GLUCAGON HORMONE
The pancreas produces a hormone called glucagon, which keeps blood glucose from dropping too low, while insulin is produced to keep blood glucose from rising too high. The two hormones counterbalance each other to stabilize blood glucose.

When someone with diabetes experiences hypoglycemia (low blood glucose), administration of glucagon can raise the person’s blood glucose quickly.

INJECTION KIT:
1. Remove the covers from the powder vial and syringe in the kit.
2. Empty the saline from the syringe into the powder vial.
3. Dissolve the powder in the saline.
4. Draw the solution back into the syringe.
5. Inject the solution into the thigh or arm of the person with severe hypoglycemia.

AUTOINJECTOR PEN:
This comes filled with a premixed form of glucagon.
1. Remove the cap and press the autoinjector against the person’s skin. A dose of glucagon is automatically injected.

DRY NASAL SPRAY:
1. Insert the tip of the device into one nostril of the person experiencing hypoglycemia.
2. Push the plunger.

SIGNS OF SEVERE HYPOGLYCEMIA
When blood glucose drops and is not addressed promptly with a fast-acting sugar source, it can lead to severe hypoglycemia.

When these symptoms occur, using emergency glucagon can be life-saving.

CONFUSION
LOSS OF CONSCIOUSNESS
SEIZURE

Visit endocrine.org for more information.
Editors: Spyridoula Maraka, MD; Quiana Wilkerson-Vidal, PhD (candidate)
EMERGENCY GLUCAGON FOR KIDS
Severe low blood sugar is a medical emergency, which is why it is important to be prepared with emergency glucagon. A pediatrician can help recommend an emergency glucagon option. The glucagon autoinjector pen is approved for use in children ages two and older. Nasal glucagon is approved for children ages four and older.

Anyone with contact to a child with diabetes should know how to spot signs of hypoglycemia, and should be ready to give emergency glucagon if needed.

These people include:

- FAMILY MEMBERS
- DAY CARE PROVIDERS
- TEACHERS
- COACHES
- OTHER CAREGIVERS

CARE PROVIDER TIPS:

1. Act quickly and look for the person's glucagon medication. Call 911 if glucagon is unavailable.

2. Follow the instructions on the medicine.

3. Turn the person on their side after giving glucagon. Vomiting is common, so this prevents choking.

4. Do not hesitate. People cannot overdose on glucagon, so don’t worry about giving too much.

5. Call 911 if the person is still unconscious after 15 minutes of receiving glucagon or if they’re awake but still confused.

CONVERSATIONS WITH YOUR HEALTHCARE PROVIDER

- Do I need a glucagon prescription? If so, which product is best for my needs?
- What can I do to increase my awareness of low blood glucose?
- What should be my or my child’s target blood glucose range?
- How can I treat mild hypoglycemia to help keep it from becoming severe?
- What can I do to increase my awareness of low blood glucose?

THINGS TO KEEP IN MIND

- Before buying a glucagon product, make sure the expiration date is at least a year away.
- Replenish used glucagon as soon as possible.
- Wear a medical ID bracelet or necklace to let others know you use insulin and/or have diabetes.

Patients have questions. We have answers.
Endocrine Society is your trusted source for endocrine patient education.
Our free, online resources are available at endocrine.org/patient-engagement