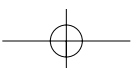
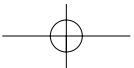


# OneTouch® Ultra System Owner's Booklet



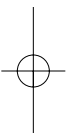
## Symbols



Caution symbol: See Instructions for use.



Serial number symbol



## Dear OneTouch® Ultra System Owner:

You have chosen one of the best blood glucose monitoring systems available. This booklet has important information you must know about the OneTouch® Ultra System. Please read it carefully.

Blood glucose monitoring plays an important role in diabetes control. A long-term study showed that keeping blood glucose levels close to normal can reduce the risk of diabetes complications by up to 60%\*. The results you get with the OneTouch Ultra System can help you and your healthcare professional monitor and adjust your treatment plan to gain better control of your diabetes.

A warranty registration card is included with your system. Please complete the card and send it to us to register for your extended service package. To complete warranty information online, visit [LifeScan.co.uk](http://LifeScan.co.uk).

\*American Diabetes Association position statement on the Diabetes Control and Complications Trial (1993).

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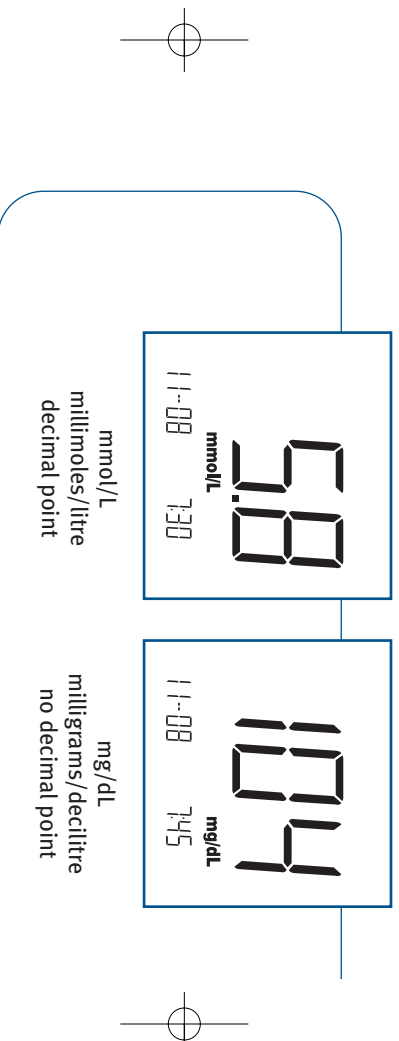
## About Your New System

The OneTouch® *Ultra* System uses the latest blood glucose monitoring technology. It measures the glucose content of a blood sample by means of an electrical current produced in the test strip and sent to the meter for measurement. Test results are “plasma-calibrated.” This makes it easier for you and your diabetes-care team to compare your meter results with laboratory tests. If you have been using another type of meter—one that provides whole-blood results—you may notice that your test results with the OneTouch® *Ultra* System are about 12% higher.



Your OneTouch® *Ultra* Meter can display results in two different units of measure. Millimoles per litre is the standard unit in the United Kingdom. Because the meter may be purchased by people living in other parts of the world, it may be reset to another unit of measure called milligrams per decilitre (mg/dL). This unit is not used in the United Kingdom except on your doctor's recommendation.

You can easily determine if the meter has been accidentally reset to the wrong unit of measure. Simply turn on the meter. The unit of measure will appear on the display with the  symbol. Also, when looking at a test result on the display, either mmol/L or mg/dL will appear with the result. A test result in mmol/L will have a decimal point. For more information, see page 41.



Your OneTouch® *Ultra* Blood Glucose Monitoring System consists of three main products: the OneTouch® *Ultra* Blood Glucose Meter, OneTouch® *Ultra* Test Strips, and OneTouch® *Ultra* Control Solution. These products have been designed, tested, and proven to work together to produce accurate blood glucose results. Use no other test strips or control solution with your meter.

*The OneTouch® Ultra System is intended for use outside the body (in vitro diagnostic use). It should be used only for testing fresh capillary whole blood samples for glucose (sugar). It should not be used for the diagnosis of diabetes or for testing newborns.*

**CAUTION** Before using any product to test your blood glucose, read all instructions and practice the test. Do all quality control checks as directed and consult with a diabetes healthcare professional. These recommendations apply to all blood glucose monitoring systems and are supported by the American Association of Diabetes Educators, the American Diabetes Association, the U.S. Food and Drug Administration, and the Advanced Medical Technology Association.

