

LABORATORY COLLECTION MANUAL	GLUCOSE TOLERANCE TEST OB 3 HOURS
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**I. PATIENT PREPARATION:**

Patient should be fasting overnight.

**II. DETERMINATION OF SAFETY OF PROCEEDING WITH GLUCOSE INGESTION:**

- A. Collect and test fasting urine specimen for presence of glucose. Take a dipstick out of the container, dip it in the urine and remove the stick from the urine. Start the time then. After 60 seconds have passed, compare the color of the glucose pad to the colors on the dipstick container.
- B. Draw fasting blood specimen.
- C. If urine is negative, proceed with glucose ingestion. Glucose beverage should be ingested within 5 minutes.
- D. If urine indicates the presence of glucose, immediately take the fasting blood sugar specimen to chemistry to run the blood sugar. The chemistry technologist will notify physician of the blood sugar results as well as the urine results. The notification of the physician must be documented in the system. Do not proceed with test unless ordered by physician.
- D. Patient must stay in the outpatient area during the entire test, unless otherwise ordered by the physician. This is for patient safety as well as to ensure that the test is done correctly.

**III. INGESTION OF GLUCOSE:**

- A. Adults pregnant females: (over 12 years of age) 100 gm of glucose.
- B. If patient is extremely small consider the following:
  - 1.75 grams (1 oz of glucose beverage) per 1 kg of body weight.
  - ★ **If ordered specifically by the physician, you can substitute Jelly Belly jellybeans for the 100 gm of glucose beverage.**
  - ★ **For the Glucose OB 3-HR Tolerance, substitute 36 Jelly Belly jellybeans for 100 gm of glucose beverage.**

**IV. SUBSEQUENT COLLECTIONS:**

After ingestion of glucose, collect blood specimens at the following intervals: **(a 30 minute specimen is not necessary; do not collect any more urine specimens, the fasting is the only one needed)**

- A. 1 hour after the ingestion of the Glucose beverage
- B. 2 hours after the ingestion of the Glucose beverage
- C. 3 hours after the ingestion of the Glucose beverage
- D. Examples of times are:
  - ★ Draw fasting specimen at 7:45
  - ★ Ingest Glucose beverage, finish at 08:00
  - ★ Do 1-hour specimen at 09:00
  - ★ Do 2-hour specimen at 10:00
  - ★ Do 3-hour specimen at 11:00

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**V. PATIENT SAFETY:**

Patient must stay in the outpatient area during the entire test, unless otherwise written by the physician. This is for patient safety as well as to ensure that the test is done correctly. Give the patient the GTT Patient Time Reminder form with the correct times written on the form.

**WRITTEN BY:** Kay Shaw, MT(ASCP)SBB **DATE:** 10-94

**APPROVED BY:** Martin F. Belli, M.D. **DATE:** 10-94

**REVISED BY:** Kay Shaw, MT(ASCP)SBB **DATE:** 6-96, 4-98, 6-2000, 7-2003, 1-2004, 6-2004, 3-2008

**APPROVED BY:** Martin F. Belli, M.D. **DATE:** 6-96, 4-98, 6-2000, 7-2003, 1-2004, 6-2004, 3-2008

***See original policy in the Laboratory for all documented annual reviews.***

**Reference:**

Glucose Tolerance Beverage, Package Label, Baxter Healthcare Corporation, Revised February, 1994.

“Jelly Bean Alternatives for Glucose Testing” K.L. Boy, E.K. Ross, S.J. Sherman, Department of Obstetrics and Gynecology, St. John Hospital and Medical Center, Detroit, Michigan, December, 1995

Tietz Fundamentals of Clinical Chemistry, 5<sup>th</sup> Edition, W.B. Saunders Company, 2001, p.440.