High Blood Sugar

High blood sugar, also called hyperglycemia or uncontrolled diabetes, happens when there is too much blood sugar, called glucose, in the body. People with diabetes can get hyperglycemia from not eating the right foods or not taking medicines correctly. Other problems that can raise blood sugar include infections, certain medicines, hormone imbalances, or severe illnesses. High blood sugar can damage your nerves, blood vessels, and organs. Talk with your doctor or nurse if your blood sugar is not managed with your current medicine, diet, and exercise plan.

Use this table to review general blood sugar levels. Anytime your blood sugar before meals is above 140, it is too high. You may have different treatment goals or tighter glucose control. Follow the goals set for you by your doctor or nurse.

<table>
<thead>
<tr>
<th>Checking Blood Sugar</th>
<th>Normal</th>
<th>Goal</th>
<th>Additional Actions Need to Be Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting</td>
<td>Less than 100</td>
<td>80 - 130</td>
<td>Less than 70 Greater than 140</td>
</tr>
<tr>
<td>Before meal</td>
<td>Less than 110</td>
<td>80 - 130</td>
<td>Less than 70 Greater than 140</td>
</tr>
<tr>
<td>2 hours after meals</td>
<td>Less than 140</td>
<td>Less than 180</td>
<td>Less than 80 Greater than 180</td>
</tr>
<tr>
<td>Bedtime</td>
<td>Less than 120</td>
<td>100 - 140</td>
<td>Less than 100 Greater than 180</td>
</tr>
<tr>
<td>A1C test</td>
<td>Less than 5.6%</td>
<td>Less than 7%</td>
<td>Greater than 7%</td>
</tr>
</tbody>
</table>

High blood sugar risk

High blood sugar is more likely to occur when you:

- Are first diagnosed with diabetes.
- Do not take enough medicine.
- Miss, skip, or delay medicines.
- Take steroid medicines.
- Eat more food than your meal plan allows.
- Eat foods high in sugar or carbohydrates.
- Get too little exercise.
- Have infection or illness.
- Have stress.
- Have heredity or genetic factors.
- Are pregnant.
Signs of high blood sugar

High blood sugar affects each person differently. Think about how you feel when blood sugar is high. Record these signs and notice if they return.

Warning signs may appear any time blood sugar is not well managed. Blood sugar can slowly rise over hours, days, and even weeks. It is important to check blood sugar often to stay within the normal range.

Signs may be noticed by others before you notice them. Talk to family and friends about your signs of high blood sugar, which may include:

- Extreme thirst
- Frequent urination
- Increased appetite
- Impotence
- Blurred vision
- Weight changes, loss, or gain
- Skin itching

- Skin infections, such as boils
- Feeling tired or sleepy
- Feeling moody or grumpy
- Delayed healing of wounds, cuts, or blisters
- Numbness in feet or hands
- Vaginal itching or frequent vaginal infections

Treatment for high blood sugar

Short term actions to take:

- Drink plenty of water, at least eight, 8-ounce glasses a day.
- Exercise if your blood sugar level is less than 250.
- Recheck your blood sugar level in 2 hours.
- Reduce your carbohydrate intake at your next meal if your blood sugar is still high.
- Contact your doctor or nurse for advice.

Long term actions to take:

- Follow your treatment plan. Review your Blood Sugar Record, diabetes medicines, meal plans, and activity of the last few days. Look for any changes that might explain high blood sugar.
  - Check your blood sugar level 4 times a day and record the results in your Blood Sugar Record.
  - Take your insulin and oral diabetes medicines as directed. Do not skip doses or take more medicine than needed unless directed to do so by your doctor.
  - Follow your meal plan. Eat a variety of whole grain foods, fruits, and vegetables each day. Limit foods that are high in sugar and carbohydrates. Eat less fat. Eat smaller portions spread throughout the day. Use less salt. Limit alcohol.
  - Exercise for at least 150 minutes each week. This is about 30 minutes of moderate exercise, 5 days a week.

Contact your doctor or nurse if your blood sugar is not being managed with your current treatment plan.
• **Contact your doctor if you have illness, infection, or other health changes** that can increase blood sugar. If you have Type 1 diabetes and your blood sugar is 240 or higher, your doctor may have you check for ketones in your urine.

• **Follow your sick day diabetes care plan as needed.** Separate sick day plans are used for general illness and for illness during pregnancy.

### Treatment problems

**Do not ignore high blood sugar.** If not treated, high blood sugar can lead to:

• Damage to major organs and nerves, including kidneys, heart, and eyes. Nerve damage can affect the feet and the ability to walk and have balance.

• Wounds that do not heal well.

• A coma. This is also called diabetic ketoacidosis (DKA) or hyperglycemic hyperosmolar state (HHS).

• Death.

If you have any questions or concerns, talk with your doctor, nurse, dietitian, or diabetes educator to help you with the management of your high blood sugar.

### Family and friends

Your spouse, family members, roommates, friends, and co-workers should know that you have diabetes. It is up to you to decide who you tell and how much you tell them about diabetes. They should know that you can have high blood sugar and what they can do when it happens.

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**Talk to your doctor or health care team if you have any questions about your care.**

For more health information, contact the Library for Health Information at 614-293-3707 or e-mail health-info@osu.edu.

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