

# Preparation of Non-Standard Isotonic Glucose Concentrations (*volumes of 500ml bags*)

Required Glucose Concentration	Volume of 50% Glucose	Add to... x mls of 0.9% NaCl or Hartmanns	Total Volume Made
7.5%	75	425	500ml
10%	100	400	500ml
12.5%	125	375	500ml
15%	150	350	500ml
20% (use 20% stock bag if available)	200	300	500ml
25%	250	250	500ml

# Preparation of Non-Standard Hypotonic Glucose Concentrations *(volumes <500ml bags)*

Required Glucose Concentration	Volume of 50% Glucose	Add to... x mls of x% Glucose	Total Volume Made
<b>12.5%</b>	<b>25ml</b>	<b>375ml 10%</b>	<b>400ml</b>
<b>15%</b>	<b>50ml</b>	<b>350ml 10%</b>	<b>400ml</b>
<b>20%</b> <i>(use 20% stock bag if available)</i>	<b>25ml</b>	<b>75ml 10%</b>	<b>100ml</b>
<b>25%</b>	<b>15ml</b>	<b>25ml 10%</b>	<b>40ml</b>
<b>25%</b>	<b>150ml</b>	<b>250ml 10%</b>	<b>400ml</b>

# Glucose Delivery Calculations

Glucose Concentration	1ml/hr = x mg/ml <i>(Divide by child's weight to give mg/kg/min)</i>	Volume Needed to Give 8mg/kg/min
5% (= 50mg/ml)	1ml/hr = 0.83 mg/min	
7.5% (= 75mg/ml)	1ml/hr = 1.25 mg/min	
10% (= 100mg/ml)	1ml/hr = 1.67 mg/min	4.8 ml/ <u>kg</u> /hr
12.5% (= 125mg/ml)	1ml/hr = 2.08 mg/min	3.8 ml/ <u>kg</u> /hr
15% (= 150mg/ml)	1ml/hr = 2.50 mg/min	3.2 ml/ <u>kg</u> /hr
20% (= 200mg/ml)	1ml/hr = 3.33 mg/min	2.4 ml/ <u>kg</u> /hr
25% (250mg/ml)	1ml/hr = 4.17 mg/min	1.9 ml/ <u>kg</u> /hr