

## **GLUCOSE TOLERANCE TEST**

### **PATIENT/FAMILY INFORMATION SHEET**

#### **What is a Glucose Tolerance Test?**

A Glucose Tolerance Test may be used to determine if your body is unable to process glucose (sugar) properly. A GTT may be ordered to confirm the diagnosis of diabetes. The test is also helpful to diagnose individuals with “pre-diabetes” (more properly called impaired fasting glucose or impaired glucose tolerance), gestational diabetes in pregnant women or diabetes following delivery in women who had gestational diabetes during their pregnancy. During the test, blood samples are taken up to 4 times to measure the blood glucose.

#### **How do I prepare for the Glucose Tolerance Test?**

- For at least three (3) days before the test, you should eat an unrestricted diet. That is, you should include all foods you usually eat, particularly those that contain carbohydrate, such as breads, cereals, grains, fruit and milk.
- You must fast for 8 – 14 hours before the test. Fasting means that you **should not** have anything to eat or drink except water.
- If you regularly take medications, prescribed or over the counter, discuss with your doctor whether you should take them the morning of the test.
- Gum chewing is permitted only if gum is of the sugarless variety.
- Do not exercise on the morning of the test.

#### **What will happen during my Glucose Tolerance Test?**

On the morning of your test, blood is drawn from your arm at timed intervals for measurement of blood glucose (blood sugar). (See the Patient/Family Information sheet on Adult Blood Work). The Glucose Tolerance Test is usually ordered as 2-hour or 3-hour tests.

**You must remain at the draw station for the duration of the test since physical activity will affect the test results.**

1. A fasting blood glucose (blood sugar) sample is drawn first.
2. You will be asked to drink either 75g or 100g of Glucola, a flavored sugar drink, within 5 minutes.
3. Depending on the type of test your doctor ordered, your blood will be drawn every hour up to time limit specified (for example, 1-hour, 2-hours and 3-hours.) Occasionally, your doctor may order the test for more than 3 hours.

## How are the results of the Glucose Tolerance Test evaluated?

The Glucose Tolerance Test measures the body's ability to process glucose; the sugar that the body uses for energy. The Glucose Tolerance Test helps to determine the diagnosis of diabetes, "pre-diabetes" or gestational diabetes. Your doctor will also take into account your physical exam, presence or absence of symptoms, and your medical history.

Your doctor will discuss the results of the Glucose Tolerance Test with you.

### References:

American Diabetes Association Standards of Medical Care in Diabetes – 2007. Diabetes Care 30:S4-S41, 2007.

National Library of Medicine, Glucose Tolerance Test.

<http://www.nlm.nih.gov/medlineplus/ency/article/003466.htm> , November 2007

WebMD-Diabetes Guide: Oral Glucose Tolerance Test

<http://diabetes.webmd.com/guide/oral-glucose-tolerance-test> , November 2007

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