Oral Glucose Tolerance Test

PREPARATION OF GLUCOSE * BLOOD AND URINE COLLECTION

ADULTS:

1. The patient must have been on adequate diet of >150 GM of carbohydrate for three days previously. The patient must have nothing by mouth after midnight and the test must be done in the morning. The patient should be instructed not to smoke, drink coffee, or leave the hospital during the procedure. He should be asked if he is presently taking any of the following medications. If so, this should be noted as a comment in the lab computer with the GTT results.
   - Thiazide Diuretics
   - Oral Contraceptives
   - Cortisone
   - Dilantin
   - Lithium
   - Propranolol

2. Draw a fasting sample of blood from the patient and obtain a urine sample. Test urine for glucose with dipstick. If positive, determine the glucose concentration of the fasting blood specimens. If 140 MG/DL or greater, the OGTT should be cancelled, the physician notified and the fasting glucose repeated at another time. A second fasting glucose > than 140 MG/DL confirms the diagnosis of diabetes.

3. Give the patient one bottle (300 ML) of Trutol (contains 75 G Dextrose). When the patient has swallowed the last of it, note time and take the succeeding blood and urine samples as noted below.

4. From the time noted take a blood sample in one hour, two hours and three hours unless ordered differently by the doctor.

5. Have the patient void a urine sample at each time of blood collection.

6. Determine the blood sugar of each blood sample. Determine or test for sugar in each urine sample.

CHILDREN:

1. Sample conditions pertain to children as to adults. (See #1 above).

2. Make the glucose solution in approximately one glass of warm water, but use only 1.75 GM/KG up to a maximum of 75 GM.

3. Blood and urine collections are taken as described for adults.
REFERENCES:

Stolk, R.P. Diabetes Care 18: 1045, 1995
Davidson MB, Diabetes Care 18: 1065, 1995