

Know more about **Home-use Blood Glucose Meter**



Medical Device Division
<https://www.mdd.gov.hk/en/home/index.html>

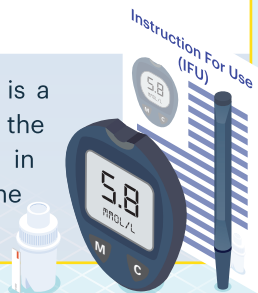


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What is home-use blood glucose meter?

- Home-use blood glucose meter is a test system to measure the concentration of glucose level in blood with a blood sample of the user.



How to operate?

- Before conducting a blood glucose test, **read and understand the Instruction For Use (IFU)** of the meter. In general, insert a disposable test strip into the device, then use a lancet to obtain a small drop of blood from the fingertip and apply it on the test strip for the blood glucose test.



What is the unit of blood glucose concentration?

- The blood glucose concentration is expressed in “millimoles per liter” (mmol/L) or “milligrams per deciliter” (mg/dL).
- Some home-use blood glucose meters allow users to change the unit of the blood glucose concentration. Hence, caution should be taken in reading the results in order to avoid misinterpretation of blood glucose level and lead to delay in treatment.



Tips for choosing:

- △ Consult healthcare professionals before purchasing. Choose a suitable blood glucose meter according to its function, accuracy and ease of operation.
- △ Purchase device listed under Medical Device Administrative Control System (MDACS) of Department of Health, which contains an HKMD number. Listed devices meet the listing requirements on safety, quality and performance. For more information about listed home-use blood glucose meters and test strips under MDACS, you may refer to the thematic webpage of blood glucose meter of Medical Device Division.
- △ Besides the meter price, the availability and total cost of consumables such as test strips, control solution and lancets should also be considered.
- △ Check if the name and contact information of the local agent are provided on the label of the blood glucose meter. Check that all accessories including the warranty card and IFU are available.
- △ Make sure the test strips supplied are compatible with the blood glucose meter.

Before using:

- △ Read the IFU carefully, and follow the instructions in calibrating the blood glucose meter. Contact the agent if you have queries.
- △ Check the power supply regularly and replace the batteries when necessary.
- △ Use compatible blood glucose test strips and beware of their expiry date.
- △ **Carry out a blood glucose test at the specific time** as instructed by healthcare professionals (e.g. during fasting, before meals, 2-3 hours after meals or before sleep).



- ◊ Under certain environmental conditions (e.g. high relative humidity or low temperature), the blood glucose test result may be inaccurate. You are advised to add a remark in the record for blood glucose tests performed under these conditions for future reference.

During operation:

◊ Each time you turn on the meter,

- ◊ Make sure the monitor displays the unit you are accustomed to.
- ◊ Verify that all display segments are present on the screen and be aware of error messages. Stop using the meter and contact the agent immediately if problem persists.



◊ Each time you perform blood glucose test,

- ◊ Wash your hands thoroughly.
- ◊ Insert the test strip completely into the meter guide.
- ◊ Use a sterile lancet for blood sampling.
- ◊ Apply a appropriate amount of blood from the fingertip to the test strip in accordance with the IFU. Insufficient or excessive blood amount will affect the accuracy of the measurement. Retest with a new test strip if necessary.
- ◊ Refer to the IFU and interpret the displayed blood glucose concentration, the units, symbols or other messages carefully.
- ◊ User should record the result for future reference.

- ⚠ If there is **any doubt about the test result**, use the control solution to test the device and repeat the measurement. **Consult healthcare professionals** as soon as possible if doubtful results persist.



⚠ Each time you change a new package of test strips,

- ⚠ Set the code of the test strips at the meter prior to testing. Make sure the code number displayed on the blood glucose meter and the code number on the test strip vial are the same.
- ⚠ Refer to the IFU to conduct the control solution test.



📌 How to take care of the meter?

- ⚠ Make sure you register with the agent for the after-sale service.
- ⚠ Dispose the used lancets into a puncture-resistant container. Clean the device according to the IFU after the test.

- ⚠ Do not insert expired or used test strip into the meter to avoid damage.

⚠ Keep the meter, test strips and control solution away from extremes of temperature and relative humidity. The test strips must be stored in the original vial with **the cap tightly closed**. Store and maintain the devices according to the IFU.



Other recommendations and summary

- △ Home-use blood glucose meter is useful for self-monitoring the blood glucose level. However, users should not totally rely on the test results and ignore the importance of regular medical follow-up.
- △ For most home-use blood glucose meters are designed for use of fingertip blood sample, blood sample obtained from sites other than fingertip may lead to inaccurate result. Consult healthcare professionals before sampling blood from other sites for blood glucose readings if necessary.
- △ Perform a quality control check based on the IFU and repeat the measurement if you are in doubt. If the test results are persistently doubtful, contact healthcare professionals immediately.
- △ Use the same blood glucose meter every time to minimise variation of the blood glucose results. Differences in the design, working principle and calibration method of different models of blood glucose meters may yield different test results.
- △ For more information on Diabetes Mellitus, please visit the webpage of “Let’s beat diabetes” on the website of the Centre for Health Protection (<https://www.chp.gov.hk/en/features/43772.html>).



For more information:



For the Thematic page of Home-use Blood Glucose Meters and Test Strips:
<https://www.mdd.gov.hk/en/information-publication/thematic-pages/blood-glucose-meters/index.html>