



In vitro diagnostic. For self-testing.

IMPORTANT: Please read this information and your OneTouch® Ultra® Family of Meters and the OneTouch® Ping™ System User Guide before using blue OneTouch® Ultra® Test Strips. Do Not use your blue OneTouch® Ultra® Brand Test Strips if your vial is open or damaged in any way as this could lead to error messages or inaccurate blood glucose values. Call the OneTouch® Customer Care Line at 1 800 663-5521 immediately if the test strip vial is open or damaged, or if these instructional materials or your meter results seem unclear. If you cannot reach Customer Service, contact your healthcare professional for advice.

Intended Use

Blue OneTouch® Ultra® Test Strips are used with the OneTouch® Ultra® Family of Meters and OneTouch® Ping™ System for quantitatively measuring glucose in fresh capillary whole blood. The blue OneTouch® Ultra® Test Strips and associated meters are intended for use by people with diabetes at home and healthcare professionals in the clinical setting. Blue OneTouch® Ultra® Test Strips and associated meters are for use in fingertip, forearm, and palm testing.

Storage and Handling

- Store the test strip vial in a cool dry place below 30°C. **Do Not** refrigerate. Keep away from direct sunlight and heat. Exposure to temperatures and/or humidity outside the required storage conditions may result in inaccurate readings.
- Store your test strips in their **original vial only**. To avoid damage or contamination, **Do Not** transfer test strips to any other container.
- Do Not** open the test strip vial until you are ready to test. **Only open vial when removing test strips.**
- After removing a test strip from the vial, immediately close the vial lid tightly. Use each test strip immediately after **removing it from the vial.**
- Do Not** use test strips from any vial that is damaged or left open to air.
- Write the discard date (date opened plus 6 months) on the vial label when you first open it.
- Do Not** use test strips beyond the expiration (printed on vial label) or discard date, whichever comes first.
- Avoid getting dirt, food, or liquids on the test strip. With clean, dry hands, you may touch the test strip anywhere on its surface.
- Do Not** bend, cut, or alter the test strip in any way.
- Test strips are for single use only. **Never reuse a test strip that had blood or control solution applied to it.**
- Make sure your meter and test strips are about the same temperature before you test.
- Apply only control solution or a blood sample to the test strip.
- After performing a test, **Do Not** return the used test strip to the vial.
- Used test strips may be considered biohazardous waste in your area. Be sure to follow your healthcare professional's recommendations or your local regulations for proper disposal.

⚠ WARNING: Keep the test strip vial away from children; test strips are a choking hazard. Do Not swallow test strips. The test strip vial may contain drying agents that are harmful if inhaled or swallowed and may cause skin or eye irritation. Do Not ingest or swallow any items.

Blood Glucose Test Procedure

For instructions on performing a blood test (including blood sample collection), refer to the User Guide that came with your system.

IMPORTANT: Some meters in the OneTouch® Ultra® Family and the OneTouch® Ping™ System require coding. For meters that require coding, matching the code on the meter to the code on the test strip vial is essential to obtain accurate results. Refer to the User Guide that came with your system to determine if your meter requires coding and get detailed instructions on coding.

Test Results

Low Glucose Values

If your test result is below 1.1 mmol/L (20 mg/dL), a warning message will appear indicating a low glucose level. This may indicate severe hypoglycemia (low blood glucose). **Treat this condition immediately, according to your healthcare professional's recommendations.** Although this message could be due to a test error, it is safer to treat first, and then do another test.

High Glucose Values

If your test result is above 33.3 mmol/L (600 mg/dL), a warning message will appear indicating a high glucose level. This may indicate severe hyperglycemia (high blood glucose). You should retest your glucose level. If the message appears again, call your healthcare professional immediately.

If You Get Unexpected Results

If your blood glucose result is below 4.0 mmol/L (72 mg/dL)², indicating low blood glucose, or above 10.0 mmol/L (180 mg/dL), indicating high blood glucose, you should contact and follow your healthcare professional's treatment advice.¹ If you continue to get unexpected results, check your system with control solution. If you are experiencing symptoms that are not consistent with your blood glucose test results AND you have followed all instructions described in your User Guide, call your healthcare professional. Never ignore symptoms or make significant changes to your diabetes control program without speaking to your healthcare professional.

Range of Expected Values

Blood glucose management requires the help of a healthcare professional. Together you can set your own range of expected blood glucose values, arrange your testing times, and discuss the meaning of your blood glucose results.

