LOS LIVOS

Diabetes Mellitus

Diabetes is a disease where the body does not make enough insulin or the body does not use the insulin it makes resulting in high levels of sugar in the blood. Health problems result when the blood glucose level remains high and is not controlled.

There are two types of diabetes: Type 1 (Juvenile diabetes or insulin dependent diabetes) and Type 2 (adult onset diabetes or non-insulin dependent diabetes). Type 1 diabetes usually occurs in children or young adults and requires insulin therapy because the pancreas makes little or no insulin. It accounts for 10% of all patients with diabetes. Type 2 diabetes usually occurs in adults over age 45 and can often be controlled by diet, weight loss, exercise and oral medications. Type 2 diabetes occurs when not enough insulin is produced by the pancreas or the body becomes insulin resistant.

Symptoms:
The symptoms of type 1 and type 2 diabetes are similar and include extreme thirst, hunger, frequent urination, fatigue, weight gain or loss, recurrent vaginal and urinary tract infections, sores that are slow to heal and loss of feeling or tingling in the feet.
The symptoms of type 2 diabetes can be very mild and often go unrecognized. If symptoms occur it is often because the blood sugar is very high.

Risk Factors:
- Family history of diabetes
- Obesity-mainly abdominal obesity
- Ethnic background-diabetes occurs more commonly in American Indian, Asian American, African American, Pacific Islander and Hispanic populations.
- Sedentary life style
- High blood pressure and high cholesterol
- History of gestational diabetes
- Having a baby who weighed more than 9 pounds at birth
- Polycystic ovarian syndrome
- Long term use of corticoid steroid medication
- Smoking
- Heavy alcohol use

Prevention
Eating a well balanced diet and maintaining a healthy weight helps prevent diabetes. A normal weight is a BMI between 20-24. A BMI of 25-30 is overweight and a woman with a score of 30 or more is obese.

Diagnosis
A fasting glucose value should be under 100. If the value is over 100, a glycosulated hemoglobin (Hgb A1c) blood test can be done to evaluate the highest blood glucose level for the past 3 months. Values of less than 6 are normal. Values over 6 may indicate diabetes. Your doctor may suggest life style changes or further testing.

Treatment
Many patients with Type 2 diabetes can be control their diabetes with weight loss, exercise and diet. One of the common medications used is metformin which lowers insulin resistance and reduces glucose production from the liver. Another common type of medication used for diabetes are the sulfonylureas which stimulate insulin production by the pancreas.

Patients with Type 1 diabetes and patients with Type 2 diabetes that are poorly controlled with oral medications require insulin therapy. The goal of treatment is to prevent long term complications of diabetes such as heart and kidney disease, blindness and nerve damage.

Blood glucose goals will be established by your physician. Most authorities feel the target for Hemoglobin AIC should be maintained less than 7.0%. Most patients should see a diabetes educator that will teach glucose monitoring and achieving optimal diabetes care. New treatments and medications are being developed each year that may improve diabetes treatment.

Complications of Diabetes
Patients with uncontrolled diabetes may develop vascular disease in both small blood vessels (micro vascular) and large blood vessels (macro vascular). Micro vascular complications include damage to the retina in the back of the eye (retinopathy) that can lead to blindness. Diabetes can damage nerves (neuropathy) throughout the body, but most commonly in the feet. This results in a sensation of numbness, tingling, burning or sharp pain in the feet. Microvascular complications can also occur in the kidney (nephropathy). This causes kidney damage and eventually kidney failure requiring dialysis and/or kidney transplant. Macro vascular complications include coronary artery disease (heart attacks), peripheral vascular disease (blocked blood vessels in abdomen or legs) and strokes.

Diabetes in Pregnancy
Women with diabetes usually have normal menstrual periods and do not have infertility issues. Before attempting pregnancy, diabetes should be in good control. Intensive diabetes management and normalization of the Hemoglobin A1c is recommended before conceiving. The most critical period for normal glucose levels is soon after fertilization. The risk of fetal malformations is increased 4 to 10 times in individuals with uncontrolled diabetes.

Website Resources
American Dabetes Association http://www.diabetes.org/diabetes-basics/
National Heart Lung and Blood Institute
http://www.nhlbi.nih.gov/health/public/heart/other/latino/diabetes/