

Must Know Health Info

Health Information from the Experts at Johns Hopkins Medicine



Keeping Kidneys Healthy

Glucose control, heart-healthy habits and medications are the keys

Your risk of kidney disease is higher with diabetes. The National Kidney Foundation reports that for people with type 1 diabetes:

- 30 percent will one day suffer kidney failure

And for people with type 2 diabetes:

- 10 to 20 percent will one day suffer kidney failure

The good news: you can avoid kidney damage. Here's how to reduce your risk and deal with problems if they arise.

Reduce your risk now

If you have diabetes for 10 years or more, you are at most risk for kidney damage. Your best chance to avoid or slow damage is to protect your kidneys now.

Your risk is greatest when blood sugar control is poor. Keeping blood sugar levels in your target range is key. This can lower your risk by 50 percent or more. That's the good news from a 10-year research study from 2005.

High blood sugar is one key risk factor for kidney damage. Two other important risk factors are:

- High blood pressure
- high cholesterol levels

High blood pressure can make kidney disease worse. This is why blood pressure control is a big factor. Good control of cholesterol is also crucial. Dealing with all three risk factors is your best defense. This will help to slow the progress of the

disease. Also, the right diet and exercise, and taking any needed meds will help lower your risks.

To find kidney damage your doctor will order a special test. This test (a "microalbumin" test) looks for traces of protein in the urine. Protein in the urine shows that there is damage to the kidneys. Sadly, kidney damage may get worse over time. It may require treatment with dialysis. Or maybe a kidney transplant. That's why it's crucial to test for this problem every year.

New kidney-protective medications

Don't wait for test results to show you that you have kidney damage. You can start with prevention now. Research has found new ways to help prevent disease years before it might develop. Of course, this is in addition to keeping risk factors under control.

Research has found that a type of drugs called "ACE inhibitors" can help. These drugs may delay the onset of protein in the urine. Usually doctors give these drugs to people to lower blood pressure. They also treat heart failure. But in a 2004 study, patients with type 2 diabetes took these meds. The results were good. People who took the drugs cut their risk of kidney damage in half. That's a major discovery.

So, don't wait until a problem is found. If you have diabetes and high blood pressure, your doctor may give you these meds. This will help to protect you from getting kidney disease. And it will do so before any signs of kidney damage appear.

Slowing the march of kidney disease

Research has also found that two types of drugs can help slow or prevent further kidney damage. These drugs are listed in the chart below.

Drug Type	Purpose
ACE Inhibitors	Can slow damage to the kidneys in people with diabetes. Also used to treat people with high blood pressure and heart failure.
Angiotensin II receptor blockers (ARBs)	Can stop more damage in people who already have signs of kidney disease. Also used to treat high blood pressure and heart failure.

If you have diabetes, this does not mean you have to take these drugs. It's not clear that people without high blood pressure or protein in the urine need these meds. But if either high blood pressure or early signs of kidney disease have set in, these drugs might help.

Be kind to your kidneys

1. **Get tested every year.** Your doctor should test to see if you have small amounts of protein in the urine. This is the first sign of kidney damage.
2. **Control your blood sugar levels.** Work with your health care team to develop a blood testing schedule that is right for you.
3. **Monitor your blood pressure.** Keep your blood pressure below 130/80 mm Hg. A diet that's low in sodium and rich in fruits and veggies will help. Also, exercise on a regular basis and take the medicines your doctor prescribes.
4. **Control your cholesterol levels.** You can protect your kidneys by lowering cholesterol. Eat a low-fat, high-fiber diet. Be sure to get regular exercise. And again, take the medicines your doctor prescribes.
5. **Ask your doctor if preventive meds are right for you.** Talk with your doctor. Find out if you have high blood pressure or early signs of kidney damage. Taking ACE inhibitors or ARBs may help.

*****Authored by Johns Hopkins University and Johns Hopkins Health System*****