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**DEXTROSE**

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**Description**

Glucose is the body's basic fuel and is required for cellular metabolism. A sudden drop in blood sugar level will result in disturbances of normal metabolism, manifested clinically as a decrease in mental status, sweating and tachycardia. Further decreases in blood sugar may result in coma, seizures, and cardiac arrhythmias. Serum glucose is regulated by insulin, which stimulates storage of excess glucose from the blood stream, and glucagon, which mobilizes stored glucose into the blood stream.

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**Indications**

- Hypoglycemia (symptomatic less than 60 mg/dl)
  - The unconscious or altered mental status patient with an unknown etiology.
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**Dosage and Administration****Adult:**

25 gm (250 mL of a 10% solution) IV/IO infusion  
Alternative: 25 gm (50 mL of a 50% solution) IV/IO bolus

**Pediatric:**

< 50 Kg administer 5 mL/Kg of 10% solution (maximum of 250 mL)

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**Precautions**

- None
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**Protocol**

- Universal Altered Mental Status
  - Seizures
  - Poisoning/Overdose
  - Psych/Behavioral
  - Neonatal Resuscitation
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**Special Considerations**

- The risk to the patient with ongoing hypoglycemia is enormous. With profound hypoglycemia and **NO IV access consider IO insertion**
- Draw blood sample before administration, if possible.
- Use glucometer before administration, if possible.
- Extravasation may cause tissue necrosis; use a large vein and aspirate occasionally to ensure route patency.
- Dextrose can be irritable to the vein and the vein should be flushed after administration.