Expected blood glucose levels for people without diabetes:²

Time	Range, mmol/L	Range, mg/dL
Fasting	Less than 6.1	Less than 110
2 hours after meals	Less than 7.8	Less than 140

Checking the System

Use OneTouch® Ultra® Control Solution

A control solution test is performed to check that the meter and test strips are working together properly and that you are performing the test correctly. For instructions on how and when to check the system by performing a control solution test, refer to the User Guide that came with your system.

Limitations of Procedure

Blue OneTouch® Ultra® Test Strips give accurate results when the following limitations are observed:

- Do Not** use for the diagnosis of diabetes or for testing of newborns.
 - Test strips are for single use only. **Do Not** reuse.
 - The test strips are specific to D-glucose and do not react to other sugars, which may be present in blood.
 - Use only fresh capillary whole blood. **Do Not** use serum or plasma.
 - Hematocrit is the percentage of red blood cells in the blood. Extremes in hematocrit may affect test results.³ Hematocrit levels below 30% may cause falsely high readings and hematocrit levels over 55% may cause falsely low readings. If you do not know your hematocrit level, consult your healthcare professional.
 - Blue OneTouch® Ultra® Test Strips may be used at altitudes up to 3048 meters (10,000 feet) without an effect on test results. Accurate results were demonstrated in clinical studies performed at altitudes up to 1609 meters (5,280 feet) and in studies simulating altitudes up to 3048 meters (10,000 feet).
- Healthcare professionals—please note these additional limitations of procedure:*
- Fresh capillary blood may be collected into heparin-containing test tubes if the blood is used within 10 minutes. **Do Not** use other anticoagulants or preservatives.
 - Interferences: Acetaminophen, salicylates, uric acid, ascorbic acid (vitamin C), and other reducing substances (when occurring in normal blood or normal therapeutic concentrations) do not significantly affect results. However, abnormally high concentrations in blood may cause inaccurately high results.
 - Patients undergoing oxygen therapy may yield falsely low results.
 - Test results may be falsely low if the patient is severely dehydrated, in shock, or in a hyperosmolar state (with or without ketosis). Critically ill patients should not be tested by blood glucose meters.
 - Lipemic samples: Cholesterol levels up to 18.1 mmol/L (700 mg/dL) and triglycerides up to 33.9 mmol/L (3000 mg/dL) do not affect the results. Grossly lipemic patient samples have not been tested and are not recommended for testing with the OneTouch® Ultra® Family of Meters and the OneTouch® Ping™ System.

Test Principle

The OneTouch® Ultra® Family of Meters and OneTouch® Ping™ System are plasma-calibrated to allow easy comparison of results with laboratory methods. Glucose in the blood sample mixes with special chemicals on the test strip and a small electrical current is produced. This current is measured by the OneTouch® Ultra® Family of Meters and OneTouch® Ping™ System and displayed as your blood glucose result. The strength of this current changes with the amount of glucose in the blood sample.

Reagent Composition

Each test strip contains: Glucose oxidase (*Aspergillus niger*) ≥ 0.08 IU; ferricyanide ≥ 22 µg; other ingredients (buffer, etc.). The test strip vial contains a drying agent.

Performance Characteristics

The performance of blue OneTouch® Ultra® Test Strips has been evaluated both in laboratory and in clinical tests.³

Measurement Range: The measurement range of the OneTouch® Ultra® Family of Meters is 1.1 to 33.3 mmol/L (20– 600 mg/dL).

System Accuracy: Diabetes experts have suggested that glucose meters should agree within 0.83 mmol/L (15 mg/dL) of a laboratory method when the glucose concentration is lower than 4.2 mmol/L (75 mg/dL), and within 20% of a laboratory method when the glucose concentration is 4.2 mmol/L (75 mg/dL) or higher. Samples from 100 diabetic patients at 1 clinical center were tested using both the OneTouch® Ultra®2 System and the YSI Model 2300 Glucose Analyzer (laboratory test).³

System Accuracy Results for Glucose Concentrations <4.2 mmol/L (75 mg/dL)

	Within ± 0.28 mmol/L (5 mg/dL)	Within ± 0.56 mmol/L (10 mg/dL)	Within ± 0.83 mmol/L (15 mg/dL)
Percent (and number) of meter results that match the laboratory test	48.8% (41/84)	84.5% (71/84)	100.0% (84/84)

