

Why monitor?

The purpose of monitoring your blood glucose levels is so that you can take action to keep the level of glucose in your blood as “normal” as possible. Raised blood glucose over the years can result in serious health complications such as hardening of the arteries (atherosclerosis), damage to the nerve endings (neuropathy), kidney damage or poor eye sight (retinopathy).

Monitoring methods

There are two methods of measuring your glucose levels at home: by testing your urine or your blood. Your doctor or healthcare professional will advise you which method is most suitable for you and will ask you to record your results in a diary or logbook.

Usually you will need to test your glucose levels at least twice a day although this will vary depending on your age, the type of diabetes, etc. Your healthcare professional will advise you.

You will soon be able to recognise “warning signals” and be able to take the right action to correct your glucose level.

Urine testing

A urine test gives an indication of the level of glucose in your blood some hours earlier when your urine was being formed. If your blood glucose level is low, normal or just slightly raised, almost no glucose is filtered from the blood and removed from the body in the urine. If the level of glucose in your blood gets too high, the kidneys wash large amounts into the urine in an effort to reduce the blood glucose level.

A positive test indicates that the level of glucose in your blood has been too high, but it will not tell you whether it is constantly high or just after a meal.

Ideally, a urine test should be negative, in other words there should be no glucose in your urine. A negative test will tell you that your glucose level is not too high, but it will not tell you if your glucose level is too low.

For these reasons, urine testing is now thought to be unsuitable for the **tight** control of diabetes necessary to reduce the risk, or delay the onset, of complications.

Blood glucose testing

A blood glucose test will tell you how much glucose is in your blood when you carry out the test. For this reason, blood testing is now considered the best method for most people with diabetes. The test strip is a reagent strip that reacts to the glucose in a drop of blood.

WHAT TO DO

1. Wash your hands in warm, soapy water and dry thoroughly to remove any dirt that may contaminate the blood sample.
2. Prick the side of your finger with a lancet and drop sufficient blood onto the test strip to completely cover the target area.
3. Wait the required length of time.
4. Note the result shown on the meter or compare the colour visually with the colour chart supplied with the strips.

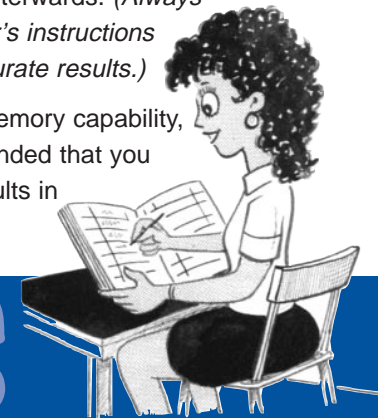
VISUAL TESTING

Match the colour in the test area to squares on the colour chart supplied with the strips to give a visual reading. Record the result in a diary.

METER TESTING

Blood glucose meters are quite simple to use. Place a test strip in a meter and apply a small amount of blood. An exact blood glucose reading will be displayed on the screen shortly afterwards. *(Always follow the manufacturer's instructions carefully to ensure accurate results.)*

Many meters have a memory capability, however, it is recommended that you always record your results in a diary.



BLOOD OR URINE TESTS?

BLOOD

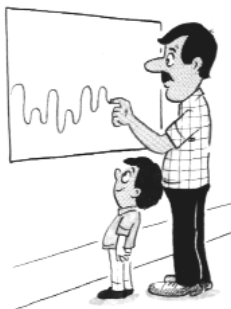
1. Test shows current level of glucose in your blood.
2. Can be used to plan food intake before, during and after exercise.
3. Test can be performed quickly without the need for privacy.
4. Tests are very accurate and show high or low blood glucose levels.

URINE

1. Tests shows an average result since you last urinated.
2. Cannot be used to plan exercise or adjust food to be eaten.
3. Need to find a toilet to urinate in order to carry out test.
4. Test results do not show low blood glucose levels.

Why record results?

Having completed a blood glucose test you can immediately take action to bring your glucose levels down or increase them should you need to. By recording your results, you and your healthcare professional can begin to see patterns or trends. You can then, with medical supervision, begin to adjust your treatment plan, diet or medication to ensure that you do not experience extremes in blood glucose levels which cause unpleasant side-effects in the short term and very serious complications in the long term.



Urine tests for ketones

Whether you test your blood or your urine for glucose, there is another test you will need to know how to perform.

Normally your body uses glucose as its main energy source. When there is not enough insulin present, or it is ineffective, the glucose cannot be used so the body switches to burning fat.

When the body uses too much fat for energy, ketones are left behind which collect in the blood. The kidneys try to filter out the ketones, but when they cannot remove enough ketones from the blood, this is called ketoacidosis.

Ketoacidosis can be very serious, with stomach pains, nausea, vomiting, dehydration, unconsciousness and even death, if not treated promptly.

IF KETONES SHOW IN YOUR URINE
CONSULT YOUR DOCTOR OR HEALTHCARE
PROFESSIONAL FOR ADVICE IMMEDIATELY

Leaflets available from Hypoguard

- 1 What is non insulin dependent diabetes
- 2 What is insulin dependent diabetes
- 3 Long-term complications of diabetes
- 4 Hypos, hypers and all that
- 5 Monitoring diabetes
- 6 Diabetes and exercise
- 7 Work and driving with diabetes
- 8 Smoking and alcohol with diabetes
- 9 On holiday with diabetes
- 10 Men and Women with diabetes

Please call the **Hypoguard Freephone Information Line: 0800 371 957** for further copies of this leaflet or other leaflets in the series.

Diabetes management made simple

Hypoguard have a range of blood glucose monitoring systems specifically designed to help people with diabetes manage their glucose levels in their homes. If you would like any information about them, please call the Hypoguard Freephone Information Line: **0800 371 957** 8am and 6pm, Monday to Friday or visit our web site at www.hypoguard.com

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