



HEALTH HOLDING

HAFER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Chemistry)		
Document:	Internal Policy and Procedure		
Title:	Oral Glucose Tolerance Test		
Applies To:	All Laboratory Staff		
Preparation Date:	January 02, 2025	Index No:	LB-IPP-038
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1. PURPOSE:

- 1.1 Establish system and set responsibilities so that samples requested for oral glucose tolerance test are provided to chemistry laboratory.

2. DEFINITONS:

N/A

3. POLICY:

- 3.1 Oral glucose tolerance test is used to test the tolerance of patient to carbohydrates to differentiate between Diabetic and non-diabetic individual.

4. PROCEDURE:

4.1 Specimens:

- 4.1.1 Consult with your doctor about any medications you're currently taking. Some medications, such as corticosteroids, beta-blockers, diuretics, and antidepressants, can interfere with the results.
- 4.1.2 Unrestricted diet (min. of 150 gtn CHO/day or 1.75 g/kg) and activity for three days before the test.
- 4.1.3 Performed in the morning between 7-9 owing diurnal variation in glucose metabolism.
- 4.1.4 Fasting (without smoking) 10-16 hours prior to test (may drink water).
- 4.1.5 Fasting blood specimen should be collected shortly before the start of the test
- 4.1.6 Start the test by giving the patient glucose drink containing 75 g of glucose or 1.75 g/kg for children and 100 grams of glucose for gestational DM.
- 4.1.7 The patient should be seated comfortably during the test.
- 4.1.8 Any form of caffeine or Nicotine should be avoided prior to & during the test.
- 4.1.9 Blood samples are taken at 30,60,90,120 min after ingestion of glucose. For gestational DM samples are taken at the one-, two-, and three-hour.

4.2 Results interpretation:

- 4.2.1 Non-diabetic individuals:
 - 4.2.1.1 Urine specimens should show a negative reaction.
 - 4.2.1.2 Peak level; normally achieved within 30-60 min. may increase to 150-180 mg /dl .
 - 4.2.1.3 Blood Glucose level drops below the fasting and returns to normal after 90-120 min or in approx. 3 hrs.
- 4.2.2 Mild Diabetic: Peak level may be shown within 30-60 min
- 4.2.3 Severe Diabetic: Peak level may be reached less than the 30-60 min
 - 4.2.3.1 If two of your four blood draw levels are higher than those listed below, your doctor will diagnose gestational diabetes:

Fasting	> 5.3 mmol/l
After 1 hour	> 10.0 mmol/l
After 2 hours	> 8.6 mmol/l
After 3 hours	> 7.8 mmol/l

5. MATERIALS AND EQUIPMENT:

N/A

6. RESPONSIBILITIES:

- 6.1 Technologist and Technician are responsible for running the test in the machine
- 6.2 Clinical Pathologist is accountable for results interpretation and release.

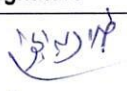
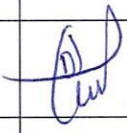
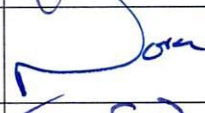



7. APPENDICES:

N/A

8. REFERENCES:

- 8.1 Tietze Text Book of clinical chemistry and molecular diagnostics 4th Edition, 2006
- 8.2 Company Leaflets of reagents

9. APPROVALS:

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