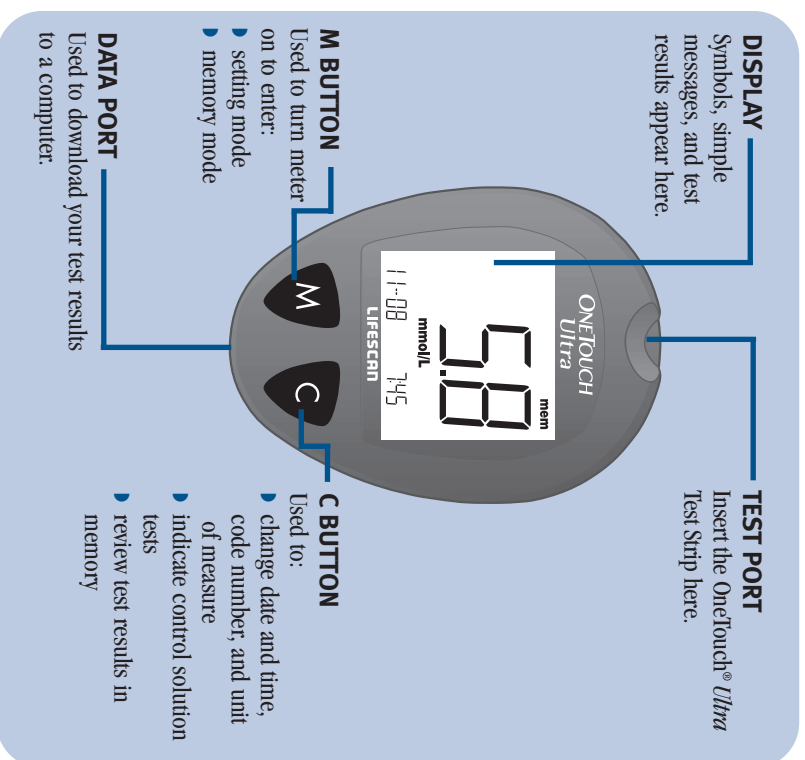
### Important Information

- Severe dehydration resulting from excessive water loss may cause false low results. If you believe you are suffering from severe dehydration, consult a healthcare professional immediately.
- Test results below 3.9 mmol/L (70 mg/dL) mean low blood glucose (hypoglycaemia). Test results greater than 13.3 mmol/L (240 mg/dL) mean high blood glucose (hyperglycaemia). If you get results below 3.9 mmol/L (70 mg/dL) or above 13.3 mmol/L (240 mg/dL), and do not have symptoms, first repeat the test. If you have symptoms or continue to get results that fall below 3.9 mmol/L (70 mg/dL) or above 13.3 mmol/L (240 mg/dL), follow the treatment advice of your healthcare professional.
- If you are experiencing symptoms that are not consistent with your blood glucose test results AND you have followed all instructions described in the OneTouch® Ultra Owner's Booklet, call your healthcare professional.
- A red blood cell count (haematocrit) that is either very high (above 55%) or very low (below 30%) can cause false results.

## The Complete OneTouch® Ultra Blood Glucose Monitoring System



## OneTouch® Ultra Blood Glucose Meter



## OneTouch® Ultra Meter Display


**CTL** \_\_\_\_\_  
Indicates a control  
solution test result.

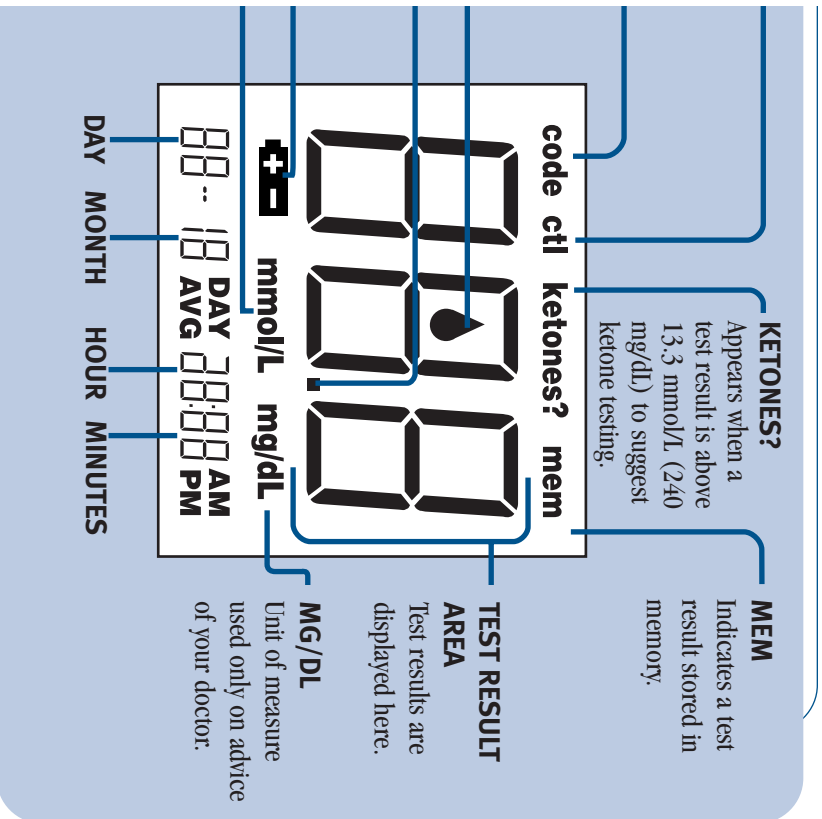
**CODE** \_\_\_\_\_  
Appears with the code number  
of the test strips.