System Accuracy Results for Glucose Concentrations ≥4.2 mmol/L (75 mg/dL)

	Within ± 5%	Within ± 10%	Within ± 15%	Within ± 20%
Percent (and number) of meter results that match the laboratory test	38.0% (196/516)	68.0% (351/516)	88.2% (455/516)	95.7% (494/516)

System Accuracy Results across the entire Glucose Range

	Within ± 0.83 mmol/L (15 mg/dL) or ± 20%
Percent (and number) of meter results that match the laboratory test	96.3% (578/600)

Therefore, 96.3% of the total results obtained with the OneTouch® Ultra®2 System achieved the goal suggested by the diabetes experts.

Regression Statistics: Samples were tested in duplicate on each of 3 test strip lots. Results indicate that the OneTouch® Ultra®2 System compares well with a laboratory method.

Number of Subjects	Number of Tests	Slope	Intercept mmol/L (mg/dL)	95% CI Slope	95% CI Intercept mmol/L (mg/dL)	Std. Error (Sy.x) mmol/L (mg/dL)	R ²
100	600	0.972	-0.012 (-2.657)	0.958 to 0.985	-0.168 to 0.145 (-5.415 to 0.102)	1.000 (17.743)	0.973

Precision:

Within Run Precision (100 venous blood tests per glucose level)

Target Glucose mmol/L (mg/dL)	Mean Glucose mmol/L (mg/dL)	Standard deviation mmol/L (mg/dL)	Coefficient of variation (%)
2.2 (40)	2.28 (41.0)	0.057 (1.02)	2.50
5.6 (100)	5.40 (97.4)	0.096 (1.74)	1.78
7.2 (130)	6.70 (120.7)	0.116 (2.10)	1.74
11.1 (200)	11.15 (200.9)	0.160 (2.87)	1.43
16.7 (300)	16.96 (305.6)	0.197 (3.55)	1.16

Total Precision (200 control solution tests per glucose level)

Glucose Levels	Mean Glucose mmol/L (mg/dL)	Standard deviation mmol/L (mg/dL)	Coefficient of variation (%)
LOW	2.59 (46.6)	0.056 (1.01)	2.18
MID	6.39 (115.1)	0.121 (2.19)	1.90
HIGH	19.47 (350.8)	0.304 (5.48)	1.56

Results show that the greatest variability observed between test strips when tested with blood is 2.5% or less.

Data generated using OneTouch® Ultra®2 Meter. OneTouch® Ultra®2 is representative of the OneTouch® Ultra® Family of Meters (OneTouch® Ultra®, OneTouch® Ultra®2, OneTouch® UltraMini®, OneTouch® UltraSmart®) and the OneTouch® Ping™ System.

IMPORTANT: For complete operating instructions and other important technical information, refer to the User Guide that came with your system. **IF YOU HAVE QUESTIONS ABOUT THE USE OF ANY LIFESCAN PRODUCT, PLEASE CONTACT the OneTouch® Customer Care Line at 1 800 663-5521. If you cannot reach Customer Service, contact your healthcare professional for advice.**

References

- Beaser, R.S. and Hill, Joan: The Joslin Guide to Diabetes. New York: Simon and Schuster (1995), p. 158.
- Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. CJ Diabetes 2008;32 (suppl 1) S11, S62.
- Data on file.

OUR COMMITMENT TO YOU:

Our goal is to provide you with quality healthcare products and dedicated customer service. If you are not fully satisfied with this product, we offer a No-Risk, Money-Back Guarantee and will refund your purchase within 30 days. Please contact us regarding a refund or with questions about the use of any OneTouch® products. For assistance, please contact the OneTouch® Customer Care Line at 1 800 663-5521. If you cannot reach Customer Service, contact your healthcare professional for advice.

Covered by one or more of the following U.S. patents: 5,708,247, 5,951,836, 6,241,862, 6,284,125, and 7,112,265. Use of these test strips and associated monitoring device is protected under the following U.S. patents: 6,413,410, 6,733,655, 7,250,105. Purchase of the associated monitoring device does not act to grant a use license under these patents. Such a license is granted only when the associated monitoring device is used with OneTouch® Ultra® Test Strips. No test strip supplier other than LifeScan, Inc. is authorized to grant such a license. The accuracy of results generated with LifeScan meters using test strips manufactured by anyone other than LifeScan has not been evaluated by LifeScan.

