



Diabetes and Low Blood Glucose

Why learn about low blood glucose?

- If you inject insulin or take diabetes pills, sooner or later you will have a low blood glucose reaction (hypoglycemia)
- If you can recognize and treat low blood glucose reactions, you can prevent them or prevent serious reactions. You need to know the best foods you can use to treat low blood glucose.

What causes low blood glucose?

- Having too much insulin or too many pills.
- Missing a meal or snack, eating less food or eating later than usual.
- Exercising or being more active than usual.
- Drinking alcohol on an empty stomach.
- Changing your schedule because of a special occasion.

Signs of low blood glucose

- You may feel sweaty, shaky, faint, dizzy, weak, nervous, extra hungry, irritable or confused.
- Your heart may pound, your head may ache or your lips or tongue may tingle.
- Other people may notice that your mood has changed, you cannot be awakened or your speech is slurred.
- You may wake up with a headache or have damp sheets. These are signs you may have experienced low blood glucose during sleep.
- It is possible to have low blood glucose and not know it. This may happen more often to people who have had diabetes for a long time.
- If you notice that you feel different than usual, check your blood glucose.

Low blood glucose will happen

- Even if you are very careful, you cannot avoid all low blood glucose.
- If you regulate your blood glucose level tightly, you are more likely to have low blood glucose reactions. If your blood glucose is often low, you may need to change the amount of insulin you take or food you eat.
- Stay calm. It is easy to over-treat a low blood glucose reaction and eat too much food. This will make your blood glucose go too high.
- Always wear medical identification. Ask your health care team about wallet cards, bracelets and necklaces.
- Keep a record of your blood glucose to review with your health care provider, especially if the low glucose episodes are occurring weekly or more frequently.
- Do not use chocolate or candy bars to treat low blood glucose.

Preventing low blood glucose

- Try to have meals and snacks at the same time each day.
- Carry foods to treat low blood glucose and snacks for emergencies.
- Eat an extra snack or use less insulin or pills if you plan to exercise.
- If you are eating out, inject your insulin or take your pills after you get to the restaurant in case your meal is delayed.
- Check your blood glucose often.
- If you drink alcohol, drink it with a meal or snack.
- Get to know yourself and how you feel when your blood glucose is low.
- Check your blood glucose often and make sure your family and friends know what to look for.

Treating low blood glucose

Step 1 Test your blood glucose.

Step 2 If your blood glucose is below 70 mg/dl OR if you have feelings or signs of hypoglycemia and cannot test, eat a treatment food (see below).

Step 3 Rest for 15 minutes.

Step 4 Test your blood glucose.

Step 5 If your blood glucose is still low, repeat steps 2, 3, and 4. If your blood glucose is normal, go to step 6.

Step 6 If you missed a meal or snack or if one is due in the next hour, eat it now. If you are not due to eat a meal or snack, eat an extra snack with about 15g carbohydrate as well as some protein and fat. Here are some ideas:

- a cup of milk or sugar-free yogurt
- a small piece of fruit and an ounce of low-fat cheese
- half of a ham or turkey sandwich
- 3 cheese or peanut butter sandwich crackers
- 1/2 burrito or quesadilla

Step 7 Get medical help immediately (dial 911) if your blood glucose is still low after 30 minutes with two failed self-treatment attempts. If you pass out, you may need a glucagon injection or intravenous (IV) glucose.

Low blood glucose treatments (10-15 gram carbohydrate)

- ½ to ¾ cup of orange or grape juice (a juice box is good when you're away from home)
- 3-4 glucose tablets or 2 doses of glucose gel (check the package and take the amount that equals 15 grams of glucose).
- 2-4 pieces of hard candy
- 5 gumdrops
- 1-2 tablespoons of honey
- 6 oz. regular (not diet) soda (about half a can)
- 2 tablespoons of cake icing
- 1 cup of milk

After low blood glucose

- Try to learn why your blood glucose was low.
- Check your blood glucose again after two to four hours.
- Call your health care team if you do not know why you had a low blood glucose reaction or if you have a low blood glucose reaction two or three days in a row.

The above information is adapted from material by and reprinted with permission from: American Diabetes Association and American Dietetic Association.

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: Dial-A-Nurse at 333-2700

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.illinois.edu>