**BLOOD DROP SYMBOL** \_\_\_\_\_  
Tells you when to apply the  
sample.

**DECIMAL POINT** \_\_\_\_\_  
Appears in test results only when  
unit of measure is set to mmol/L.

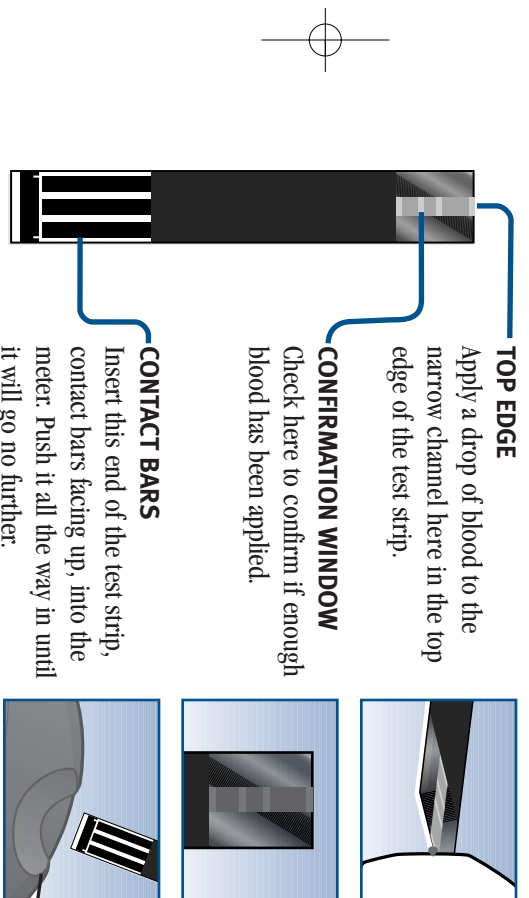
**BATTERY SYMBOL** \_\_\_\_\_  
Warns when the battery is low or  
must be replaced.

**MMOL/L** \_\_\_\_\_  
Preset unit of  
measure. Be sure this  
symbol appears with the  before applying  
sample to the test strip.



## OneTouch® Ultra Test Strips

The OneTouch® Ultra System measures the amount of glucose in whole blood. Blood is applied to the TOP EDGE of the OneTouch Ultra Test Strip and is automatically drawn into the reaction cell where the reaction takes place.



### Important Test Strip Information

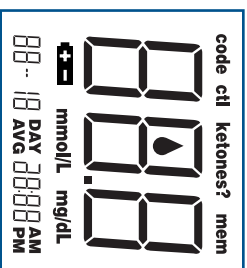
- Store test strip vials in a cool, dry place below 30°C. Keep away from direct sunlight and heat. Do not refrigerate.
- Store test strips in their **original vial only**. To avoid damage or contamination, do not transfer test strips to any other place.
- Do not use test strips beyond the expiration date printed on the package since they may cause inaccurate results.
- After removing a test strip from the vial, replace the vial cap immediately and close it tightly.
- With clean, dry hands, you may touch the test strip anywhere on its surface.
- Use each test strip immediately after removing it from the vial.
- Count three months from the date you first open a new vial of test strips and write this date on the vial label. Throw test strips and vial away after this discard date.
- Apply only OneTouch® *Ultra* Control Solution or a blood sample to the test strip.
- Do not bend, cut, or modify test strips in any way.
- OneTouch® *Ultra* Test Strips are for single use only. **Never reuse a test strip that has had either blood or control solution applied to it.**
- Refer to additional information in the OneTouch *Ultra* Test Strip package.

**WARNING:** Keep the test strip vial away from children; the cap is a choking hazard. Also, the cap or vial may contain drying agents that are harmful if inhaled or swallowed and may cause skin or eye irritation.

## Before Testing

### Checking the Display

Each time you turn on the OneTouch® *Ultra* Meter either by inserting a test strip or pressing the M button, all segments of the display will appear briefly. This tells you that the system is performing several self-checks to confirm that the meter is working properly. To check that all display segments are working, hold the C button down.



### Coding the Meter

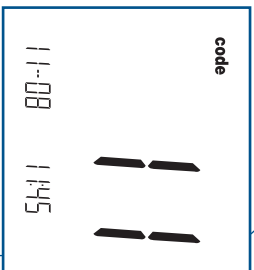
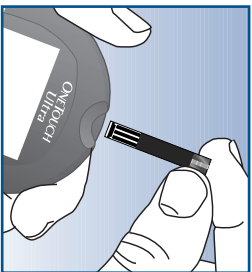
Code numbers are used to calibrate the OneTouch® *Ultra* Meter with OneTouch® *Ultra* Test Strips for accurate results. You must code the meter before using it for the first time and then every time you change to another vial of test strips. **Each time you test, check to be sure that the code number on the meter display matches the code number on the test strip vial.**

**CAUTION:** Failure to code the meter correctly will cause inaccurate test results.

### STEP 1

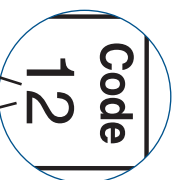
#### Enter the Code Mode.

