

HANDLING LOW AND HIGH BLOOD SUGAR

Signs, Symptoms, and What to Do

HYPOGLYCEMIA (LOW BLOOD SUGAR)

Hypoglycemia occurs when there is **not enough glucose** in your blood. It usually comes on suddenly and can happen after strenuous exercise or when you've waited too long to eat. You're considered hypoglycemic when your blood glucose levels are less than 70 mg/dl. **Knowing how to identify low blood sugar is important because it can be dangerous if left untreated.**

Common Causes of Low Blood Sugar:

- Taking too much insulin.
- Not eating enough carbs for how much insulin you take.
- The amount and timing of physical activity.
- Drinking alcohol.
- How much fat, protein, and fiber are in your meal.
- Hot and humid weather.
- Unexpected changes in your schedule.
- Menstruation.



If you think you have low blood sugar, be sure to check it.

Mild to Moderate Hypoglycemia Symptoms (Warning Signs)



shakiness



hunger, along with
nausea due to hunger



sweating



dizziness



mood changes
(nervousness, anxiety,
irritability, or confusion)



fast heartbeat

The 15-15 Rule

If you have low blood sugar between 55-69 mg/dL, you can treat it with the 15-15 rule: have 15 grams of carbs. Check it after 15 minutes. Repeat if you're still below your target range.

These items have about 15 grams of carbs:

- 4 ounces (½ cup) of juice or regular soda.
- 1 tablespoon of sugar, honey, or syrup.
- Hard candies, jellybeans, or gumdrops (see food label for how much to eat).
- 3-4 glucose tablets (follow instructions).
- 1 dose of glucose gel (usually 1 tube; follow instructions).

Severe Hypoglycemia Symptoms

Blood sugar below **55 mg/dL** is considered severely low. You won't be able to treat it using the 15-15 rule. You also may not be able to check your own blood sugar or treat it by yourself, depending on your symptoms. Make sure your family members, friends, and caregivers know your signs of low blood sugar so they can help treat it if needed.



slurred speech, acting
strange, or feeling confused



loss of consciousness



difficulty walking or
seeing clearly



seizures

Injectable glucagon is the best way to treat severely low blood sugar. A glucagon kit is available by prescription. Speak with your doctor to see if you should have a kit. **It's important to contact a doctor for emergency medical treatment immediately after receiving a glucagon injection.**

When to Call 911

If any of the following happens, your friend, relative, or helper should call 911:

- You pass out and no glucagon is available.
- You need a second dose of glucagon.
- You had glucagon but are still confused.
- Your blood sugar stays too low 20 minutes after treatment or doesn't respond to your usual treatments.

Or call 911 anytime you are concerned about your severely low blood sugar.



UNIVERSITY OF MIAMI
STUDENT HEALTH SERVICE

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HYPERGLYCEMIA (HIGH BLOOD SUGAR)

Hyperglycemia (too much sugar in your blood) usually occurs slowly, over the course of several hours or days. It can be brought on by illness, infection, certain medications, too much food, not enough insulin or exercise, or stress. High blood sugar, or hyperglycemia, is defined as a blood sugar level of above 11 mmol/L.

Hypoglycemia Symptoms



urinating more than usual
(polyuria)



lack of energy, exhaustion,
and irritability (that does
not get better with food)



poor concentration



dizziness/blurred vision



thirst (polydipsia)



weight loss

Treatment

Acute occurrences of hyperglycemia may require emergency treatment in the form of fluid and electrolyte replacement and/or insulin therapy. Long-term, your health care professional may recommend a combination of the following:

- Regular exercise as a way to control blood sugar.
- Medication as prescribed by a health care professional.
- A healthy diet that reduces the amount of sugary foods and drinks and encourages the consumption of whole foods.
- Regular blood sugar monitoring to ensure you're in the optimal range.
- Insulin regulation to supplement and/or adjust your insulin levels, helping to temporarily correct a high level of sugar in the blood.

Develop a Care Plan

If you are living with diabetes, establish a care plan with your provider at Student Health.

The University of Miami Student Health Service can connect you with experts within the UHealth Division of Endocrinology that offer comprehensive treatment, diabetes education classes, and clinical research opportunities for people living with diabetes.

The Comprehensive Diabetes Center can help you develop a customized treatment plan that fits into your lifestyle, using the latest advancements in diabetes treatment. You can depend on expert care and a full range of resources to make living with diabetes a little easier.

To make an appointment with a provider at Student Health, visit **MyUHealthChart.com**.



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