

## Ketones urine test

### Definition

A ketone urine test measures the amount of ketones in the urine.

### How the Test is Performed

Urine ketones are usually measured as a "spot test." This is available in a test kit that you can buy at a drug store. The kit contains dipsticks coated with chemicals that react with ketone bodies. A dipstick is dipped in the urine sample. A color change indicates the presence of ketones.

This article describes the ketone urine test that involves sending collected urine to a lab.

A clean-catch urine sample is needed. The clean-catch method is used to prevent germs from the penis or vagina from getting into a urine sample. To collect your urine, the health care provider may give you a special clean-catch kit that contains a cleansing solution and sterile wipes. Follow instructions exactly.

### How to Prepare for the Test

You may have to follow a special diet. Your provider may tell you to temporarily stop taking certain medicines that may affect the test.

### How the Test will Feel

The test involves only normal urination. There is no discomfort.

### Why the Test is Performed

Ketone testing is most often done if you have type 1 diabetes and:

- Your blood sugar is higher than 240 milligrams per deciliter (mg/dL)
- You have nausea or vomiting
- You have pain in the abdomen

Ketone testing may also be done if:

- You have an illness such as pneumonia, heart attack, or stroke
- You have nausea or vomiting that does not go away
- You are pregnant

### Normal Results

A negative test result is normal.

Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or test different samples. Talk to your provider about the meaning of your specific test results.

moderate, or large as follows:

- Small: <20 mg/dL
- Moderate: 30 to 40 mg/dL
- Large: >80 mg/dL

Ketones build up when the body needs to break down fats and fatty acids to use as fuel. This is most likely to occur when the body does not get enough sugar or carbohydrates.

This may be due to diabetic ketoacidosis (DKA). DKA is a life-threatening problem that affects people with diabetes. It occurs when the body cannot use sugar (glucose) as a fuel source because there is no insulin or not enough insulin. Fat is used for fuel instead.

An abnormal result may also be due to:

- Fasting or starvation: such as with anorexia (an eating disorder)
- High protein or low carbohydrate diet
- Vomiting over a long period (such as during early pregnancy)
- Acute or severe illnesses, such as sepsis or burns
- High fevers
- The thyroid gland making too much thyroid hormone (hyperthyroidism)
- Nursing a baby, if the mother does not eat and drink enough

## Risks

There are no risks with this test.

## Alternative Names

Ketone bodies - urine; Urine ketones; Ketoacidosis - urine ketones test; Diabetic ketoacidosis - urine ketones test

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