



Glucose Tolerance Testing (GTT)

Testing Location

Laboratory

St. James Mercy Hospital, 1st Floor
411 Canisteo Street
Hornell NY, 14843

To schedule an appointment: 607-324-8070

To fax to scheduling: 607-324-8221

What is a Glucose Tolerance Test (GTT)?

A glucose tolerance test is a medical test in which glucose is given and blood samples are taken afterward to determine how quickly the glucose is cleared from the blood. The test is usually used to test for diabetes, insulin resistance, and sometimes reactive hypoglycemia and acromegaly, or rarer disorders of carbohydrate metabolism.

How do I prepare for a GTT?

A GTT should only be performed on ambulatory (mobile) patients. Also, if you have had an illness in the prior two weeks, you should not do a GTT. Please call to reschedule if this is the case.

For three (3) days prior to the GTT, your diet should contain at least 150 g/day of carbohydrates. Two (2) additional days of this diet are essential if you previously have not been on a diet sufficient in carbohydrates. The presence of anorexia or any other condition indicating inadequate food intake will automatically negate the test. During the 12 hours prior to a test, you must fast and avoid even black coffee and avoid smoking, chewing gum and even mild exercise. These factors will distort the test results.

Should I take my regular medications before I come?

Many drugs such as salicylates, diuretics and anticonvulsants decrease insulin secretion, and they should be avoided for at least three days prior to your GTT, as well as all non-essential medications. Oral contraceptives will both cause insulin resistance and alter the half-life of insulin.

Remember: always consult with your physician prior to stopping or holding any medication. He or she will make the final decision on what medications are suitable for you to have prior to testing.

How should I feel during the test?

You may experience a feeling of nausea because the drink that you are given is a known amount of glucose. You also may feel tired.

How long does the test take?

Your doctor may order a 2-hour GTT, 3-hour GTT and occasionally a 5-hour GTT. A venipuncture – which is a blood draw from a vein, usually from the inside of the elbow or the back of the hand – will be taken for your fasting blood level. When those results indicate that you are at a safe level to be given the glucose, you will be given your drink. Venipunctures will be performed at the $\frac{1}{2}$ hour mark, then at 1 hours, 2 hours, 3 hours, 4 hours, and 5 hours from the time that you finished your drink, depending on which test your doctor has ordered. We will offer you a snack and beverage at the completion of your test.

How do I get my test results?

Your doctor will get your GTT results and will discuss them with you.