure may rise, and your body may not be able to make enough red blood cells. Most kidney diseases affect the nephrons. These are tiny filters inside the kidneys that clean the blood.



Types of kidney disease:

- **Chronic kidney failure**
 - a gradual loss of kidney function that results from a long-term disease. This is the more common type of kidney failure and, although it can not be reversed, it can be treated.
- **Acute kidney failure**
 - a sudden loss of kidney function resulting from an injury, disease, contrast dye or blood poisoning. Acute kidney failure can usually be reversed within a few weeks if treated quickly.
- **End-stage renal disease (ESRD)**
 - a condition where the kidneys do not work or only very little kidney function is left.



Adapted from <http://www.healthhype.com/strained-kidneys-meaning-symptoms-diet-and-treatment.html>

What Causes the Kidneys to Stop Working?

Kidney failure can be caused by a number of diseases or conditions:

- **Diabetes** is the most common cause of kidney failure. High levels of blood sugar (glucose) in people with diabetes can damage the small blood vessels in the nephrons and cause the kidneys to fail. **Review your blood sugar levels each time you visit your nurse or doctor. Know your numbers. Strive for “normal” blood sugar numbers.**
- **High blood pressure**, or **hypertension** can also damage the small blood vessels in the filters of your kidneys, causing them to fail. Uncontrolled high blood pressure can make kidney disease progress even faster. Medication, healthy diet, and exercise are ways to keep your blood pressure in a healthy range to protect your kidneys. **Write down your blood pressure each time you visit your nurse or doctor.**

- **Lupus** (a disease of the immune system), **polycystic kidney disease** (multiple cysts in the kidneys), and **glomerulonephritis** (an inflammation of the kidney’s filtering mechanism) are just some of the other diseases than can lead to kidney failure.
- **Injury** or **trauma** from an accident, and **poisons**, such as street drugs or large quantities of certain over-the-counter medicines can result in acute, or sudden kidney failure.



Symptoms You Can Feel When Your Kidneys Aren't Working Properly

Symptoms of kidney failure can vary from person to person. Some people with kidney disease may not feel sick, or they may not notice their symptoms. Often, some people do not feel sick until their kidneys are no longer removing waste. This is why kidney disease is sometimes called a “silent” disease.

As kidney function slows down, most people experience symptoms of **uremia**. Uremia means urea or waste in the blood.

Symptoms include:

- feeling tired and/or weak,
- swelling of the hands and feet,
- shortness of breath,
- appetite loss, a bad taste in the mouth, vomiting, nausea, weight loss,
- difficulty sleeping, itching, muscle cramps, and darkening of the skin.

Be sure to tell your doctor or nurse if you feel any of these symptoms.

Staying Healthy With Your Kidney Function

To remain healthy, it is very important to monitor how slowly or quickly your kidney disease is developing. **Kidney function** is what percentage of your kidneys is still working. You and your doctor will be able to tell by keeping a close watch on your **serum creatinine**, a waste product found in your blood that can be checked with a simple blood test.

People with kidney failure can develop complications such as anemia and bone disease. To stay healthy, it is important to regularly follow up with your healthcare team and have tests that will help find these problems early so the best therapy can be started.



Kidney Failure Can Be Managed To Keep You Healthy

Today, there are a number of treatments for kidney disease, and even kidney failure, that can help you live a healthy, active life. These include medications and treatment procedures designed to slow down your kidney disease, as well as those procedures that can remove waste similar to a normal functioning kidney.

If your kidneys are slowing down, your physician may recommend a treatment that does some of the work of the kidneys called **dialysis** or, eventually, **kidney transplantation**.



Dialysis is a procedure that temporarily removes waste and extra fluid from your body.

One type of dialysis procedure uses the natural membrane of the body (called the peritoneum) as the filter to remove waste and fluid, and is called **Peritoneal Dialysis**.

The second type of dialysis uses a machine and an external man-made blood filter to remove waste from the body, and is called **Hemodialysis**.

Kidney transplantation is a surgical procedure that places a new kidney from a donor into your body.



Remember You Are a Part of a Healthcare Team: You Are Not Alone!

Managing your kidney disease in order to stay healthy is a team effort. Often, you may need to take the lead by asking questions, reporting symptoms, reading on your own, or just reaching out to another team member. Your healthcare team includes doctors, nurses, dietitians, pharmacists, social workers, and psychologists — each with individual responsibilities, but all working together to make sure you get the very best care. Your family and friends also play an important role in helping you and your kidneys stay as healthy as possible.



Stay in Touch with Your Feelings

When learning about a new health problem from your doctor, it is common to experience many feelings, especially if you generally feel well and the news comes as a surprise.

These feelings can range from shock, that perhaps you have been given incorrect facts, to sadness, depression, and anger. Remember, it is very common to feel this way, and you should speak with your nurse and doctor. They can connect you with other members of the healthcare team who can help you to work through these feelings. Also, your healthcare team can connect you with other resources so that you can make decisions that are best for you.



Your Healthcare Team

Nephrologist — a doctor who specializes in kidney diseases. Your nephrologist oversees all the medical care related to your kidneys, including prescribing medications, ordering and evaluating tests, and designing your treatment plan.

Nurse — a registered nurse who specializes in kidney care. He or she works with the nephrologist and healthcare team to coordinate your care, perform tests, and provide education to support you in making informed decisions regarding a treatment plan that is best for you and your family.

Dietician — a renal dietician is a nutritional expert who can provide diet and nutritional advice in order to help you live well with kidney disease. Your dietician may create a meal plan or special diet that will keep your kidneys healthy longer.

Social Worker — this person is a trained counsellor who can provide support and practical advice on living with a chronic illness and adjusting to life with dialysis or transplantation. They can be a resource for information on issues such as finances or transportation.

Pharmacist — a pharmacist works with you and the healthcare team of nurses and doctors to provide education about your medications. They can answer questions about other types of herbal therapies that could be harmful to your kidneys, monitor medication prescriptions for possible drug interactions, and provide suggestions to the team about the best types of medications based on your kidney health at a given time.

Notes

Kidney Resources

There are many resources available to help you learn about your kidney disease and how to best live with it.

Here are just a few:

Kidney Foundation of Canada www.kidney.ca

Canadian Diabetes Association www.diabetes.ca

Heart & Stroke Foundation of Canada www.heartandstroke.ca

AGIR (French kidney patient connection – Québec) www.agir.qc.ca

Thank you to those centres who helped put this material together.

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TH-CKD-01 (CAMP/MG1/15-0024) 1/16