

DEXTROSE

Additional Names: D10, D25, D50

Classification: Carbohydrate, Hyperglycemic

Indications: Known hypoglycemia
Altered Mental Status of unknown origin with suspected hypoglycemia

Contraindications: Head Injury (unless documented hypoglycemia)
Known or suspected Intracranial Hemorrhage (caution)

Dosages:

Adult:

Diabetic Emergency / Hypoglycemia
D50: 12.5g-25g IV/IO, (25g = 50mL of D50)
D10: 12.5g-25g IV/IO, (25g = 250mL D10)

Stroke: CBG < 60mg/dL
D50: 12.5g-25g IV/IO, (25g = 50mL of D50)
D10: 12.5g-25g IV/IO, (25g = 250mL D10)

Pediatric:

Diabetic Emergency / Hypoglycemia
D50: 1ml/kg IV/IO
D25: 2mL/kg IV/IO, optimal for age 1-7yo
D10: 5ml/kg IV/IO, optimal for age < 1yo

Cardiac Arrest
D50: 1ml/kg IV/IO
D25: 2mL/kg IV/IO, optimal for age 1-7yo
D10: 5ml/kg IV/IO, optimal for age < 1yo

Side Effects: Irritation, thrombosis, or necrosis can occur if dextrose is infiltrated into tissue.

Physiological Effects: Dextrose is a monosaccharide which provides calories for the metabolic needs of the cell as an aerobic metabolic substrate of APT synthesis. Dextrose reverses the CNS effects of hypoglycemia by rapidly elevating serum blood glucose when given parenterally.

Additional Info: May worsen ICP or cerebral edema from trauma or CVA
Extravasation leads to severe tissue necrosis
* Incompatible with Sodium Bicarbonate and Diazepam, thoroughly flush IV between use of same administration access point