

Healthy Living: Hyperglycemia and Hypoglycemia¹

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If you have diabetes, you may have low blood glucose levels (hypoglycemia) or high blood glucose levels (hyperglycemia) from time to time. Both can be serious if not treated. It's important to learn about hypoglycemia and hyperglycemia so you can prevent and treat them before they cause health problems.

Causes of Hyperglycemia

High blood glucose happens when the body doesn't have enough insulin or when the body can't use insulin properly. It can be caused by overeating, not taking enough diabetes medication, stress, or illness.

Symptoms of Hyperglycemia

High blood glucose happens gradually, so you might not notice the signs. You may:

- ✓ Have increased thirst.
- ✓ Need to use the bathroom often.
- ✓ Feel very tired or weak.
- ✓ Have blurred vision.

Your health care provider will tell you how often to check your blood glucose. He or she also will tell you what level is too high.

Treating Hyperglycemia

Talk to your health care provider about the best way to treat hyperglycemia. He or she may adjust your medications or your meal plan.

If you have type 1 diabetes, you should test your urine for ketones if your blood glucose is over 240 mg/dL. Ask your health care provider about testing for ketones.

Preventing Hyperglycemia

To prevent high blood glucose and the long-term health problems it causes:

- ✓ Follow your meal plan.
- ✓ Take your medication as directed.
- ✓ Be physically active most days of the week.



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If you have diabetes, you may have low blood glucose levels once in a while even if your diabetes is well controlled. Low blood glucose is called hypoglycemia and also may be called an "insulin reaction." If not treated, low blood glucose can cause you to pass out.

Causes of Hypoglycemia

Low blood glucose may happen if you miss a meal or eat less than usual, are more physically active than usual, or take too much insulin or oral medication.



Symptoms of Hypoglycemia

- Shakiness
- Dizziness
- Sweating
- Pale skin color
- Hunger
- Headache
- Confusion
- Clumsy or jerky movements
- Sudden mood or behavior change
- Tingling sensation around the mouth
- Seizure

Your health care provider will tell you how often to check your blood glucose. He or she also will tell you what level is considered low. Check your blood glucose according to your schedule and also whenever you feel low blood glucose symptoms.

If you feel symptoms coming on but cannot check your levels, treat for hypoglycemia.

Treating Hypoglycemia

Treat low blood glucose with sugar, such as:

- Three glucose tablets
- ½ cup of fruit juice or regular soda
- Five to six pieces of hard candy

Check your blood glucose fifteen to twenty minutes later. If it's still low, eat or drink another serving and check your blood glucose again in fifteen to twenty minutes. If it's still low, get help.

Treat low blood glucose quickly. If it gets worse, you could pass out. If you pass out, you need IMMEDIATE help with a glucagon injection or a visit to the emergency room.

If you pass out, a glucagon injection will treat low blood sugar. Teach family members how to use glucagon in case you ever need it. If glucagon isn't available, someone should call 911 or take you to the emergency room.

Preventing Hypoglycemia

You can help prevent low blood glucose by being consistent about the timing and amount of meals, snacks, and medication.

- ✓ Don't skip meals or snacks.
- ✓ Try to eat the same amount of carbohydrates from meal to meal and day to day.
- ✓ Take the right amount of medication at the right time.
- ✓ Plan ahead for times when you will be more active than usual. You may need to adjust your medication or eat another snack.

Always carry a quick source of sugar in case you have hypoglycemia.