Insert a test strip to turn on the meter. Push it all the way in until



it will go no further. Avoid bending the test strip. The display check will appear. Then the code number is displayed for three seconds. (The first time you use the meter, three dashes

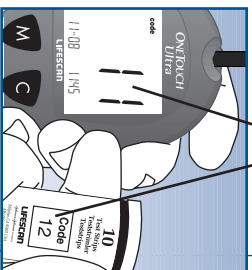
--- will appear, meaning that there is no code stored in the memory.) If three dashes appear any other time, see page 46 of "Display Messages and Problem-Solving Guide."



### STEP 2

#### Match the Code Numbers.

Compare the code number on the meter display with the code number on the test strip vial. If the two code numbers match, you may begin testing. If they do not match, follow Step 3.




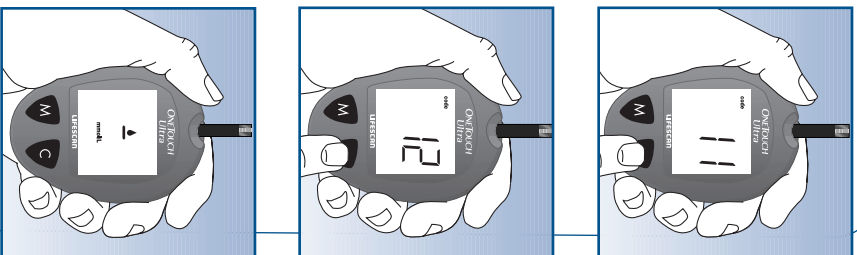
### STEP 3

#### Code the Meter.

Press the C button to select the correct code. Each time you press and release the C button, the number will increase by one. To move more quickly, press and hold the C button.

After selecting the correct code number, it will flash for three seconds and then appear solid for three seconds.

Then the  symbol will appear with the unit of measure, indicating that the OneTouch® Ultra System is ready for testing.

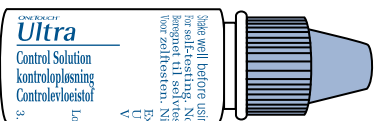


## Checking the System

**NOTE:** Refer to additional information in the OneTouch® *Ultra* Control Solution package.

OneTouch® *Ultra* Control Solution is used to check that the meter and the test strips are working together as a system and that you are performing the test correctly.

OneTouch® *Ultra* Control Solution contains a measured amount of glucose that reacts with OneTouch® *Ultra* Test Strips. Compare your control solution test results with the range printed on the test strip vial label. It is very important that you do this simple check routinely to make sure you get an accurate result.



Before you use the OneTouch® *Ultra* Meter to test your blood for the first time, practice the procedure using control solution. When you can do three tests in a row that are within the range, you are ready to test your blood.

### Important Control Solution Test Information

- Use only OneTouch® *Ultra* Control Solution.
- Check the expiration date on the control solution vial. Record the discard date (date opened plus three months) on the vial label. Do not use after expiration or discard date, whichever comes first.
- Control solution, meter, and test strips should be at room temperature (20–25°C/68–77°F) before testing.
- Shake the vial, discard the first drop of control solution, and wipe off the tip to ensure a good sample and an accurate result.
- Store control solution tightly closed at temperatures below 30°C (86°F). Do not refrigerate.

**CAUTION:** The control solution range printed on the test strip vial is for OneTouch® *Ultra* Control Solution only. **It is not a recommended range for your blood glucose level.**

#### When to do a control solution test:

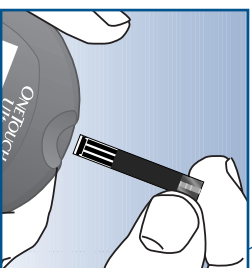
- Once a week.
- When you open a new vial of test strips.
- Whenever you suspect that the meter or test strips are not working properly.
- If your blood glucose test results are not consistent with how you feel.
- After dropping the meter:


### How to do a control solution test:

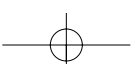
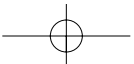
#### STEP 1

##### Insert Test Strip.

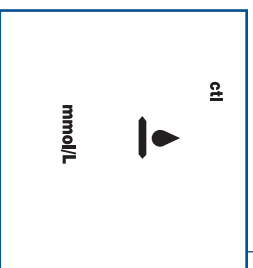
Insert a test strip, contact bars end first and facing up, into the test port. Push it all the way in until it will go no further. The meter will turn on and the display check will appear briefly.



Then the code number will appear, followed by the  symbol and unit of measure. Check that the unit of measure is set correctly. Be sure the meter and test strip codes match. If they do not, code the meter correctly.



