

## KIDNEY FUNCTION AND DIABETES

The kidneys perform an important role by balancing the proper amount of water and chemicals in the blood stream and filtering out waste materials and some medications. Kidney (renal) disease impairs the selective filtering ability of the kidneys and can lead to kidney failure, which may require dialysis or a kidney transplant. Kidney failure is a serious condition that can result in death. Individuals who have diabetes, a parent or sibling with renal failure, and/or hypertension (high blood pressure) are at greater risk for developing kidney disease.

Kidney disease can happen without discomfort or symptoms until a significant amount of kidney damage has already occurred. Once kidney disease occurs, the kidneys become less effective filters and may allow larger proteins from the blood stream (**microalbumin**) to enter the urine. A simple urine test can be done to screen for the presence of microalbumin in the urine.

As with many diabetes-related complications, there are measures that can be taken to prevent kidney disease. The best way to prevent kidney disease is by following these guidelines:

- Control blood glucose (sugar) levels by following a prescribed diet and medication schedule, monitoring and recording of blood glucose levels, and exercise.
- Control blood pressure. The American Diabetes Association and National Institutes of Health recommend people with diabetes maintain a blood pressure of 130/80 or less. Have your blood pressure checked at each regular diabetes visit with your physician.
- Schedule an annual physical exam. Tell your physician if you have any of the other noted risk factors for kidney disease and ask about screening for **microalbumin** in the urine. The American Diabetes Association recommends that this test be done once a year.
- Notify your physician if you experience symptoms of a urinary tract infection. Early signs and symptoms may include cloudy or bloody urine and painful or frequent urination. Later symptoms may include fever, chills, and back pain. If your physician treats you for a urinary tract infection, take all of your medication and follow-up as directed.
- Take your medication as instructed by your physician and report any problems with prescription medications to your physician. If kidney disease has been detected, your physician may prescribe a special class of medications that may slow down the progress of kidney disease, such as ACE Inhibitors (Angiotension Converting Enzyme) or ARB (Angiotensin Receptor Blockers).
- Ask your physician about the use of certain medications that may impact kidney function, such as over-the-counter Ibuprofen (Motrin) and Naproxen (Aleve), and the testing dyes used in special x-rays and scans.
- Follow special diet instructions if kidney disease has been detected. Your physician may recommend a protein restricted diet and/or a low salt diet to prevent an extra burden on the kidneys.

Additional resources for information on Diabetes and kidney function are:

American Diabetes Association  
1701 N. Beauregard Street  
Alexandria, VA 22311  
(800) 342-2383  
(800) 236-6733 (to order publications)  
(800) 232-3472  
[www.diabetes.org](http://www.diabetes.org)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)  
National Diabetes Information Clearinghouse (NDIC)  
1 Information Way  
Bethesda, MD 20892-3560  
(800) 860-8747  
[www.niddk.nih.gov](http://www.niddk.nih.gov)

### HEALTHY INITIATIVES

TML IEBP Medical Management, PO Box 141039, Austin, Texas 78714-1039  
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