

Dextrose (D10W)

Indications: Symptomatic hypoglycemia, altered mentation with glucose < 50, newborn with heart rate < 60.

Contraindications: Suspected hypoglycemia: None

Concentration: 0.1 g/mL

ADULT DOSING

Indication	Dose	Rate & Route	Note
Symptomatic Hypoglycemia – or – Altered mentation with glucose < 50	25 g 250 mL	IV Infusion	25 g in 250 ml for 10% concentration. Titrate and repeat dose to effect.

ADULT DOSING

PEDIATRIC DOSING

Indication	Dose	Rate & Route	Note
Hypoglycemia	1 g/kg	IV Infusion	Premixed 25 g in 250 mL bag: 10 ml/kg Titrate and repeat dose to effect.
Newborn Bradycardia < 60 hr	Max dose: 25 g		

PEDIATRIC DOSING

Pediatric Dosing Dextrose (D10W)

3 kgs	4kgs	5 kgs	6-7 kgs	8-9 kgs	10-11 kgs	12-14 kgs	15-18 kgs	19-23 kgs	24-29 kgs	30-36 kgs
6.6 lbs	8.8 lbs	11 lbs	13-15 lbs	17-20 lbs	22-24 lbs	26-30 lbs	33-40 lbs	42-50 lbs	53-64 lbs	66-80 lbs
in18.25-20.25	in20.25-21.5	in21.5-23.25	in23.25-26.25	in26.25-29.25	in29.25-33	in33-37.5	in37.5-42.5	in42.5-47.75	in47.75-51.25	in51.25-56.25

D10W: Max Dose of 250 mL

Must use IV Burette for infusion

30 mL	40 mL	50 mL	65 mL	85 mL	105 mL	130 mL	165 mL	210 mL	250 mL	250 mL
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Precautions Use with caution in patients with suspected increased ICP.

Adverse/Side Effects Patients may complain of warmth, pain, or burning at the injection site. Extravasation causes necrosis. Infusing through larger vessels decreases the risk of necrosis

Class Carbohydrate

Mechanism of Action Glucose is readily processed in the blood. Through glycolysis, glucose is turned into pyruvate giving off a small amount of chemical energy (ATP). Pyruvate is further processed through the Citric Acid Cycle yielding even more energy. Glucose is a large molecule and is incapable of being absorbed into a cell without insulin and therefore increases damage to epithelium. It also causes an osmotic pressure as concentrations vary across membranes.

Onset of Action	Fast	Peak Effect	Varies	Duration of Action	Varies
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