2 Hour Post Prandial Blood Glucose
(After Carbohydrate Meal)

Principle

Two-Hour Post Prandial (PP) or Post Cibum (PC) Glucose Levels are used to screen for Diabetes Mellitus, to diagnose diabetes, and to monitor glucose control in the known diabetic. Usually the maximum increase in blood glucose following a meal occurs at 60 to 90 minutes, and by two hours levels are similar to fasting levels.

Patient Preparation

Previous to the test, the patient should have been on an adequate carbohydrate diet (greater than 150 grams/day) and all medications that influence glucose tolerance should have been discontinued three days prior to the test. The patient should be fasting 12 hours. Water is allowed during the fasting period. The test should not be performed during illness or trauma. A two week recovery time is recommended before glucose testing. The patient should remain at rest and avoid medications, smoking, caffeine and alcohol during the test.

The protocol may be different if the test is performed on a known diabetic. In these cases, instructions given by the patient’s physician must be followed.

Procedure

1. Patient must be fasting 12 hours before testing. Water is allowed during the fasting period.

2. Draw fasting glucose only if ordered by physician. It is common for both fasting and 2-hour samples to be requested for a diabetic screen. NOTE: If both fasting and 2-hour samples are requested, a separate order must be put into the computer for each specimen to generate two different draw times and two different sample numbers.

3. The patient consumes a breakfast or lunch containing 100 grams of carbohydrate. Often patients have instructions from their physician’s office for a carbohydrate-rich meal which they need to follow.
An acceptable breakfast meal consists of orange juice, cereal with sugar, toast and milk.

The patient should remain at rest and avoid medications, smoking, caffeine and alcohol during the test. Water is permitted.

4. Draw the patient for glucose 2 hours after completion of the meal.

5. **FOR INPATIENTS** the same procedure is followed. The meal is arranged through the Dietary Department and the nursing floor, the floor is responsible for collection of the blood sample 2-hours after the patient finished eating.

**References**

Henry, John Bernard; *Clinical Diagnosis and Management by Laboratory Methods*; W.B. Saunders Co., Philadelphia, PA; 1984; pp.174-175.