

Hypoglycemia: Symptoms and Treatment

Hypoglycemia is a blood glucose or sugar level less than 4.0 mmol/L

Why does this occur: Low blood sugar levels may occur if you:

- Skip or delay a meal
- Take too much insulin or eat too few carbohydrates
- Exercise or increase physical activity without adjusting insulin
- Drink alcohol, especially without eating carbohydrates

If you have any of these symptoms, check your blood sugar or treat without testing:

- Weakness and/or fatigue
- Headache
- Sweating
- Anxiety
- Dizziness
- Shaking
- Increased heartbeat or palpitations
- Increased hunger
- Nausea
- Irritability
- Blurred vision
- “Fuzzy head” or decreased concentration
- Interrupted sleep – bad dreams, sweating, heart racing
- Loss of consciousness, seizure

Treatment:

Mild – moderate Hypoglycemia: If your blood sugar is less than 4 mmol/L:

- Eat 15 to 20 grams of “quick-acting” sugar/carbohydrate (examples listed below)
- Wait 15 minutes and then recheck your blood sugar
- If blood sugar is still less than 4.5 mmol/L, take another 15 grams of carbohydrate and retest blood sugar in another 15 minutes. Repeat if necessary.

Severe hypoglycemia: If your blood sugar is less than 2.8 mmol/L or if there are symptoms of confusion or decreased level of consciousness:

- Assistance from another person is required.
- Treat with Glucagon nose spray (Baqsimi), Glucagon injection or call 911.
- If able to swallow, treat with 30 grams of “quick acting” sugar.
- Wait 15 minutes and then recheck your blood sugar
- If blood sugar is still less than 4.5 mmol/L, take another 15 grams of carbohydrate and retest blood sugar in another 15 minutes. Repeat if necessary.

After your blood sugar starts increasing and you feel better, it is important to eat some food to prevent the blood glucose from dropping again:

- eat a snack containing 1 carbohydrate and 1 protein portion, or
- eat a meal if close to your regular mealtime.

Important: If you have frequent low blood sugars speak to your healthcare provider. You may need changes in your medications and/or meal plan.

Quickly absorbed carbohydrate/sugars - Guide for Treating Low Blood Sugars

If your blood sugar is low you need to eat or drink 15 to 30 grams of a quickly absorbed carbohydrate, like the ones listed below. Each of the following servings provides 15 grams of carbohydrate.

Candies and Other Sweets

- 3 to 4 DEXtrose tablets
- 12 gummy bears
- 6 large jellybeans
- 5 Life Savers
- 15 Skittles
- 1 Tablespoon honey, jam or jelly
- 1 Tablespoon sugar in water or 3 packets/teaspoons of sugar
- 4 Starburst candies

Beverages

- 150 ml of apple, orange or other fruit juice (just more than ½ a cup)
- 150 ml of regular soft drink/pop/soda (not diet)

Fruits

- 1/2 banana
- 1 small apple
- 1 small orange
- 1/2 cup applesauce
- 15 grapes

Note: The foods listed above are easily digested and will increase blood sugar levels quickly. Foods that contain protein and fat or oils— such as chocolate, granola bars, candy bars, milk, cookies, crackers and bread – don't raise blood sugar quickly enough; they should not be used as first line treatment of hypoglycemia.