

GLUCOSE
TOLERANCE
TEST

Orderables - Glucose Tolerance: GTT₂ Gestational Glucose Tolerance: GTTG₁/GTTG₂

Turnaround Time: 4 hours

Alternate Name(s):

GTT
Gestational Glucose Tolerance Test

Specimen:

Adult	Pediatric
4.5 mL Green top Vacutainer tube or 2 mL Grey top Vacutainer tube	0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube

Collection Information:

Paediatric:
Prebook with Paediatric Medical Day Unit, VH, Ext. 58434.

Instructions for 1-hour 50g Glucose Tolerance Test:

Patient must drink entire contents at once. Nothing to eat or drink from the time of the drink until the time the post consumption (PC) blood is drawn. PC glucose level must be drawn **EXACTLY 1 HOUR AFTER FINISHING THE DRINK**

No urine samples are required.

Notes: No urine samples are required.
Fasting not necessary for the 50g Glucose Tolerance Test
Fasting required for the 75g Glucose Tolerance Test - No caloric intake for at least 8h before the test.

Reference Ranges:



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Oxygen rate method



Test Schedule:
Monday - Friday
0800 - 1600 h

GLUCOSE TOLERANCE TEST

* See Interpretive Comments for the diagnosis of Diabetes Mellitus

Interpretive Comments:

***Diagnosis of Diabetes (Non-pregnant Adults)**

Fasting Glucose: ≥ 7.0 mmol/L **or**

2 h Glucose after 75 g load: ≥ 11.1 mmol/L **or**

Random PG ≥ 11.1 mmol/L

(Random = any time of the day, without regard to the interval since the last meal)

Impaired fasting glucose:

Fasting glucose:

6.1-6.9 mmol/L

Impaired glucose tolerance:

2 h Glucose after 75 g load:

7.8-11.0 mmol/L

Gestational Diabetes Screening:

50 g Glucose Tolerance Test:

1hr Glucose after 50g load: < 7.8 mmol/L - Normal

1hr Glucose after 50g load: 7.8 - 11.0 mmol/L then proceed to 75g glucose tolerance test

1hr Glucose after 50g load: ≥ 11.1 mmol/L is diagnostic of GDM

75g Glucose Tolerance Test: (Two step approach)

Fasting Glucose ≥ 5.3 mmol/L

1hr Glucose after 75g load: ≥ 10.6 mmol/L

2hr Glucose after 75g load: ≥ 9.0 mmol/L

GDM is diagnosed if one value of the three above is met or exceeded.

75g Glucose Tolerance Test: (One step approach)

Fasting Glucose ≥ 5.1 mmol/L

1hr Glucose after 75g load: ≥ 10.0 mmol/L

2hr Glucose after 75g load: ≥ 8.5 mmol/L

GDM is diagnosed if one value of the three above is met or exceeded.

Please see 2018 CDA guidelines at

<http://guidelines.diabetes.ca/cpg>