

Hypoglycemia (Low Blood Glucose)

When your blood glucose drops below normal levels, you have a condition called **hypoglycemia**. It's most common in people being treated for diabetes, but it can happen in others as well.

Hypoglycemia can be dangerous. Fortunately, there's a lot you can do to prevent it from happening — and treat it when it does happen. This handout explains what to watch for, and what to do when you're hypoglycemic.

What are the symptoms?

Most people experience one or more of the following when they're hypoglycemic:

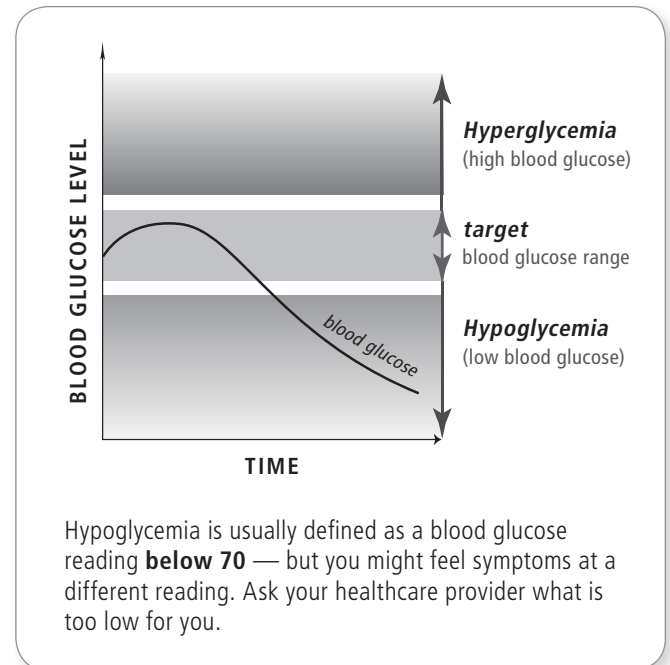
- Shakiness or dizziness
- Sweating
- Hunger
- Headache
- Pale skin color
- Fainting or seizure
- Clumsy or jerky movements
- Difficulty paying attention, or confusion
- Tingling sensations around the mouth
- Sudden moodiness or behavior changes, such as nervousness, irritability, or crying for no apparent reason

What is hypoglycemic unawareness?

Some people don't notice any symptoms when their blood glucose levels are low. This is called **hypoglycemic unawareness**. If you have hypoglycemic unawareness, monitoring your blood glucose regularly is even more important. It can alert you to low blood glucose before it becomes a problem.

Hypoglycemic unawareness can occur for several reasons:

- If blood glucose is poorly controlled, over time high blood glucose levels can cause damage to the hormonal system that signals low blood glucose.



- People who have had frequent episodes of low blood glucose may become used to the feelings that come with it. They may no longer recognize them as warning signs that their blood glucose is low.
- Some medications may mask the symptoms of low blood glucose (for example, sleeping pills, sedatives, or heart medicines called beta blockers).

How do I prepare for hypoglycemia?

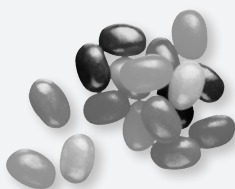
Although you hope to avoid hypoglycemia, **you need to be prepared in case it happens to you**. Here's how:

- **Make sure the people around you know the signs** and how to help you if you're not able to help yourself. Tell them to call 911 if you pass out or have a seizure.
- **Always carry a carbohydrate snack.** (See page 2 for ideas.) And always carry your emergency glucagon kit if you have one.
- **Carry a card in your wallet** explaining that you have diabetes, and how someone can help if you show signs of hypoglycemia. Wear your diabetes ID.

How do I care for myself when I'm hypoglycemic?

Hypoglycemia usually comes on quickly. Be aware of the symptoms so you'll be ready to act quickly.

- ✓ **Check your blood glucose, if possible.** If that's not possible, treat yourself as if your blood glucose is low.
- ✓ **Tell someone around you that you have low blood glucose, if possible.** You might need someone to help you, and they might not know what's going on with you unless you tell them.
- ✓ **Eat or drink 15 grams of fast-acting, low-fat carbohydrate.** Give this treatment about 15 minutes to work. Avoid the temptation to continue eating until your symptoms go away. Overeating may cause your blood glucose to rebound too high.



These items contain about 15 grams of carbohydrate:

- ½ cup juice or regular soda (not diet)
- 4 teaspoons sugar
- 2 tablespoons raisins
- 4 to 5 saltine crackers
- 3 to 5 pieces hard candy
- 1 cup skim milk
- 1 piece bread
- 1 fruit roll-up
- 3 to 4 glucose tablets, or 1 tube glucose gel
- 11 jellybeans
- 8 Lifesavers candies (not sugar-free)

Note: Some foods slow down digestion of carbs, so they're not good sources of quick energy. These include high-fat foods (such as candy bars and cookies) and high-fiber foods (such as whole-grain products).

- ✓ **Check your blood glucose 15 minutes after you eat.** If it's still below 70, eat another 15 grams of carbohydrate. Repeat this until your blood glucose is over 70 or until your symptoms go away.
- ✓ **Once your blood glucose is back to normal, get back on your management plan, and look for causes.** Do you need to do a better job of following your meal plan, or taking your medications as prescribed? If you can't identify a cause of your hypoglycemia, contact your healthcare provider. You might need a change in your plan.

How can I prevent hypoglycemia?

Your healthcare providers will help you make a plan for your nutrition, medications, and exercise. Following your plan closely can help you prevent hypoglycemia.

- **Eat on a regular schedule.** Irregular eating patterns — especially with long periods between meals — can cause your blood glucose to drop.
- **Take your medications exactly as prescribed.** Medications to control diabetes can cause hypoglycemia, especially if taken in the wrong amount or at the wrong time. For example, too much insulin can cause hypoglycemia, which is why it's sometimes called an "insulin reaction." Taking your medication at the wrong time can also make your blood glucose drop too low.
- **Try to get about the same amount of exercise every day.** Being more active than usual can cause hypoglycemia, since active muscles use more glucose than inactive muscles. So even though exercise is a great way to keep your blood glucose levels normal, you need to exercise sensibly to stay safe.

When should I call my healthcare providers?

If you feel you are about to pass out, get emergency care.

Call for advice or an appointment if:

- You can't control your hypoglycemia, in spite of taking action to correct it.
- You have 2 to 3 readings in a row with results of 70 mg/dL or less.
- You have more than 2 unexplained episodes of hypoglycemia in a week.
- You have repeated low glucose readings during a particular time of day.