

DEXTROSE 10% (D₁₀W)

EMSAC FEBRUARY 2026

ACTION: Glucose Replacement/~~Nutrient~~

- Elevates blood glucose levels

INDICATIONS:

- Blood glucose levels <60 mg/dl or high index of suspicion of hypoglycemia

CONTRAINDICATIONS:

- None ~~No major contraindications for administration.~~
- ~~Dextrose containing fluids should be used cautiously in patients with suspected increased intracranial pressure.~~

POTENTIAL SIDE EFFECTS:

- Hyperglycemia
- Tissue necrosis if extravasation occurs

ADULT DOSE/ROUTE:

- ⇒ ~~Up to~~ 25g of D₁₀W = ~~Up to~~ 250ml IV or IO bolus. May repeat q5min **for persistent hypoglycemia on patient response** (max dose 50 grams)

PEDIATRIC DOSE/ROUTE:

- ⇒ **Neonates < 1 month: D~~10~~W**, 2 ml/kg IV/IO (0.2 g/kg). May repeat q5min based for persistent hypoglycemia
- ⇒ **Children > 1 month: D~~10~~W**, 5 ml/kg IV/IO (0.5 g/kg **max 25 grams**). May repeat q5min based for persistent hypoglycemia

NOTES:

- Make every attempt to obtain blood glucose level PRIOR to administration of dextrose
- Recheck blood glucose within 5-10 minutes after dextrose administration
- For patients with altered mental status due to hypoglycemia, the median time to improvement after administration is approximately 7 minutes.
- **Use Buretrol for neonate and pediatric patients.**
- Concentrated dextrose can have a sclerosing effect on veins. Make sure that IV sites are patent by aspirating blood before and during administration of dextrose. Use largest available vein.