

Dextrose (Glucose, D10)

Effective: 03/01/2021

Supersedes:
N/A**Approved Provider:** EMR | EMT (oral glucose) | AEMT | Paramedic**Referenced Protocols:** [Diabetic Emergencies](#)**DOSING AND ADMINISTRATION****ADULT**

- 15-30 G, PO (1 tube)
- 12.5-25 G, IV/IO

PEDIATRIC (Refer to Handtevy)

- 15-30 G, PO (1 tube)
- 12.5-25 G, IV/IO

Pharmacology and Actions:

- Glucose is the major metabolic substrate for energy metabolism. Although all tissues need glucose, the brain is particularly sensitive to low glucose levels. Glucose specifically reverses hypoglycemia

Indications:

- Confirmed hypoglycemia with a rapid bedside glucose test
- Suspected hypoglycemia (if unable to obtain glucose reading) as manifested by altered mental status (including apparent drug or alcohol use, seizure or post ictal state) or coma

Contraindications:

- None

Precautions:

- Extravasation of glucose will cause skin necrosis. The IV should be secure and the free return of blood should be checked during administration. If extravasation does occur, immediately stop administration. Notify the ED staff upon arrival of possible glucose extravasation
- High glucose levels have been associated with worsened neurologic outcomes of patients with stroke, cardiac arrest and low perfusion states. When these states exist, it is preferable to only administer glucose after hypoglycemia has been documented by a rapid bedside glucose test

Administration:

- Acceptable routes of administration include IV, IO, PO

Special Considerations:

- Consider oral glucose if mental status permits its use
- One bolus should raise the blood sugar by 100-200mg%