

Experiment 6: Oral Glucose tolerance test (OGTT)

Procedure:

- Set up 9 test tube the Please follow the table:

Chemical	Fasting		After 1 hour		After 2 hour		standard		Blank
	1	2	3	4	5	6	7	8	
Fasting	0.1 ml	0.1 ml	-	-	-	-	-	-	-
After 1 hour	-	-	0.1 ml	0.1 ml	-	-	-	-	-
After 2 hour	-	-	-	-	0.1 ml	0.1 ml			-
Working standard	-	-	-	-	-	-	0.1 ml	0.1 ml	
Distilled water	-	-	-	-	-	-	-	-	0.1 ml
O-toluidine reagent	7 ml	7 ml	7 ml	7 ml	7 ml	7 ml	7 ml	7 ml	7 ml

- **Cover** all tube by aluminum foil then use **Vortex** to mix the contents, then place all tube in water bath at **boiling** degree for **5** min.

Read the absorption of 6 tubes against blank at **630** nm. And record your result

Results:

Test tube		Absorption at 630nm	Mean
Fasting	Test 1		
	Test 2		
After 1 hour	Test 3		
	Test 4		
After 2 hour	Test 5		
	Test 6		
Working standard	Test 7		
	Test 8		

Calculation:

$$\text{Amount of glucose in plasma} = \frac{\text{Mean Ab Test}}{\text{Mean Ab Standard}} \times \text{Concentration of STD} = \text{mg/dl}$$

Concentration of Standard = **50** mg/dl

Mean Absorbance of Standard =.....

Mean Absorbance of the Fasting sample =.....

Mean Absorbance of the After 1 hour sample =.....

Mean Absorbance of the After 2 hour sample =.....

Glucose concentration in Fasting plasma=

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Glucose concentration after 1 hour=

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Glucose concentration after 2 hour=

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