



Managing Your Blood Sugar Levels

When you have type 2 diabetes, you need to manage your blood sugar carefully to keep it within the target range. Doing so can help prevent or delay the onset of complications associated with type 2 diabetes, such as damage to the nerves, eyes, kidneys, and blood vessels.

Managing your blood sugar involves balancing the food you eat with exercise and any medications you might be taking. Two tests can help you monitor how well you are managing your blood sugar: a blood sugar check and a urine ketone check.

Blood sugar checks

Blood sugar checks tell you your blood sugar level at any given time and are the main tool to see how you are doing in managing your blood glucose. It's important to keep a log of your blood sugar levels so that you can review them with your health care professional. This log will show your body's response to the foods you are eating and the medications you may be taking. The log will allow your health care professional to modify your treatment plan as necessary to maintain proper blood sugar control.

Here is a chart that includes target blood sugar ranges for adults with diabetes:

Glycemic control	
A1C	Less than 7.0%
Preprandial plasma glucose (before a meal)	70–130 mg/dL (5.0–7.2 mmol/L)
Postprandial plasma glucose (after a meal)	Less than 180 mg/dL (less than 10.0 mmol/L)
Blood pressure	Less than 130/80 mmHg

Who should be checked?

The American Diabetes Association recommends blood sugar checks if you have diabetes. You may need to check your blood sugar more often if you are:

- Taking insulin or diabetes pills
- Undergoing intensive insulin therapy
- Pregnant
- Having a hard time controlling your blood sugar levels
- Having severely low blood sugar levels or ketones from high blood sugar levels
- Having low blood sugar levels without the usual warning signs



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Urine ketone checks

Urine ketone tests are important when your diabetes is out of control or when you are ill. Ketones show up in urine when your body is burning fat instead of glucose for fuel because there is too little insulin available.

This test is easy to do, but to get accurate results, you must follow the directions and be sure that the test strips have not expired. If you have any questions, be sure to check with your doctor or nurse.

Here's how most urine tests are done:

- Get a sample of your urine in a clean container.
- Place the strip in the sample (you can also pass the strip through the urine stream).
- Gently shake excess urine off the strip.
- Wait for the strip pad to change color. The directions will tell you how long to wait.
- Compare the strip pad to the color chart on the strip bottle. This gives you a range of the amount of ketones in your urine.
- Record your results.

What do your results mean? A negative result indicates that there are no ketones present. Small amounts of ketones may mean that ketone buildup is starting; therefore, you should test again in a few hours. Moderate or large amounts of ketones are a danger sign, because they can upset the chemical balance of your blood and ultimately poison the body. Moderate or large amounts of ketones and high blood sugar are indications that your diabetes is out of control. Talk to your doctor at once if your urine results show moderate or large amounts of ketones, and never attempt to exercise if there are ketones in your urine.

When to test

Ask your doctor or nurse when to check for ketones. You may be advised to check for ketones when:

- Your blood glucose is more than 300 mg/dL
- You feel nauseated, are vomiting, or have abdominal pain
- You are sick (for example, with a cold or flu)
- You feel tired all the time
- You are thirsty or have a very dry mouth
- Your skin is flushed
- You have a hard time breathing or your breath smells “fruity”
- You feel confused or “in a fog”

These can be signs of high ketone levels that may require your doctor's help.

For more information about diabetes, please visit JourneyForControl.com.

