

**Pediatric Diabetes:
Mini-Dose Glucagon**

What is the Purpose?

Prevent hospital admission of children with low blood sugars (hypoglycemia) due to illness or not eating.

To be used when:

- Blood sugar levels are < 70 mg/dL and your child is awake but not able to eat or refuses to eat.
- You are trying to stop your child’s hypoglycemia from getting worse, and to avoid a trip to the hospital.

How do I prepare Glucagon?

1. Open glucagon pack and flip the orange lid off the bottle.
2. Remove protective rubber needle cover from glucagon syringe.
3. Inject all of the water into the glucagon bottle and mix.
4. Remove glucagon syringe and throw away.
5. Use an insulin syringe (smallest available) to draw up the glucagon dose (see dose guide).

Initial dose guide-1 unit per year of age to a maximum of 15 units

Age in Years	Dose in Units
1 year old	1 unit
2 year old	2 units
3 year old	3 units
4 years to 15 years old	4-15 units based on age (Max 15 units)
Over 15 years old	15 units

How do I give the Glucagon?

1. Draw up the “mini-dose” of glucagon with an insulin syringe (smallest available).
 2. Give glucagon under the skin as you would insulin.
 3. Repeat blood sugar at 30 minutes and 1 hour.
 - a. If blood sugar is < 100mg/dL at 30 minutes give double the initial dose.
 4. Keep testing blood sugar every hour. If blood sugar is less than < 70 mg/dL you can repeat the effective glucagon dose if it has been 2 or more hours since the last glucagon dose.
- You can repeat this cycle to keep blood sugar from 70-100 mg/dL, with “mini-doses” of glucagon every 2-3 hours.
 - Make sure of good sugar/fluid intake. Push sugar-containing fluids ½ to 1 cup per hour.
 - Keep in touch with Pediatric Diabetes Team.
 - Your child may need to be seen in the emergency room or be admitted to hospital if there is no improvement.
 - Replace your glucagon emergency kit as soon as possible.

References

Haymond MW Mini-dose glucagon rescue for hypoglycaemia in children with Type 1 Diabetes. *Diab Care* 2001; 24:643-5
Hasan K: Mini dose glucagon is effective at diabetes camp. *J Paediatrics* 2004; June 144 (6):834
Hartley M, Thomsett MJ, Cotterill AM: Mini-dose glucagon rescue for hypoglycaemia in children with type 1 Diabetes: the Brisbane experience. Department of Endocrinology, Mater Children’s Hospital, Brisbane. Oral presentation, APEG 2004

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 1/2016 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7481.