Press the C button to mark the test as a control solution test in the meter memory. **chl** will appear on the display. If you decide not to do a control solution test, press the C button again to remove **chl** from the display.



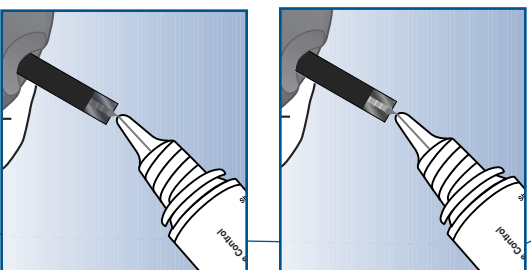
## STEP 2

### Apply Control Solution.

To ensure an accurate result:

- Shake the vial well
- Discard the first drop
- Wipe the dispenser tip

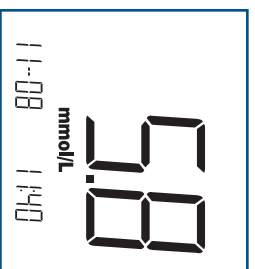
Hold the drop to the narrow channel in the top edge of the test strip. When the confirmation window is full, the meter will begin to count down from 5 to 1 second.



## STEP 3

### Result Appears in 5 Seconds.

Compare the control solution test result with the range printed on the test strip vial. The result should fall within this range.

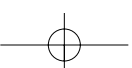
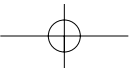


**NOTE:** Mark all control solution tests with **ctl** to distinguish them from blood glucose tests in the meter memory. Marked control solution tests will not be included in your averages.

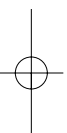
### Comparing control solution results

If test results fall outside the range printed on the test strip vial, repeat the test. Out-of-range results may be caused by one or more of the following:

- Error in performing the test.
- Failure to shake the control solution vial well.
- Expired or contaminated control solution.
- The meter, test strips, or control solution are too warm or too cold.
- Failure to discard the first drop of control solution and wipe the dispenser tip clean.
- Improper meter coding.
- Test strip deterioration.
- Meter malfunction.



**CAUTION:** If you continue to get control solution test results that fall outside of the range printed on the vial, the system may not be working properly. **Do not** use the meter. Call LifeScan Customer Care Freephone. **UK 0800 121 200, Ireland 1800 535 676**



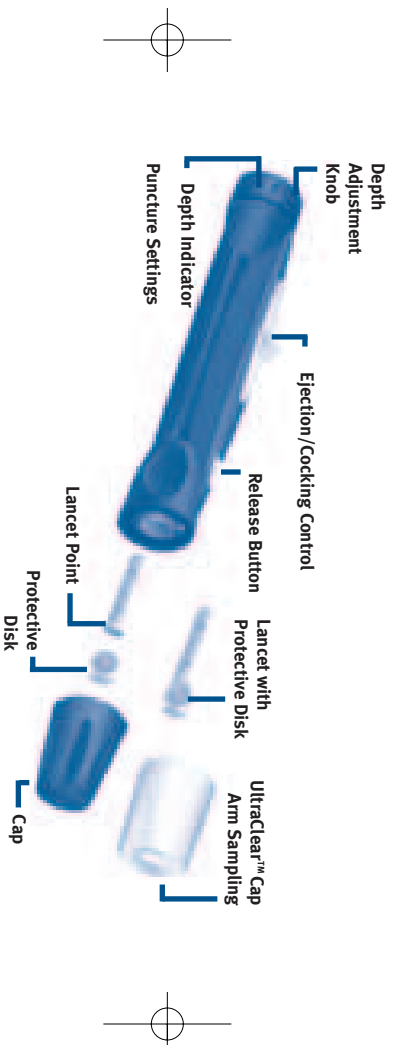
## Testing Your Blood

Read this section and the test strip package insert carefully before testing. Make sure you have all items needed to test.

- Meter
- Test Strips
- Sampler
- Optional UltraClear™ Cap
- Sterile Lancer



## Preparing the OneTouch® UltraSoft™ Sampler



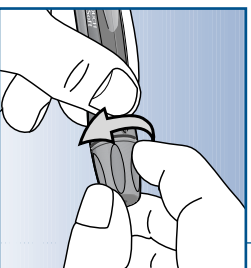
**CAUTION:** To reduce the chance of infection:

- ▶ Never share a lancet or the OneTouch® UltraSoft™ Sampler with anyone.
- ▶ Always use a new, sterile lancet. Lancets are for single use only.
- ▶ Keep the OneTouch® UltraSoft™ Sampler clean.

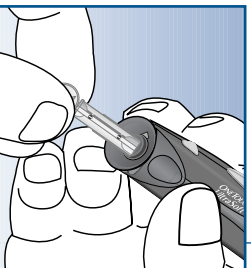
### STEP 1

#### Insert a Lancet.

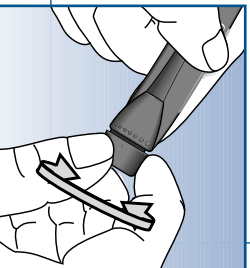
Turn the cap anti-clockwise to remove it.



