

Guidelines for Treating a Low Blood Glucose (Sugar) Reaction

What is hypoglycemia?

Low blood glucose is often called hypoglycemia. Hypoglycemia is when blood glucose **falls below 70 mg/dL**. Some people may have symptoms of low blood glucose at levels greater than 70 mg/dL.

How would I know if my blood glucose is low?

Symptoms of low blood glucose include:

- Sweating
- Becoming shaky
- Feeling hungry
- Headache or light-headed
- Irritable or crabby
- Feeling weak
- Blurry vision

If you do not treat your low blood glucose, it will fall lower and you may become:

- Confused
- Very tired
- Unconscious (pass out)

How can my blood glucose go too low?

Low blood glucose can happen when you take oral medicine or insulin to lower blood glucose and treat diabetes. Blood glucose can go too low when you:

- Take too much insulin or diabetes pills.
- Do not eat enough food.
- Eat a meal later than usual.
- Skip a meal.
- Exercise without eating.
- Drink alcohol.

How do I treat low blood glucose?

Do not wait to treat low blood glucose. If you feel your blood glucose is low, you need to treat it as soon as you can. Start by checking your blood glucose with your blood glucose

meter. If you feel low and are not able to check your blood glucose quickly, treat the low blood glucose anyway. It is better to have your blood glucose go a little high than to have it go too low.

You should treat your low blood glucose right away. Eat or drink something that contains 15 grams of quick-acting carbohydrate (sugar). 15 grams of carbohydrate will raise your blood glucose 50-60 mg/dL in 10-15 minutes.

Good choices of 15 grams of quick-acting carbohydrates are:

- ½ cup apple juice
- ½ cup orange juice
- 1 tablespoon honey or syrup
- 2 tablespoons raisins
- ½ cup regular gelatin
- 6 sugar cubes
- 1 tablespoon table sugar
- Soft, chewable candy
- 3-4 glucose tablets
- ½ (80 gram) glucose bottle
- ½ (31 gram) instant glucose tube

You can buy glucose tablets, instant glucose bottles, and tubes at your local drug store.

What should I do next?

After eating or drinking the quick-acting carbohydrate, wait 10 to 15 minutes and re-check your blood glucose.

If you still feel your blood glucose is low or if your blood glucose is still below 70 mg/dl, repeat the steps above. Try eating another 15 grams of carbohydrate until your blood glucose is higher than 100 mg/dl, or you feel better.

Try to eat a well-balanced meal with a source of whole grains, vegetables, and lean protein (chicken, fish, eggs, or low-fat dairy) within the next hour.

If your next meal is more than an hour away, eat a healthy snack with a source of carbohydrate and lean protein or healthy fat.

Healthy snack options include:

- Apple or small banana and 1 tablespoon peanut butter
- ½ sandwich on wheat bread
- 6 wheat crackers with 1 oz cheese
- 3 cups popcorn and 2 tablespoons of nuts
- 1 6" tortilla with ¼ cup of hummus or guacamole
- 5-6 oz container of low-fat Greek yogurt
- 1 cup of raw vegetables and ¼ cup of hummus

Avoid Over-Treatment

Foods used in treating low blood glucose are extra foods that are not part of your meal plan. Foods used to treat low blood glucose should not be viewed as “treats.” Chocolate candy is not a good choice because it will **not** produce a **rapid** rise in your blood glucose.

Avoid Low Blood Glucose

If you have low blood glucoses often, think about why this may be happening. Ask yourself:

- Am I skipping meals and/or snacks?
- Am I counting carbohydrates the right way?
- Am I giving myself too much insulin, or taking my diabetes pills the wrong way?
- Am I exercising without knowing my blood glucose?

If you have trouble figuring out why, be sure to ask your healthcare provider who may be able to help you.

How do I prevent low blood glucose?

- Eat meals at about the same time each day. Do not skip meals.
- Take the correct amount of insulin or diabetes oral medicines.
- Eat a snack before exercise and before driving long distances (if you have not had a meal for 2-3 hours).
- Know when your insulin will peak.
- Always carry a form of quick-acting glucose to treat low blood glucose.

If you have diabetes and you become unconscious or not able to swallow, someone will need to give you glucagon rather than trying to make you eat or drink. Glucagon is a shot given into a large muscle. It will increase the blood glucose levels in your body.

Teach Back:

What is the most important thing you learned from this handout?

What changes will you make in your diet/lifestyle, based on what you learned today?

If you are a UW Health patient and have more questions, please contact UW Health at one of the sites listed below. You can also visit our website at www.uwhealth.org/nutrition.

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children's Hospital (AFCH) can be reached at: **(608) 890-5500**.

Nutrition clinics for UW Medical Foundation (UWMF) can be reached at: **(608) 287-2770**.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2019 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Clinical Nutrition Services Department and the Department of Nursing. HF#259