Diabetes: Albumin Urine Tests

Diabetes can cause kidney problems, or diabetic nephropathy. This test checks your urine for albumin, a sign of kidney damage. Albumin is a type of protein usually found in the blood.

What causes albuminuria?
Albuminuria is most often caused by kidney damage from diabetes. However, many other conditions can lead to kidney damage, such as high blood pressure, heart failure, cirrhosis, or lupus.

Why do you need albumin testing?
An above-normal level of albumin in the urine means your kidneys are stressed or have been damaged. Detecting kidney damage early can be important because treatment may help keep your kidneys working well and prevent more damage.

How is the test done?
This test can be done on:
- A random sample of urine. This is the most common method if you have diabetes. The sample is collected anytime, usually after the first time you urinate in the morning.
- A sample collected over a 24-hour period.
- A sample collected over a specific period of time, such as 4 hours or overnight.

You may need more than one test to find out how well your kidneys are working.

How often should you be tested?
The American Diabetes Association recommends three tests to check for kidney damage. These are a blood pressure test, a urine albumin test, and a creatinine blood test, which is used to calculate an estimated glomerular filtration rate (eGFR). Creatinine is a waste product that is filtered out of the blood by healthy kidneys.

- If you have type 2 diabetes, you should have these tests when you are first diagnosed, and then each year to check for diabetic nephropathy.
- If you have type 1 diabetes, you should have these tests to check for diabetic nephropathy each year starting 5 years after diagnosis.
- If you have either type of diabetes and are pregnant, talk to your doctor about how often you need to be tested.
What do your test results mean?
Your doctor will evaluate your test results based on your health and other factors.

- When your kidneys do not work well and leak a high amount of protein, your doctor may check your urine more often to watch for kidney damage.
- If your kidneys leak a very high amount of protein, you may have long-term kidney disease.
- If you have two or three high results in a 3-to 6-month period and you have diabetes, your doctor may suspect kidney damage caused by diabetes. If you have protein in your urine and have diabetes, your doctor may start you on certain medicines. These medicines, along with good control of your diabetes, are the best ways to prevent worse kidney damage.