UNC KIDNEY CENTER

Podcast Transcript:
Dr. Amy Mottl
Diabetic Kidney Disease
“Diabetic Kidney Disease: What is diabetes?”

Patient: What is diabetes?

Dr Mottl: Diabetes is a disease wherein the blood sugar is elevated above what would be considered the normal range. There actually is a continuum of what the blood sugar is in response to either somebody who’s fasting, or hasn’t eaten in a long time, versus the blood sugar in someone who has just recently eaten a meal. The blood sugar threshold for diagnosis of diabetes when someone is fasting is arbitrarily considered to be 126. In people who have just recently eaten a meal, the threshold is 200. Again these are arbitrary cutoffs-these have actually evolved. Ten years ago these cutoffs were different from what they are now. They were changed in the recent past to become more sensitive so we can pick up more patients who have diabetes.

There are actually 2 different types of diabetes because there are different mechanisms by which diabetes can occur. Type 1 diabetics-who are more often children, but of course this can occur in adults as well-are more likely to have decreased insulin secretion from the pancreas. Insulin is a chemical which allows the body’s tissues to uptake the sugar that is in our bloodstream. So if there is decreased insulin in the body, then the blood sugar becomes elevated. That elevated blood sugar can damage the tissues in the body.

Type 2 diabetes is more frequent in adults, but again, can also occur in children. Especially these days with increasing prevalence of overweight and obesity, type 2 is unfortunately becoming more common in children as well. In type 2 diabetes, there is decreased ability for the tissues in the body to take up the sugar in response to insulin, so in other words, there needs to be more insulin secreted in order to take up the sugar from the blood stream. The end result is the same as in type 1 diabetes wherein the sugar is elevated, and there’s end organ damage to the tissues.