

N. Glucose Tolerance Testing

When collecting specimens for glucose tolerance tests (GTT's), it is imperative that all specimens be collected at appropriately timed intervals. In order to ensure that specimens are consistently collected at their appropriate times, it is necessary to limit the number of GTT's being conducted on any given day.

Consequently, SMMC Laboratory Services must make appointments for any glucose tolerance tests consisting of three (3) or more blood collections. By scheduling GTT patients evenly throughout the week, SMMC Laboratory Services will be able to ensure optimal accuracy of these critically timed specimens.

1. Patients referred for tests requiring a single timed collection, such as the 2 hour post-prandial glucose or 1 hour post 50 gm. glucose load do NOT need to make an appointment. They should arrive in a fasting state.
2. GTT's will be conducted on outpatients Monday through Saturday. For your convenience, we have enclosed a patient instruction sheet. Please feel free to photocopy these instructions and give them to any of your patients for whom you are ordering glucose tolerance tests.
3. Please feel free to contact the Client Services at (949) 452-3405 with any questions.

PATIENT INSTRUCTIONS FOR GLUCOSE TOLERANCE TESTS

MAKE YOUR APPOINTMENT:

Glucose Tolerance Tests (GTT's) are performed Monday through Saturday by appointment only.

Please call Saddleback Memorial Medical Center Laboratory Client Services at **(949) 452-3405** to schedule your appointment.

When collecting specimens for (GTT's), it is imperative that all specimens be collected at appropriately timed intervals. In order to ensure that specimens are consistently collected at their appropriate times, it is necessary to limit the number of GTT's being conducted on any given day. Consequently, SMMC Laboratory Services must limit the number of appointments performed on any given day. We will attempt to accommodate patients that come in without an appointment, but please be aware that you may be asked to come back at another time if we have met our capacity on the day you come in.

PRIOR TO YOUR GLUCOSE TOLERANCE TEST

For three (3) days prior to your scheduled GTT, you should eat a diet high in carbohydrates (a minimum of 300 grams of carbohydrates per day is recommended). Starches (such as potatoes, pasta, bread, and rice) and desserts (such as cake, cookies, ice cream, etc.) are both excellent sources of carbohydrates.

Make sure you are feeling well. Both illness and physical trauma can cause your glucose tolerance test to be artificially abnormal. It is recommended that you wait at least two (2) weeks after recovery for best results.

It is imperative that you be in a fasting state when you begin your GTT. Therefore, **DO NOT EAT OR DRINK ANYTHING EXCEPT PLAIN WATER FOR 10-16 HOURS PRIOR TO YOUR GLUCOSE TOLERANCE TEST.** Since GTT's are scheduled to begin in the morning, it is normally advisable to eat a normal dinner in the early evening, then restrict your intake by mouth to plain water until your appointment the following morning.

THE DAY OF YOUR GLUCOSE TOLERANCE TEST

You will be required to remain in the Outpatient Express or Laboratory Collection Site throughout your GTT. You may want to bring some reading material with you to keep you busy while you are waiting for the length of the test (usually 3 or 4 hours).

You will be given a glucose drink at the beginning of your GTT. Thereafter, it is important that you **do not eat or drink anything** except plain water until your test is completed. Smoking and chewing gum are also prohibited for the duration of your GTT as these can adversely effect the results.

When your GTT is completed, we recommend that you eat a good meal as soon as possible.

Any questions regarding diet or medication should be directed to your physician.

GLUCOSE, TWO-HOUR POSTPRANDIAL GLUCOSE, OR POST GLUCOLA

1. Give patient special diet instructions:
 - a) Eat a meal high in carbohydrates (minimum of 50 grams of carbohydrates).
 - b) Meal needs to consist of breads, cereals, pastas, or fruit.
 - c) Or the laboratory will give the patient a 50 gram Glucola drink.
2. Draw a blood specimen in a 7 ml red top tube or a 5 ml gray top tube **2 hours** after the patient has finished the meal or the Glucola.
3. Deliver the specimen as soon as possible to the laboratory.

GLUCOSE TOLERANCE TESTING (3 or 4 Hour)

1. In an effort to standardize oral glucose tolerance testing, the Committee on Statistics of the American Diabetes Association (ADA) has recommended a set of conditions under which the test should be performed.
 - a) For three days prior to the GTT, a diet containing at least 300 grams per day of carbohydrate is required.
 - b) Two additional days of this diet are essential if the patient previously has not been on a diet sufficient in carbohydrates. The presence of anorexia or any other condition precluding adequate food intake automatically invalidates the test. Inactivity, such as bed rest, has been reported to reduce glucose tolerance; thus a GTT should not be performed in non-ambulatory patients.
 - c) During the 12 hours prior to a test, the patient must fast and avoid even black coffee. In addition, smoking and even mild exercise are not permitted.
 - d) The test should not be performed on those patients who have had an illness during the prior two weeks.