

Important Test Update for Sarasota Memorial Laboratory Services:

Diagnostic Testing for Diabetes and Oral Glucose Tolerance Testing (GTT)

For decades, the diagnosis of diabetes was based on plasma glucose criteria, either the fasting plasma glucose (FPG) or the 2-h value in the 75-g oral glucose tolerance test (OGTT).

In 2009, an International Expert Committee that included representatives of the American Diabetes Association (ADA), the International Diabetes Federation (IDF), and the European Association for the Study of Diabetes (EASD) recommended the use of the A1C test to diagnose diabetes, with a threshold of greater than or equal to 6.5%, and ADA adopted this criterion in 2010.

Current Criteria for the diagnosis of diabetes:

- 1) **A1C greater than or equal to 6.5%.** The test should be performed in a laboratory using a method that is NGSP certified and standardized to the DCCT assay. **OR**
- 2) **FPG greater than or equal to 126 mg/dL.** Fasting is defined as no caloric intake for at least 8 h. **OR**
- 3) **2-h plasma glucose greater than or equal to 200mg/dL** during an OGTT. The test should be performed as described by the WHO, using a glucose load containing the equivalent of 75 g anhydrous glucose dissolved in water. **OR**
- 4) In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose greater than or equal to 200 mg/dL.

Considering the current diagnostic criteria as endorsed by ADA, and the significant inconveniences of time and multiple needle sticks for patients subjected to the traditional oral glucose tolerance test (OGTT), Sarasota Memorial Laboratory is encouraging the use of the above listed methods, all of which are available with collection of a single specimen.

Questions regarding Hemoglobin A1c and Glucose testing for the diagnosis of Diabetes should be directed to Tom Reed, MD, Laboratory Medical Director at 941-917-2294.