

Neonatal Intensive Care Unit

Glucose Infusion Calculations

Flow rate of 10% dextrose (ml/kg/day)	Infusion rate (mg/kg/min)
40	2.77
60	4.16
80	5.55
100	6.94
120	8.33
130	9.03
140	9.72
150	10.42

How to calculate mg/kg/min from ml/kg/day for any concentration of glucose:

Rate (ml/kg/day) / 144 x glucose% = mg/kg/min

How to make up any concentration of glucose in any volume:

Desired volume = V ml

Desired concentration of glucose = D%

Lower concentration of glucose = L%

Volume of lower concentration of glucose to add = LV ml

Higher concentration of glucose = H%

Volume of higher concentration of glucose to add = HV ml

Formula: $HV = V (D-L) / (H-L)$

$LV = V - HV$

Add HV ml and LV ml to get V ml of D%

Written by Dr. Peter Reynolds 2017

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