Hypoglycemia

Hypoglycemia, or low blood sugar, is any blood sugar below 70. With good diabetes control, you may have a low blood sugar during the daytime 1-2 times a week. Our goal is for you to never have a low blood sugar while you are asleep and to avoid severe hypoglycemia at all times.

Severe hypoglycemia is defined as low blood sugar symptoms that you cannot treat alone and may result in seizure or unconsciousness. If you are having more than two daytime lows per week, any severe lows, or any overnight lows, you may need an adjustment to your diabetes treatment plan. Call (314) 454-6051 to talk to a nurse if you need help.

Common Causes of Hypoglycemia:

- more insulin than your body needs, relative to other factors
- not enough food or a delayed meal
- more exercise or activity than usual
- drinking alcoholic drinks (low blood sugar will occur several hours later)

Common Symptoms of Hypoglycemia

Nightmares, sleep walking or talking, restless sleep can be additional signs of hypoglycemia at night.

Severe hypoglycemia can result in unconsciousness, seizures, coma, brain damage, and death.

For severe hypoglycemia where the individual is unable to swallow or unable to awaken, GIVE GLUCAGON THEN CALL 911.

WHAT TO DO: “The Rule of 15”

1) TEST: Check blood sugar with meter. (If your CGM shows that you are low, this should be confirmed on your meter.) Sometimes you may have symptoms and think you are low, but your blood sugar is above 70. You should not treat it as a low unless you are actually low.
   - If your blood sugar is not below 70, but you are symptomatic; your blood sugar may be dropping rapidly or you may be much lower than you normally run. Continue to check blood sugar. If it drops below 70, treat.
2) TREAT: Eat or drink 15 grams of quick acting sugar (example: 4 oz. juice or 4 glucose tabs).
3) RETEST: Recheck blood sugar in 15 minutes, repeat treatment until blood sugar is above 70.
   - If your next meal or snack will not be eaten until more than one hour later, consider eating a snack with 15 grams of carbohydrate and some protein.

Developed by the Washington University/ St. Louis Children’s Hospital Diabetes Team 2014
Preventing Hypoglycemia

Safe Basic Diabetes Care
- Check blood sugars before each meal, at bedtime, before driving a car, and when you feel low blood sugar symptoms.
- Avoid taking rapid-acting insulin right before going to bed. If you do, you need to recheck blood sugar in 2-3 hours.
- If there are several lows during the day or any lows at night, call to review blood sugars with the diabetes nurse. Call if there are more than 2 unexplained blood sugars below 70 in 1 week during the day or any blood sugars below 70 overnight. Do not wait until this has been happening for weeks.

Problems with Insulin Absorption
- Give the correct dose and type of insulin at the right time in the appropriate site. Rotate your injection sites. Injecting in areas of lipohypertrophy may lead to uneven absorption of insulin.
- Avoid hot showers or baths right after taking insulin; this can cause the insulin to be absorbed too quickly and may cause a low blood sugar.
- Use a different site for your injections before exercise. Injecting insulin into the arm or leg that will be doing exercise will cause the insulin to absorb too quickly and may cause you to have a low.

Exercise
- Check blood sugars before, during, and after strenuous exercise. If blood sugar is less than _____ before exercise, eat a snack. By checking blood sugars, you’ll find out how much you need to eat during exercise. Start with 15 grams of carbohydrate for every 30 to 60 minutes of strenuous activity/exercise.

Other Safety Tips:
- Contact your diabetes doctor if you are having lows that you do not feel or recognize. You may have hypoglycemia unawareness, which increases your risk of severe hypoglycemia.
- Always carry 15 grams of quick acting sugar in case you need to treat a low. You should also keep quick acting sugar in your car if you drive.
- Make sure you have an un-expired Glucagon kit in your diabetes bag. EMS does not carry Glucagon, so it should be carried with you or easily accessible at all times.
- Wear some sort of medical identification.

Drive Safely
- **When you drive, check your blood sugar before starting the car.** It is unsafe for you and everyone else on the road for you to drive a vehicle without knowing what your blood sugar is. **If blood sugar is less than 70, even if you do not feel low, do not drive until you eat or drink something to raise it.** If you feel low while driving, pull off the road as soon as safely possible and treat the low. Resume driving only after confirming that your blood sugar is above 70.
- It is also unsafe to drive if you are experiencing severe hyperglycemia or hyperglycemia with ketones.

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