

ASCENSIA
HEALTHFACTS

Ketone Testing



Bayer HealthCare

KETONE TESTING

What are ketones?

Ketones are a type of acid. Ketones are left over when your body burns some of its own fat for fuel. Your body burns fat if it can't get enough glucose to use for energy. When your body burns too much fat too quickly, there may be ketones in your blood. Ketones get removed from your bloodstream into your urine.

Why would my body have trouble using glucose?

Glucose is the first fuel your body burns for energy. To help move glucose from your bloodstream into body cells where glucose is used for fuel, your body needs insulin. Insulin is a hormone that is made in the pancreas. If there is too little insulin in the bloodstream to help the glucose 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 develop ketones more easily than people with type 2 diabetes. Everyone with type 1 diabetes should test for ketones in their urine as pictured below. 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 glucose testing (see Blood Glucose Monitoring leaflet), 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 Gestational Diabetes leaflet). Ketone testing may also be recommended for children with type 2 diabetes or people with MODY (maturity onset diabetes in youth).

It is recommended that you talk to your healthcare professional about ketone testing.



Testing for ketones in urine

KETONE TESTING

When should I test for ketones in my urine?

Your healthcare team will tell you when you should test for ketones. Diabetes UK recommends that you test if:

- Your blood glucose is above 15mmol/L or higher for two tests in a row
- You are ill (even with a cold) because being ill can cause you to have ketones
- You are vomiting or have diarrhea
- You are under stress or are upset
- You are pregnant



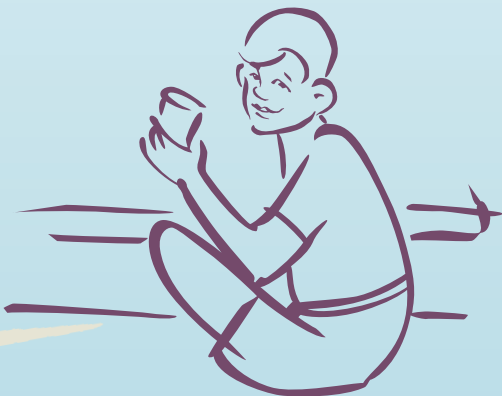
What do I do if my ketone test is positive?

If the results show TRACE or SMALL amounts of ketones:

1. Drink a glass of water every hour.
2. Test your blood glucose and urinary ketones every 3 to 4 hours.
3. If your blood glucose is higher than 15 mmol/L and you have ketones, **DO NOT** exercise. Also, be sure to contact your healthcare team.
4. If your blood glucose and urinary ketones are **NOT** going down after two tests, call your healthcare team.

If the results show MODERATE or HIGH ketones:

1. Call your doctor **IMMEDIATELY**.
2. Continue testing your blood glucose and urinary ketones every 2 hours until normal.
3. Drink a glass of water every hour.



KETONE TESTING

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:

- Pain in your stomach
- Nausea or vomiting
- Rapid breathing
- Fruity smelling breath



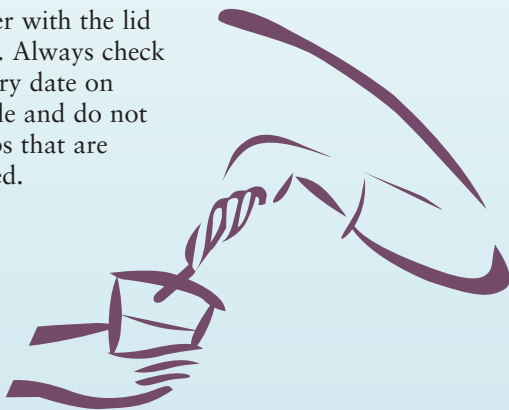
If you have any of these symptoms and have ketones in your urine, call your healthcare professional or go to the A/E department at your local hospital.

How do I test for ketones in my urine?

Testing your urine for ketones is very easy. You can use a simple dip-and-read urine test strip.

The test strip is dipped into a sample of your urine or passed through the urine stream. If the colour changes there are ketones in your urine.

KETOSTIX® Reagent Strips are for urine ketone testing only. You can get these at your local pharmacy. Bottles of 50 KETOSTIX® test strips are also available on prescription from your GP. KETOSTIX® test strips are sensitive to light and moisture, so you must keep them stored in the container with the lid on tight. Always check the expiry date on the bottle and do not use strips that are out-dated.





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Ketoacidosis is a very serious problem. It is also mostly preventable. Taking good care of your diabetes will greatly lower your risk. 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 our Ascensia™ diabetes product range call Ascensia™ DIABETES SUPPORT on 0845-600-6030

You can also visit our web site at:
www.ascensia.co.uk



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