

## Microalbuminuria test

### Definition

This test looks for a protein called albumin in a urine sample.

Albumin can also be measured using a blood test or another urine test, called the protein urine test.

### How the Test is Performed

You will usually be asked to give a small urine sample while at your health care provider's office.

In rare cases, you will have to collect all of your urine at home for 24 hours. To do this, you will get a special container from your provider and specific instructions to follow.

To make the test more accurate, urine creatinine level may also be measured. Creatinine is a chemical waste product of creatine. Creatine is a chemical made by the body that is used to supply energy to muscles.

### How to Prepare for the Test

No special preparation is necessary for this test.

### Why the Test is Performed

People with diabetes have an increased risk of kidney damage. The "filters" in the kidneys, called nephrons, slowly thicken and become scarred over time. The nephrons begin to leak certain proteins into the urine. This kidney damage can also start to happen before any diabetes symptoms begin. In the early stages of kidney problems, blood tests that measure kidney function are usually normal.

If you have diabetes, you should have this test each year. The test checks for signs of early kidney problems.

### Normal Results

Normally, albumin stays in the body. There is little or no albumin in the urine sample. Normal albumin levels in the urine are less than 30 mg/24 hours.

Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or may test different specimens. Talk to your doctor about the meaning of your test results.

### What Abnormal Results Mean

If the test finds a high level of albumin in your urine, your provider may have you repeat the test.

Abnormal results may mean your kidneys are starting to get damaged. But the damage may not yet be bad.

Abnormal results may also be reported as:

- Range of 20 to 200 mcg/min

You will need more tests to confirm a problem and show how severe the kidney damage may be.

If this test shows that you are starting to have a kidney problem, you can get treatment before the problem gets worse. There are a number of diabetes medicines that have been shown to slow the progression of kidney damage. Talk to your provider about specific medicines. People with severe kidney damage may need dialysis. They may eventually need a new kidney (kidney transplant).

The most common cause of a high level of albumin in the urine is diabetes. Controlling your blood sugar level may lower the albumin level in your urine.

A high albumin level may also occur with:

- Some immune and inflammatory disorders affecting the kidney
- Some genetic disorders
- Rare cancers
- High blood pressure
- Inflammation in the whole body (systemic)
- Narrowed artery of the kidney
- Fever or exercise

Healthy people may have a higher level of protein in the urine after exercise. People who are dehydrated may also have a higher level.

## Risks

There are no risks with providing a urine sample.

## Alternative Names

Diabetes - microalbuminuria; Diabetic nephropathy - microalbuminuria; Kidney disease - microalbuminuria; Proteinuria - microalbuminuria

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