Insert the lancet into the lancet holder and push down firmly until it is fully seated. Do not twist the lancet. Twist the protective disk until it separates from the lancet. Replace the OneTouch® UltraSoft™ Cap. Turn it clockwise until it is snug.



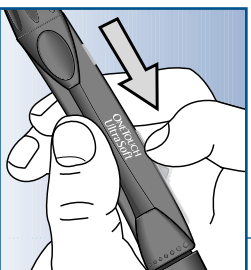
Adjust the puncture depth setting if necessary. Twist the depth adjustment knob toward the smaller bumps for a shallower puncture or toward the larger bumps for a deeper puncture.



## STEP 2

### Cock the Sampler.

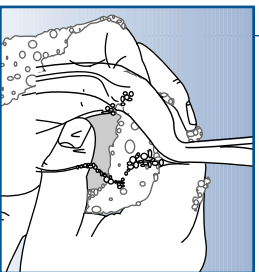
Slide the ejection/cocking control back until it clicks. If it does not click, the sampler may have been cocked when the lancet was inserted. The sampler is now ready for use.



## STEP 3

### Wash Your Hands and the Puncture Site.

Use warm, soapy water.  
Rinse and dry thoroughly.



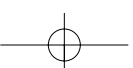
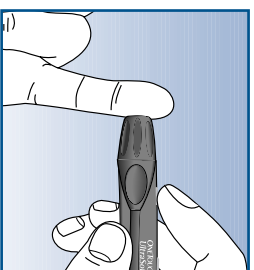
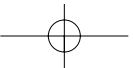
## Fingertip Blood Sampling

The OneTouch® *Ultra* System requires a very small blood drop to perform a test. You may obtain it from a **fingertip** or **arm**. (See next page for information on obtaining a blood sample from the arm.) Choose a different puncture site each time you test. Repeated punctures in the same spot may cause soreness and calluses.

### STEP 1

#### Position the Sampler.

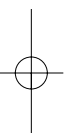
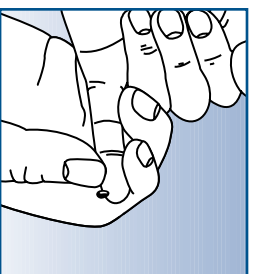
Hold the OneTouch® *UltraSoft*™ Sampler **firmly** against the **side** of your finger. Press the release button.



### STEP 2

#### Massage the Fingertip.

Massaging the fingertip gently will help you obtain a round drop of blood. Do not squeeze excessively on the puncture site. The blood sample must be at least one microlitre (1 µl) in volume (◆ actual size) or you may get an **Er-5** message (see page 53) or an inaccurate test result. Do not smear the blood sample. Proceed with your blood glucose test.



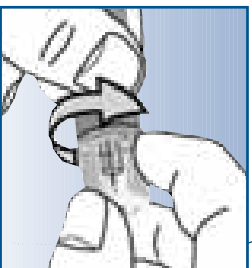
## Arm Blood Sampling

The arm has fewer nerve endings than the fingertip so you may find that obtaining a blood sample from the arm may be much less painful than using the fingertip. The technique for arm sampling is different from fingertip sampling. Also there are differences between arm samples and fingertip samples that you should understand. Please read the important information on page 25 carefully.

### STEP 1

#### Install the UltraClear™ Cap.

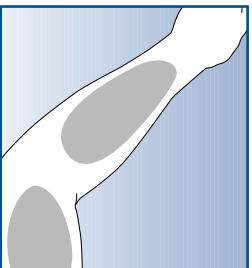
To aid in obtaining a blood sample from the arm, replace the regular sampler cap with the UltraClear cap. If necessary, set the sampler for a deeper puncture.



### STEP 2

#### Choose the Puncture Site.

Select a soft, fleshy area on your arm that is clean and dry, away from bone, and free of visible veins and hair.



### STEP 3

#### Massage the Area.

To increase blood flow to the puncture site, massage the area gently. For individuals who experience difficulty in getting sufficient blood for a test, rubbing the area more vigorously or the brief application of heat may be helpful.



### STEP 4

#### Position the Sampler.

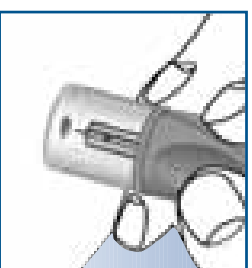
Press and hold the armpler against the arm for a few seconds. Press the release button.



### STEP 5

#### Allow Blood Drop to Form.

Continue holding the sampler against the skin for a few seconds until the blood drop forms. Allow enough blood to form under the cap until you have a blood sample that is sufficient to fill the confirmation window of the test strip. If you must massage the area to obtain more blood, do not squeeze the site excessively.



If bruising occurs, you may choose to lance a fingertip instead. If you are having difficulty obtaining blood from the arm, call LifeScan Customer Care Freephone at **UK 0800 121 200 Ireland 1800 535 676** for assistance.


