

Diabetes, Blood Sugar and Hemoglobin A1C

Diabetes is a metabolic condition associated with high levels of blood glucose (sugar). Approximately 6-7% or 21 million of the USA population has this very significant disease. More than 90% of diabetics are type 2 or adult onset diabetics. About 10% are type 1 or juvenile diabetics; these youth are deficient of Insulin, the hormone that drives sugar into body cells. Diabetes may be diagnosed by appropriate urine and/or blood testing. Day by day management of blood sugar relies on blood and urine testing, diet, exercise and medications. Consistent fasting blood sugars in excess of 110 mg% are highly suggestive of the diagnosis of diabetes. People with diabetes often have a family history of diabetes, obesity or a sedentary lifestyle and mental tension. Prolonged elevations of blood sugars can cause damage to your heart, eye, kidney, nerve or blood vessels. Diabetes is a leading cause of heart disease, morbidity and mortality. What you don't know can hurt you!

While a single blood sugar analysis lets you know what your current glucose level is, hemoglobin A1C is another blood test that is like a batting average of many of your blood sugars over the past 90 days. This test relates to the life of your red blood cells and the tendency for your blood sugar to bind to these red blood cells. Thus, if you are a diabetic, the hemoglobin A1C permits you and your doctor to know if you have a "working" diet, exercise and medication plan that is controlling your blood sugars in a proper range over time. A hemoglobin A1C of less than approximately 7.5% is considered normal utilizing this newly developed finger stick laboratory testing procedure. However, you should know that different labs have varying levels of normal standards. Also, the gold standard for hemoglobin A1C is determined by a venopuncture and standard laboratory procedures. The LHF is testing to see if the less invasive, at home test is reliable enough to closely track the standard procedure. It is also possible that a pre-diabetic state (elevated A1C) might be identified prior to the detection of consistently elevated levels of blood glucose in some people.

If your hemoglobin A1C is 7.5% or higher, you should check with your doctor to discuss this problem. If you would like to discuss this new test, feel free to call the LHF office at 732-8425584.