



KAISER PERMANENTE®

Diabetes Urine Testing

Direct testing of blood sugar (or blood glucose) is a widely accepted practice for people with diabetes to help them manage their condition. Though practiced less commonly, urine testing is another method to manage diabetes, and it can sometimes give you information that can't be gained by testing blood sugar alone. It is, in fact, an excellent supplement to blood sugar testing.

Urine testing provides a history of what your blood sugar has been doing over the past few hours. Let's say you get up in the morning and your urine is negative for glucose. This tells you that your blood sugar has probably been less than about 180 all night long. To get that same information you would have had to test your blood several times throughout the night. Or suppose your blood sugar tests normal before dinner and at bedtime, but your urine tests moderately positive for glucose at bedtime. This suggests that you had a temporary excess of blood sugar after dinner. This may indicate that you should modify your pre-dinner insulin dose or change its timing.

Your doctor, diabetes educator, or other health care professional may also want you to check your urine for sugar and ketones—especially if you have type 1 diabetes, but sometimes if you have type 2 diabetes. The results of the urine test for ketones should nearly always be negative. When you are ill, or if your diabetes is in poor control, the presence of ketones in your urine may signal potential trouble. Contact your doctor or health care professional if ketones are large or persistent in any strength in your urine.

Urine testing is easy and painless. The more often you test, the more information you get. Ideally, the test for urine sugar should be negative or small in amount. If you consistently test for larger amounts of sugar, it means that your diabetes is not under adequate control. If this is the case, you'll need to make more of an effort to properly adjust your insulin doses or you may have to change your pattern of eating or exercising. Please discuss this with your doctor or health care professional.

To test for sugar in urine, use test strips such as Diastix or Ketodiastix. Diastix tests only for sugar, while Ketodiastix tests for both sugar and acetone. Test strips can be purchased without a prescription at most drugstores. You can either collect the urine in a clean container and dip the strip into it, or moisten the strip as you are urinating. After 30 seconds, compare the strip to the color chart provided on the container to determine the sugar level. The test patch for acetone works in a similar fashion. If there is a small amount of acetone in your urine, repeat the test in two hours. If it indicates a moderate or large amount of acetone or if repeated tests continue to show a small amount, call your doctor or health care professional.

Finally, it's important to keep your urine testing equipment in a cool, dry place, safely out of the

reach of children.



For additional health information you can trust:

- Log on to our members-only Web site at www.kaiserpermanente.org/california, then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

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REGIONAL HEALTH EDUCATION