Diabetes: Hypoglycemia and Hyperglycemia

Hypoglycemia

Hypoglycemia occurs when your blood sugar level drops too low to provide enough energy for your body’s activities. This also is called low blood sugar or low blood glucose. A normal blood sugar range varies with each person. The normal range is about 65 to 99 mg/dL. In most cases, patients with levels below 70 mg/dL are treated for low blood sugar. Please talk with your doctor about the blood sugar range that is best for you.

Symptoms

- Hunger.
- Nervousness and shakiness.
- Sweating.
- Dizziness or lightheadedness.
- Sleepiness.

Hypoglycemia also can happen while you are sleeping. Signs to watch for include:

- Pajamas or sheets damp from sweating.
- Crying out or having nightmares.
- Feeling tired, irritable or confused when you wake up.

Causes of Hypoglycemia

People taking blood-glucose-lowering medicines can have blood sugars fall too low for a number of reasons, including:

- Meals or snacks that are too small, delayed or skipped.
- Excessive doses of blood-glucose-lowering medicines.
- Increased activity or exercise.
- Excessive alcohol intake.

Prevention

It is important to follow a regular schedule to maintain your usual medication times with your usual meals and activities. You should remember several things to help prevent hypoglycemia:

- Some diabetes medicines can cause low blood sugar; ask your doctor about yours.
- Meal plans designed by your dietitian can help you eat regular meals that fit your preferences and lifestyle.
Physical activities, such as sports or exercise may require a snack or an adjustment to your medication. Talk to your doctor about what is right for you.

Blood sugar should be checked regularly by people with diabetes. Simply checking will help you know if you are having a hypoglycemic episode. If your blood sugar is 70 mg/dL or below, this is considered low blood sugar.

A quick source of sugar, like glucose tablets or Lifesavers®, should be kept with you at all times in case of a hypoglycemic episode so you are able to treat the problem right away.

Treatment
If you think your blood sugar is too low, use a blood glucose meter to check your level. If it is 70mg/dL or below, take 15 grams of a fast-acting carbohydrate. Wait 15 minutes, and check your blood sugar again. You can remember this as the 15:15 rule. Repeat the treatment until your blood sugar is within normal range. If you do not have your meter with you and are feeling symptoms of low blood sugar, treat with a fast-acting sugar that will help raise your blood sugar quickly, such as:

- 3 to 4 glucose tablets.
- 4 ounces of any fruit juice or regular soda.
- 8 ounces of skim milk.
- Hard candy (6 to 7 Lifesavers® or 7 jelly beans).

Hyperglycemia
Hyperglycemia is another name for high blood sugar levels. Please check with your doctor for the blood sugar range that is best for you.

Symptoms
- Thirst.
- Frequent urination.
- Fatigue.
- Blurred vision.
- Increased hunger.
- Dry skin.
- Slow-healing wounds.

Causes of Hyperglycemia
Hyperglycemia may occur for several reasons, including:

- Change or increase in food intake.
- Wrong or missed dose of insulin or diabetes tablets.
- Side-effect of some medications.
- Not enough physical activity.
- Emotional stress.
- Illness.
**Long-term Complications**
- Heart disease.
- Kidney disease.
- Vision loss.
- Nerve damage.
- Liver damage.
- Skin sores.
- Infection.

**Prevention/Treatment**
Hyperglycemia can be avoided in many cases. Remember these suggested actions to help maintain control of your blood sugar.
- **Check food intake** and look for ways to improve your eating pattern. Ask your dietitian for help.
- **Take insulin or diabetes tablets** in the prescribed doses and at the correct times. Contact your doctor if you are concerned.
- **Drink plenty of water** to prevent dehydration.
- **Try increasing your physical activity** gradually and make it a part of your lifestyle.
- **Consider ways of reducing stress** through relaxation training or stress management.
- **See your doctor** if you are ill to ensure the illness is treated as soon as possible.
- **Do not skip diabetic medications on sick days.** Contact your doctor.

**Health Information Resources**
For more information, visit Northwestern Memorial Hospital’s Alberto Culver Health Learning Center. This state-of-the-art health library is located on the 3rd floor of the Galter Pavilion. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Center by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nm.org.

For additional information about Northwestern Medicine, please visit our website at nm.org.