### ***Important information about arm testing***

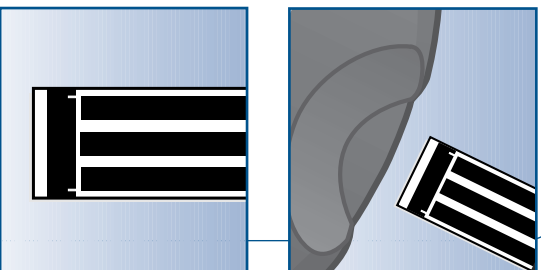
- Under certain conditions, blood glucose test results obtained using samples taken from your arm may differ significantly from fingertip samples.
  - The conditions in which these differences are more likely to occur are when your blood glucose is changing rapidly such as following a meal, an insulin dose, or associated with physical exercise.
  - When blood glucose is changing rapidly, fingertip samples show these changes more quickly than arm samples.
  - When your blood glucose is falling, testing with a fingertip sample **may** identify a hypoglycaemic (low blood sugar) level sooner than a test with an arm sample.
  - Use arm samples only for testing prior to, or more than two hours after, meals, insulin dose, or physical exercise.
  - Testing performed within two hours after meals, an insulin dose, or physical exercise, or whenever you feel that your glucose levels may be changing rapidly, should be done from the fingertip.
  - You should also use fingertip testing whenever you have a concern about hypoglycaemia (insulin reactions) such as when driving a car, particularly if you suffer from hypoglycaemic unawareness (lack of symptoms to indicate an insulin reaction), as arm testing may fail to detect hypoglycaemia.
- What you should do:**
- Use arm or fingertip samples for testing prior to, or more than two hours after, meals, insulin dose, or physical exercise.
  - Routine testing before meals can be done either at the fingertip or the arm.
  - Consult your healthcare professional before you begin using the arm for testing.

## Step-by-Step Test Procedure

### STEP 1

#### Insert Test Strip.

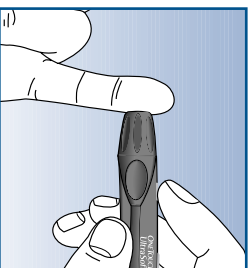
Insert a test strip, contact bars end first and facing up, into the test port. Push it in until it will go no further. The meter will turn on and the display check will appear briefly. Then the code number will appear, followed by the  symbol with the unit of measure. Check that the unit of measure is set correctly (normally mmol/L in UK). Be sure the meter and test strip codes match. If they do not, code the meter correctly.




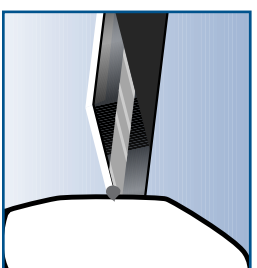
## STEP 2

### Apply Sample.

Obtain a round drop of blood using the OneTouch® UltraSoft™ Adjustable Blood Sampler. **The blood sample must be at least 1 µL in volume** (• actual size) to fill the confirmation window.



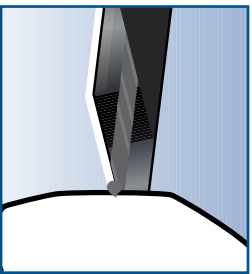
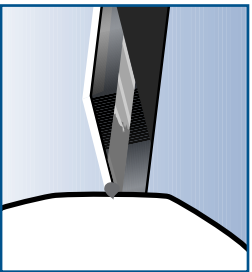
When the  symbol appears on the display, **touch and hold the drop of blood to the narrow channel in the top edge of the test strip.**



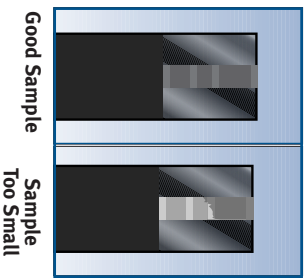
### DO NOT


- Apply sample to the front or back of the test strip.
- Push your finger against the test strip.
- Apply a smeared sample.

Hold the blood drop to the top edge of the test strip until the confirmation window is full before the meter begins to count down. If the confirmation window does not fill completely before the meter begins to count down, do not add more blood to the test strip; discard the test strip and retest. If you have trouble filling the test strip, contact LifeScan Customer Care for assistance.



If the confirmation window is not full, you may get an *E-5* message or an inaccurate test result.

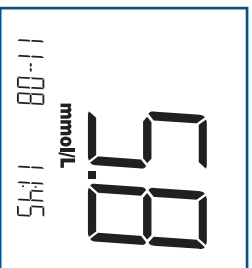


**NOTE:** If you do not apply a blood sample within two minutes after the  symbol appears, the meter will turn itself off. You must remove the test strip and insert it back into the meter to restart the test procedure.

### STEP 3

#### Accurate Results in Just 5 Seconds.

Your blood glucose test result will appear after the meter counts down from 5 to 1. Blood glucose test results are automatically stored in the meter memory. You may also record them in a logbook. Turn the meter off by removing the test strip. Dispose of used test strip in a sealed container.



