

Preventing Diabetic Kidney Disease: 10 Answers to Questions

Prevent diabetic kidney disease with good blood sugar control. Regular checkups, a healthy lifestyle, and medication can help protect your kidneys and overall health.

Diabetic kidney disease is a decrease in kidney function that occurs in some people who have diabetes. It means that your kidneys are not doing their job as well as they once did to remove waste products and excess fluid from your body. These wastes can build up in your body and cause damage to other organs.

1. What causes it?

The causes of diabetic kidney disease are complex and most likely related to many factors. Some experts feel that changes in the circulation of blood within the filtering units of the kidney (glomeruli) may play an important role.

2. Are some people more likely to get diabetic kidney disease?

Yes. The following risk factors have been linked to increased risk of developing this disease: high blood pressure, poor glucose (sugar) control and diet.

3. I have diabetes. How do I know if my kidneys are affected?

In the early stages, there may not be any symptoms. As kidney function decreases further, toxic wastes build up, and patients often feel sick to their stomachs and throw up, lose their

appetites, have hiccups and gain weight due to fluid retention. If left untreated, patients can also develop heart failure and fluid in their lungs.

4. Are there tests that can be done to tell if I have kidney disease?

Yes. The diagnosis is based on the presence of abnormal amounts of protein in the urine. A variety of tests can be done to tell if a person has kidney disease, such as serum creatinine and BUN (blood urea nitrogen). The most widely used are serum creatinine and BUN (blood urea nitrogen). These are not very sensitive tests because they do not begin to change until the patient develops more severe disease. Other more sensitive tests are: creatinine clearance, glomerular filtration rate (GFR) and urine albumin. Estimated of glomerular filtration rate (eGFR) is considered a better measure of kidney function compared to creatinine. Urinary albumin-to-creatinine ration (UACR) is also used to check for high protein in the urine (albuminuria), which is a sign of kidney disease.

In patients with Type I (juvenile-onset or insulin-dependent) diabetes, a diagnosis of early kidney disease can be based on the presence of very small amounts of protein in the urine (microalbuminuria). Special methods are needed to measure these small amounts of protein. When the amount of protein in the urine becomes large enough to be detected by standard tests, the patient is said to have "clinical" diabetic kidney disease.

5. How long does it take for kidneys to become affected?

Almost all patients with Type I diabetes develop some evidence of functional change in the kidneys within two to five years of the diagnosis. About 30 to 40 percent progress to more serious kidney disease, usually within about 10 to 30 years.

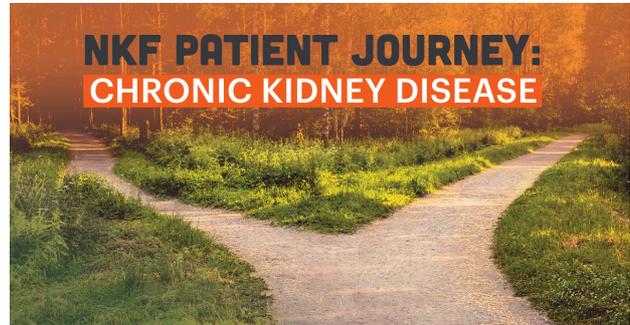
The course of Type II (adult-onset or non-insulin-dependent) diabetes is less well defined, but it is believed to follow a similar course, except that it occurs at an older age.

6. What can I do to prevent kidney disease?

Careful control of glucose (sugar) can help slow the progression, or perhaps prevent, kidney disease in people with diabetes. You should follow the advice of your doctor and other

members of your healthcare team regarding diet and medicines to help control your glucose levels.

Your kidney health is unique. Your path should be too.



7. If my kidneys are already affected, can I keep them from getting worse?

It may be possible to prevent or delay the progression of kidney disease. Since high blood pressure is one of the major factors that predict which diabetics will develop serious kidney disease, it is important to take your high blood pressure pills faithfully if you do have high blood pressure. Your doctor may also recommend that you follow a low-protein diet, which reduces the amount of work your kidneys have to do. You should also continue to follow your diabetic diet and to take all your prescribed medicines.

8. Are there any new treatments that can help me?

Yes. Some studies suggest that a group of high blood pressure medicines called ACE inhibitors may help to prevent or delay the progression of diabetic kidney disease. These drugs reduce blood pressure in your body, and they may lower the pressure within the kidney's filtering apparatus (the glomerulus). They also seem to have beneficial effects that are unrelated to changes in blood pressure. Patients who take these medicines may have less protein in their urine. SGLT2 inhibitors are a newer class of medicines, some of which can also help reduce the risk of heart or kidney disease in people with diabetic kidney disease. SGLT2 inhibitors can also reduce hospitalization risk from heart failure. Other medicines, such as GLP-1 agonists and MRAs, are also being studied for risk reduction of heart and kidney disease in people with diabetic kidney disease. You may want to speak to

your doctor or another member of your healthcare team, to see if these medicines could help you

9. How many people with diabetic kidney disease develop total kidney failure?

About 30 percent of the people with Type I diabetes and about 10 to 40 percent of the people with Type II diabetes will eventually develop end-stage kidney failure, requiring treatment to maintain life.

10. If my kidneys do fail, what can I do?

If your kidneys fail, you can receive dialysis treatments or you may be a candidate for a kidney transplant. Two types of dialysis are available - hemodialysis and peritoneal dialysis. Your healthcare team will discuss these treatment options with you. The decision about which treatment is best for you will be based on your medical condition, your lifestyle and your personal preference.