

Improve your Blood Glucose Control

Avoiding Low Blood Sugar

One of the most important reasons to monitor your blood sugars is to identify any patterns or trends that are foiling your efforts to get better control. Low blood sugar cannot be detected by the A1C test that is done in our office every 3 months or an occasional test done on your glucometer. The only way to detect low blood sugar is to use your glucometer and test regularly or when you experience any of the symptoms of low blood sugar.

When discussing your blood glucose (BG) results with your provider, or your diabetes educator, the first thing we look for is low blood sugars. Low blood sugar is also



known as hypoglycemia, which is generally defined as a blood sugar reading under 70 mg/dl. Hypoglycemia starves the brain of glucose energy which is essential for brain function. Lack of this glucose



energy to the brain can cause symptoms such as headache, mild confusion, abnormal behavior, loss of consciousness, seizure and coma. Severe hypoglycemia, not treated, can cause death. Writing down your BG results or downloading them to review during your visit is the best way to detect any patterns that may need attention.

MILD Hypoglycemia - usually the person has tremors (shaky), fast heartbeat (palpitations), sweating and/or excessive hunger. You are generally able to treat this with 15 grams of a fast acting carbohydrate, such as a 4 oz. glass of orange juice. This should generate a response within 10-15 minutes.

MODERATE Hypoglycemia - this usually includes symptoms such as headache, mood changes, irritability, decreased attentiveness and drowsiness. Some may require assistance to treat this because judgment may be impaired. Moderate reactions may be more long lasting and may require a second or third dose of a carbohydrate.

SEVERE Hypoglycemia- Severe reactions are characterized by unresponsiveness, combativeness, unconsciousness or seizures and will require additional assistance. This may necessitate a glucagon injection or intravenous glucose, or, if these are not available, a glucose gel applied between the patient's cheek and gum may help.

There are several common causes of hypoglycemia including: too much glucose lowering medication, inadequate food, skipping meals while on medications that reduce blood glucose, unplanned activity for a prolonged duration or increased intensity of an activity and use of alcohol or drugs. If you experience low blood sugars, please talk with your provider to establish what the source is. The best way to determine the most likely source is to monitor and share that information with your provider. The goal is to prevent hypoglycemia by finding the source and making adjustments. One solution does not fit all situations, as each patient is unique.

For example, in a scenario where you find that lows usually occur at the same time every day, despite consistent activity and regular meals, it is common that the source of your low may be attributed to your medication(s). Your provider will then be able to make some adjustments in your medication(s) to prevent this. If you take insulin, common reasons for the lows may be related to the dose. Variables can include when you take your dose in relation to your meal and in what manner you calculate how much insulin you need for your meals. Again, your provider can make adjustments in your insulin prescription to prevent those lows. Changes in activity levels may also precipitate a low. If you are active, you may need to replace the energy that you expend by eating some carbohydrate prior to or during the activity.

If you discover that hypoglycemia is one of your problems consider this:

- 1. Always test your BG before you drive.*
- 2. Always have carbohydrates available to treat a low.*
- 3. When in doubt, and you don't have your glucometer, treat for a low.*
- 4. Treat early, the longer you let it go, the more severe it can become and the longer the recovery period will be.*
- 5. Discuss these occurrences with your provider/educator and get to the source.*
- 6. Prevention is the best treatment.*