

HYPOGLYCEMIA (LOW BLOOD GLUCOSE)

Hypoglycemia is a condition characterized by abnormally low blood glucose (blood sugar) levels, usually less than 70mg/dl, often 79mg/dl in a diagnosed diabetic individual.

Hypoglycemia may also be referred to as an insulin reaction, or insulin shock as insulin carbohydrate imbalance is often the causative factor, specifically in severe hypoglycemia.

Hypoglycemic symptoms are important clues that an individual is experiencing low blood glucose. Each person's reaction to hypoglycemia is different, any or all of the noted symptoms may be present.

Diabetics have the biggest likelihood of experiencing hypoglycemia, in most cases students will have individual health protocols that should be deferred to. The standard procedure should be followed in the event that a student does not have a procedure for hypoglycemia and seeks out assistance.

The only sure way to know whether an individual is experiencing hypoglycemia is to check the blood glucose, if possible. If symptoms are present and there is no meter to check blood glucose, treat for hypoglycemia. Severe hypoglycemia has the potential to cause accidents, injuries, coma, and death.

If these symptoms present in someone who *does not* have a diagnosis to explain the symptoms (diabetes, glycogen storage disease), immediately call parents and RN. If symptoms are significant (blurred vision, lack of coordination, confusion): Call EMS/9-1-1

Signs and Symptoms of Hypoglycemia (happen quickly)

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| • Shakiness | • Headaches |
| • Nervousness or anxiety | • Weakness or fatigue |
| • Sweating, chills and clamminess | • Anger, stubbornness, or sadness |
| • Irritability or impatience | • Lack of coordination |
| • Confusion, including delirium | • Sleepiness |
| • Rapid/fast heartbeat | • Blurred/impaired vision |
| • Lightheadedness or dizziness | • Tingling or numbness in the lips or tongue |
| • Hunger and nausea | |

Treatment

1. Treat with 15 grams of “simple sugars”

Examples of 15 grams of simple sugars or carbohydrates include:

- glucose tablets (follow package instructions)

- gel tube (follow package instructions)
 - 2 tablespoons of raisins
 - 4 ounces (1/2 cup) of juice or regular soda (not diet)
 - 1 tablespoon sugar, honey, or corn syrup
 - 8 ounces of nonfat or 1% milk
 - hard candies, jellybeans, or gumdrops (see package to determine how many to consume)
 - 15 skittles3-4 glucose tablets
 - 5 Lifesavers or 2-3 pieces of other hard candy
 - 5 sugar cubes or 3 packets of sugar
2. Have the student rest for 15 minutes. Keep the student under direct supervision and continue to monitor for worsening symptoms or loss of consciousness/seizure.
 3. After 15 minutes,
 - If symptoms gone, student may resume normal activities. Proceed to steps 5, 6, and 7.
 - If symptoms continue, repeat steps 1 and 2. If necessary follow step 4.
 4. If symptoms continue for more than 2 feeding treatments, call parent to pick up student.
 - a. Continue to monitor student. If parent is not on site in 30 minutes, call EMS/9-1-1 and give fast acting carbohydrate foods/liquids.
 - b. If student worsens and becomes unresponsive, unable/unwilling to swallow, unconscious, or has seizure.
 - Turn student on side and do not give food or fluids.
 - Call EMS/9-1-1.
 - Continuously monitor for absent breathing/pulse.
 - Notify parent and school nurse.
 5. If regular snack/lunch/meal is due in 60 minutes or more, have student eat a snack that consists of carbohydrate and protein (see list below for suggestions). Student may return to class.
 - a. 3 graham cracker squares with peanut butter
 - b. 6 peanut butter or cheese crackers
 - c. ½ meat or peanut butter sandwich
 - d. 1 cup of milk with 2 graham cracker squares
 - e. ¼ cup of trail mix
 6. For low blood sugar symptoms occurring 30 minutes or less before dismissal, advise parent. Student should be picked up by an adult if all symptoms are not gone.
 7. Record incident on delegated health care log. Notify school nurse of low blood sugar and all actions taken.

Severe Hypoglycemia

- Change in level of consciousness or loss of consciousness
 - Seizure
1. Always assume as diabetic presenting with these symptoms is suffering from severe hypoglycemia and immediately delegate a call to EMS

2. If the individual is able to swallow, administer glucose gel by mouth
3. If the individual has glucagon on site, and you are trained to administer glucagon, defer to glucagon protocol.
4. If the individual does not have glucagon and is unable to swallow, assess for pulse and respirations, administer CPR for absent breath or pulse until EMS arrives.

EMERGENCY GLUCAGON PROVIDER PROCEDURE-*For use by Glucagon Trained Staff only*

American Diabetes Association (2016) Hypoglycemia. Retrieved from: <http://www.diabetes.org/living-with-diabetes/treatment-and-care/blood-glucose-control/hypoglycemia-low-blood.html?referrer=https://www.google.com/>

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