

Antihypoglycemic	Glucagon Treats disorders of the Islets of Langerhans	D50 50% Dextrose Treats disorders of the Islets of Langerhans	Oral Glucose Glucose
Type of Drug	- Hormone - Antihypoglycemic	Caloric Antihypoglycemic	
Mechanism Action	- Stimulates an increase in blood concentration of glucose - Acts on hepatocytes to stimulate release of glucose - Glucagon has positive inotropic and chronotropic effects on the heart that are independent of beta-adrenergic receptors which is why it is indicated for beta-blocker overdose.	Needed for adequate utilization of amino acids Decreases protein, and nitrogen loss Prevents ketosis	
Onset/Duration	1 minute / 9 – 17 minutes	< 1 minute / Depends on degree of hypoglycemia	15 - 30 minutes / 3 – 6.5 hours
Indications	- Severe hypoglycemia (BG<60) when IV is NOT obtainable - Beta blocker overdose - Calcium channel blocker overdose - Esophageal obstruction	Acute hypoglycemia (BG<60)	
Contraindications	None in prehospital setting	- HYPER glycemia - Delirium tremens - Intracranial hemorrhage	- HYPER glycemia - Delirium tremens - Intracranial hemorrhage - Absence of gag reflex - Unconsciousness - Inability to swallow
Precautions	- Ineffective with hypoglycemia in patients with reduce glycogen stores - May increase anticoagulant effect of warfarin	- Infiltration causes tissue necrosis - Use larger bore IV if possible (bcos this drug is very thick) - Give thiamine if patient is suspected to be malnourished (alcoholic, homeless, elderly)	Altered mentation
Route/Dosage	IM / SQ / or slow IV 1 mg; repeat in 20 minutes, as needed	IV (can be given PO too) 25 -50 grams slow IVP (IV push)	Oral 10 g orally q 10 minutes, total dose 30 g
Adverse Reactions and Side effects	- Nausea - Vomiting if given rapid IV - Hypotension	CHF Pulmonary edema	
How supplied	1 mg of glucagons and 1 ml of glycerin; must be mixed just prior to administration.	IV: 25 grams in 50 mL preload (0.5 g/mL) Pediatrics: give it in 25 mL Oral	32 g in paste Plastic squeeze tube