

Ketone Testing

BAYER HEALTH FACTS



EASY ACCURACY. ANSWERED BY BAYER.



American Association
of Diabetes Educators



Bayer HealthCare
Diabetes Care

WHAT ARE KETONES?

Ketones are a type of acid. Ketones are left over when your body breaks down fat for fuel. Your body burns fat if it can't get enough sugar (glucose) to use for energy. When your body burns too much fat too quickly, your body produces ketones. Ketones get removed from your bloodstream into your urine.

WHY WOULD MY BODY HAVE TROUBLE USING SUGAR?

Sugar is the first fuel your body burns for energy. To help move sugar from your bloodstream into body cells where sugar is used for fuel, your body needs insulin. Insulin is a hormone that is made in the pancreas. If there is too little insulin to help the sugar get into cells, the body looks for other kinds of fuel to burn. When the body burns stored fat, ketones begin to build up in the body. Too many ketones in the bloodstream can lead to a serious problem called ketoacidosis. Without proper treatment, this can lead to coma or death.

WHO SHOULD TEST FOR KETONES?

People with type 1 diabetes may produce ketones more easily than people with type 2 diabetes. Everyone with type 1 diabetes should test for ketones in their urine. (See: [When should I test for Ketones in my urine?](#)).

People with type 2 diabetes are less likely to have problems with ketones, but everyone with diabetes should know about the warning signs and when to test. Ketone

testing, like blood sugar testing (see our Bayer Health Facts brochure on **Blood Sugar Testing**),



is very important. Finding ketones in your urine is a sign of trouble. Ketone testing is often recommended for people with type 1 or type 2 who become pregnant or for women with gestational diabetes (see our Bayer Health Facts brochure on **Gestational Diabetes**).

Ketone testing may also be recommended for children with type 2 diabetes or people with MODY (maturity onset diabetes in youth).

WHEN SHOULD I TEST FOR KETONES IN MY URINE?

Your healthcare team will tell you when you should test for ketones. The American Diabetes Association recommends you test if:

- Your blood sugar is 250 mg/dL or higher for two tests in a row
- You are sick (even with a cold) because being sick can cause you to have ketones (see our Bayer Health Facts brochure on **Sick Day Management**)
- You are vomiting or have diarrhea
- You are under stress or are upset
- You are pregnant



WHAT DO I DO IF MY KETONE TEST IS POSITIVE?

If the results show trace or small amounts of ketones:

1. Be sure to contact your healthcare team.
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2. If your blood sugar and ketone numbers are NOT going down after two tests, call your healthcare team.
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3. Drink an 8 oz. glass of water or calorie free fluids every hour. (at a minimum)
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4. Test your blood sugar and ketones every 2 to 4 hours.
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5. If your blood sugar is higher than 250 mg/dL and you have ketones, DO NOT exercise. Also, be sure to contact your healthcare team.



What do I do if my ketone test is positive? (continued)

If the results show moderate or high ketones:

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1. Call your doctor **IMMEDIATELY**.

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2. Continue testing your blood sugar and ketones every 2 hours until normal.



3. Drink a glass of water or calorie free fluids every hour.

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Ketoacidosis can quickly develop into a very serious problem. Be sure to contact your healthcare professional if tests stay high or if you have any of the early signs of diabetic ketoacidosis (DKA).

Early signs of DKA include:

- High blood sugar levels
- Thirst or very dry mouth
- Pain in your stomach
- Frequent urination
- Nausea or vomiting
- Rapid breathing or a hard time breathing (short, deep breaths)
- Fruity smelling breath
- Constantly feeling tired
- Dry or flushed skin
- A hard time paying attention, or confusion

If you have any of these symptoms and have ketones in your urine, call your healthcare professional or go to the emergency room.

HOW DO I TEST FOR KETONES IN MY URINE?

Testing your urine for ketones is very easy.

1. You can use a simple dip-and-read urine test strip.
2. The test strip is dipped into a sample of your urine.
3. If the color changes there are ketones in your urine.

Ketostix[®] Reagent Strips are for urine ketone testing only. Keto-Diastix[®] Reagent Strips are for testing urine for sugar and ketones. Both products are made by Bayer. You can get these at your drugstore. Ketone test strips are available in bottles or



individually foil-wrapped strips. They are sensitive to light and moisture, so it is a good idea to keep them stored in the container with the lid on tight.

Always check the expiration date on the bottle or individually foil-wrapped strip, and do not use strips that are outdated.

Although urine ketone testing is more common, you can also test your blood for ketones. There are blood ketone test strips available at your local pharmacy. If you are interested in testing your blood for ketones, ask your doctor or diabetes educator.



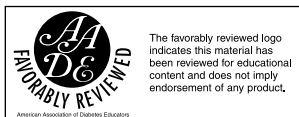
Ketoacidosis is very serious. It is also mostly preventable. Taking good care of your diabetes will greatly lower your risk of developing ketoacidosis. So will testing your ketones when you spot the warning signs. Just remember—the power to manage your diabetes is in your hands.

For more information about Diabetes Care Systems and support from Bayer, or help with your diabetes testing supplies, call our toll-free Customer Service Help Line at 1-800-348-8100 (24 hours, 7 days a week).

You can also visit our web site at:
www.BayerDiabetes.com/us



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For more help in managing your diabetes, see a diabetes educator. To find an educator:

www.diabeteseducator.org