Lab sheet #2

-Estimation of reducing sugars by Dinitrosalicylic acid method-

Method:

1- In clean test tubes add:

	Glucose solution (100mg/dl) (ml)	**Sample (ml)**	**Water (ml)**	**DNS reagent (ml)**		**Sodium potassium tartrate (ml)**
Blank	--	--	1	3	Cover the tubes (with aluminum foil) And heat for 5 min in a boiling water bath	1
1	0.1	--	0.9	3		1
2	0.2	--	0.8	3		1
3	0.3	--	0.7	3		1
4	0.4	--	0.6	3		1
5	0.5	--	0.5	3		1
6	0.6	--	0.4	3		1
7	0.7	--	0.3	3		1
8	0.8	--	0.2	3		1
Honey	--	1	---	3		1
	--	0.6	0.4	3		1
Milk	--	1	---	3		1
	--	0.6	0.4	3		1

2. Mix the contents.
3. Cool by immersing in cold water and read at 540 nm.
4. Plot the standard curve, calculate the amount in the sample from standard curve and calculate the contents.

Results:

Tube	Absorbance at 540 nm	CHO content (mg/dl) ($C_1 \times V_1 = C_2 \times V_2$)
B	--	--
1		Ex: $C_1 \times V_1 = C_2 \times V_2$ $100 \times 0.1 = C_2 \times 1 \rightarrow C_2 = 10$
2		
3		
4		
5		
6		
7		
8		
Honey		
Milk		

Calculations:

- Dilution factor (DF) = final volume / aliquot volume

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- Concentration of sample A = Concentration obtained from standard curve x 100

  = A x DF (if used)

- The amount of carbohydrate in the sample= …….mg/dl x DF

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