

Steroid Induced Diabetes

What is high blood sugar (hyperglycemia)?

Hyperglycemia is a high level of sugar in the blood. Blood sugar is also called glucose.

Some people are unable to process the sugar that is found in food and this is called Diabetes. Diabetes is diagnosed when the fasting blood sugar is greater than 126 or a random blood sugar is greater than 200.

What is insulin?

Insulin is a hormone made by the pancreas. It moves the sugar from the blood into the cells where it is used for energy. Without insulin, the body cannot turn sugar into energy. Then the sugar builds up in the blood, causing high blood sugar.

What is steroid induced diabetes?

Patients who are getting chemotherapy for cancer treatment often get glucocorticosteroids (steroids), too. Steroids may decrease your body's ability to use insulin effectively and you may develop what is called **steroid induced hyperglycemia** or **steroid induced diabetes**. This condition may go away after you stop taking steroids. Some people that are already at higher risk for getting diabetes will still have high blood sugar after the steroids are stopped.

Controlling your blood sugar is very important and your doctor will talk with you about how to best do this. You may need to change how you are eating, check your blood sugar at home, and take insulin to help lower your blood sugar.

What are the symptoms?

Symptoms of high blood sugar may include:

- blurry vision
- dry mouth
- frequent thirst
- feeling the need to drink large amounts of liquids
- increased urination
- feeling tired

However, do not rely on how you feel because very often there are no symptoms from high blood sugar. This is why blood glucose testing is so important.

How can I take care of myself?

Here are some easy steps to follow:

- Make healthy food choices
- Try to exercise every day
- Talk with your doctor about checking your blood sugar
- If medicine has been prescribed, take it exactly as directed

Make healthy food choices

Carbohydrates are important for providing your body with the energy it needs to function. Carbohydrates are found in grains and starches, fruits, starchy vegetables, (such as potatoes, corn, and peas), legumes, milk and milk products (like soy milk, rice milk), sweets and many beverages. To stay healthy eat a variety of fruits and vegetables, whole grains, and dairy every day.

The Cancer Center has dietitians who can help you develop an eating plan that will help you keep blood sugars low. Call 877-907-0859 for an appointment.

Exercise

Along with diet, exercise is the first recommendation for patients with diabetes to help control blood sugar. However, during cancer treatment you may find it more difficult to get enough exercise. Try exercising for ten minutes at a time, three times a day. This can keep you active without making your fatigue worse. Look for activities that you enjoy. Make sure you talk to your doctor before starting any new exercise routine to make sure there are no restrictions because of your cancer treatment.

Blood Glucose Monitoring

How do I monitor my blood sugar?

A glucose meter is used to test blood sugar. Testing your blood sugar levels at different times of the day will give you information on how your blood sugar is doing. Keeping your blood sugar level close to normal will make you feel better and help reduce your risk of diabetes-related complications.

When should I monitor?

- Most people need to check their blood sugar before or after meals and at bedtime. This gives a picture of how your blood sugar reacts to your insulin, food and exercise.
- Discuss with your doctor when you should be monitoring.
- You can also check your blood sugar if you just aren't feeling right. This helps you decide if how you feel is related to your blood sugar or to something else.

Keep a record of your blood sugars:

- Review these records regularly using the guidelines provided by your doctor about high and low blood sugars. Make sure you call your doctor if your blood sugar is less than 70 mg/dl twice in a week or over 200 mg/dl on three occasions within one week.
- Take your glucose meter and your log book to your medical visits and show them to your doctor.

Low Blood Sugar (Hypoglycemia)

What it is:

A blood sugar less than 70mg/dl is low blood sugar or hypoglycemia.

Signs and symptoms:

It's important to recognize low blood sugar as early as possible. Symptoms will vary from person to person. They can include;

- Feeling shaky or sweaty
- Fast heart beat
- Feeling anxious
- Having blurred vision
- Weakness or sudden fatigue
- Irritability
- Feeling dizzy and/or having a headache.
- In its extreme form it can cause you to become confused, disoriented and even make you unconscious

What can cause low blood sugar:

- Too much insulin
- Too little food or skipping a meal
- More activity than usual

- Too much alcohol

How to treat low blood sugar

If you have symptoms of low blood sugar, test your blood sugar if you can. If it's less than 70mg/dl, or if you can't test, act quickly. You need:

- 15 grams of fast acting glucose: That could be:
 - 4-6 ounces of fruit juice
 - 8 ounces of skim or fat free milk
 - 4 ounces (a third of a can) of regular (not diet) soda
 - 4 glucose tablets

If your blood sugar is 50 mg/dl or less, you need to treat with 30 grams of fast acting glucose:

- 8 oz of fruit juice
- 16 oz of fat free milk
- 8 oz or 1 cup of regular pop
- 8 glucose tablets

Wait 15 minutes and test your blood sugar to make sure it is back up to a safe zone. If the blood sugar continues to be below 70 mg/dl repeat the instructions above.

How *NOT* to treat low blood sugar

Chocolate, donuts, cake, pie, candy bars, cheese, and meat are NOT good choices to treat a low blood sugar. All of these foods are high in fat. The fat in these foods makes them stay in the stomach longer, so the sugar in them doesn't get into your blood stream quickly and will not increase your blood sugar as quickly as other choices.

How to prevent low blood sugars

Make sure you follow your meal plan and talk with your doctor about what to do on the days you do not feel like eating. Check your blood sugar before, during and after exercise to see if you need to eat extra food or possibly decrease your insulin to prevent a low.

How can I find out more?

Please talk to your doctor or nurse if you want to learn more about diabetes. They can refer you to the Diabetes Education Program. The Diabetes Education Program offers group classes as well as one-on-one sessions for people with diabetes. Most insurance will cover the classes with a referral from your doctor. Call 734-647-5871 or 866-266-5221 for more information.

When and how should I contact my healthcare team?

You should always call if you are having problems or questions regarding your treatment.

Contact Person:

Hours:

Phone Number:

After hours, weekends and holidays: Contact the paging operator at (734) 936-6267 and as for the Oncology Resident on call.

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