

DIABETES SAFETY FIRST!

Recognizing and Preventing Low Blood Sugar

Blood glucose (sugar) goes up and down in a small range throughout the day. In people with diabetes, the range can be much wider. It is important to understand the fine balance between treating the high sugars and avoiding the low sugars.

If you have diabetes and take certain diabetes drugs or insulin, you may experience low blood sugar (hypoglycemia) from time to time. Hypoglycemia is a blood sugar of less than 70 mg/dL. However, some people have symptoms of low blood sugar even at higher blood sugar levels. This can happen when blood sugar is dropping too quickly or if the person has had very high blood sugars for a long time. Severe hypoglycemia means the person needs someone to treat them, which is a very serious condition!

Even mild hypoglycemia symptoms are hard on your body and on your emotions. By learning more about the signs and causes of low blood sugar, you can take steps to keep it from happening again. Frequent low blood sugars are serious because the body becomes less able to show the warning signals of a low blood sugar. The blood sugar can then fall to dangerously low levels.

What causes low blood sugar and what are the symptoms?

Low blood sugar is usually caused by eating less or later than usual, changing your physical activity or taking a diabetes medicine that is not right for your needs. Even mistakes in dosing can lead to hypoglycemia. For example, you could mistake one insulin for another or forget that you had already taken your diabetes pills! A recent large study showed that the most common causes of hypoglycemia were smaller than usual food intake, delay in eating, or skipping a meal.

Common symptoms of low blood sugar are:

- Feeling dizzy, shaky, or lightheaded
- Feeling nervous or anxious
- Having a fast heart beat
- Sweating or having clammy skin
- Feeling tired or confused
- Having a headache
- Feeling irritable

Low blood sugar feels different to different people, so learn to know your own symptoms.

Symptoms from low blood sugar may be mild at first but may worsen quickly. If it's not treated quickly, you could pass out or have a seizure.

What should I do if I have symptoms of low blood sugar?

If you think you have any low blood sugar symptoms, check your blood sugar right away.

If your blood sugar is less than 3.0 mmol/L (or below the level set by your doctor) take one of the following right away (15 grams of carbohydrates [carbs]).

- 3-4 glucose tablets (4-5 grams glucose each)
- One-half cup fruit juice or soft drink (not diet)
- One tablespoon sugar, jam, or honey
- 7-8 Lifesaver candies
- 1/2 to 1 tube of gel cake icing (not frosting)
- 8 Sweet Tart candies
- One fruit roll-up (tuck it into an exercise bra or bike shorts for easy carrying)

If you feel your blood sugar is low and you can not test it, take one of the above items anyway. It's better to be safe than sorry!

After treating your low blood sugar wait 15 minutes then test your blood sugar again. If it is still low, eat or drink another 15 grams of carbs.

Waiting to treat low blood sugar is not safe. Not treating symptoms quickly can cause you to faint and lose consciousness, which would then require emergency treatment.

How can I avoid low blood sugar?

To help avoid low blood sugar:

- Stay close to your schedule of eating, activity, and medication
- Don't skip meals
- Carry snacks and carbs that have sugar (like hard candy or glucose tablets) so you can treat low blood sugar levels at any time
- Test your blood sugar on schedule and anytime you feel different
- In general:
- Carry identification: a bracelet, necklace, or ankle bracelet that has a medical alert message stating that you are taking diabetes medication

Why worry about hypoglycemia?

Clearly the symptoms of hypoglycemia are unpleasant, and feeling tired and out of sorts can continue for hours even after the low blood sugar returns to more normal levels. If severe low blood sugar is untreated, seizures, coma or even death can occur. In fact,

many traffic accidents involving people with diabetes may be related to untreated hypoglycemia (so always check your finger stick glucose BEFORE putting your key in the car ignition!).

New evidence shows that hypoglycemia can include changes in heart rhythm and electrical problems in the heart. Heart attacks can occur later in life in people with diabetes-associated nerve function loss. Should you then give up on controlling your blood sugar? Please, NO! But discuss your blood sugar goals with your doctor, your endocrinologist, and your diabetes team, to decide what blood sugar targets are the best and safest for you.

Important:

- If you often have episodes of low blood sugar, talk to your doctor. You may need to have the dosage or the type of your diabetes medication adjusted or changed
- Always wear or carry diabetes identification
- Teach your family, friends, and coworkers about symptoms and treatment of low blood sugar.

Dr Shahjada Selim

Assistant Professor

Department of Endocrinology

Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh

Cell: 01826200665

Chamber

Comfort Doctors' Chamber

165-166 Green Road, Dhaka Mobile:

01731956033, 01552468377

Email: selimshahjada@gmail.com; info@shahjadaselim.com