Plasma-Calibrated Result

### Used Lancet Disposal

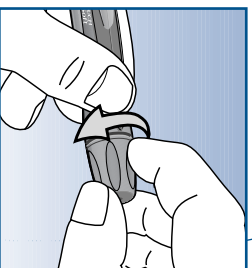
It is important to discard the used lancet carefully.

#### STEP 1

##### Remove the Sampler Cap.

Twist the cap counterclockwise.

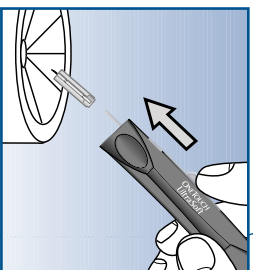
(Optional: Replace the protective disk on the used lancet by placing it on a hard surface and pushing the lancet tip into the disk.)



## STEP 2

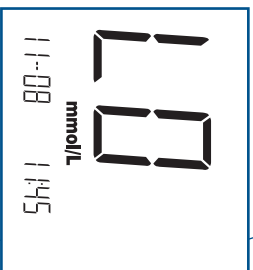
### Eject the Lancet.

Point the sampler down and away. Push forward on the ejection/cocking control and eject the lancet directly into a container for sharp objects. (Used test strips can go into the same container.) Return the ejection/cocking control to the middle position. Replace the cap.

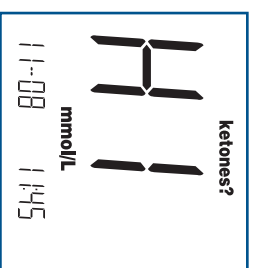


## Special Messages

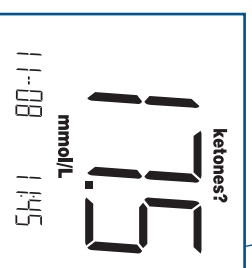
The OneTouch® *Ultra* Meter displays results between 1.1 to 33.3 mmol/L (20 and 600 mg/dL). If your blood glucose test result is lower than 1.1 mmol/L (20 mg/dL), **L** will appear on the meter display. **This indicates severe hypoglycaemia (low blood glucose). You should treat this condition according to the recommendations of your healthcare professional.**



If your blood glucose test result is above 33.3 mmol/L (600 mg/dL), **H I** will appear on the meter display. **This indicates severe hyperglycaemia (high blood glucose).** You should recheck your blood glucose level. If **H I** again appears on the display, call your doctor immediately.



When your blood glucose test result is above 13.3 mmol/L (240 mg/dL) or reads **H I**, "**ketones?**" will appear on the meter display. **This message does not mean that the system detected ketones but that testing with a ketone test strip may be advisable.** Consult your healthcare professional about when and how to test for ketones.



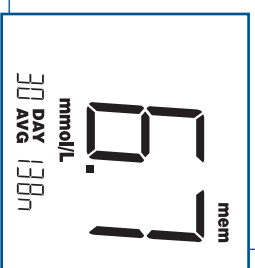
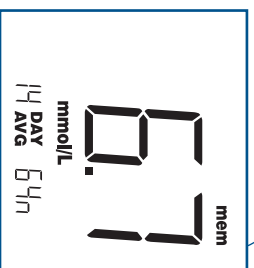
## Using the Meter Memory

Your OneTouch® *Ultra* Meter stores the 150 most recent blood glucose and control solution test results with date and time in its memory. It also provides you with 14- and 30-day averages of your blood glucose test results. Review the test results in memory with these easy steps.

### STEP 1

#### Enter the Memory Mode.

You may enter the memory mode either with the meter turned off or immediately after completing a test. Press the M button **mem** and the 14-day average will appear with the number of blood glucose tests performed in this period. After three seconds, the 30-day average will appear. (If you are using the meter for the first time, - - - indicates there are no test results in memory.)



These averages are calculated from the blood glucose results obtained during the last 14 and 30 calendar days. A **H** result will be included in your averages as 33.3 mmol/L (600 mg/dL) and a **L** result as 1.1 mmol/L (20 mg/dL). Results marked as control solution tests will not be included in your averages.

## STEP 2

### Recall Test Results.

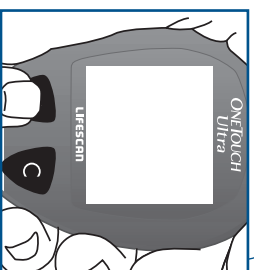
The most recent test result with date and time will appear. Press and release the C button and the next most recent test result will appear. The meter will recall up to your last 150 test results in order from the most recent to the oldest. When the memory is full, the oldest result is dropped and the newest is added. To move through the tests more quickly, press and hold the C button. **ctl** will appear with control solution tests.



## STEP 3

### Exit the Memory Mode.

Press the M button to turn off the meter.



## Downloading Test Results to a Personal Computer

Transferring test results with date and time from the meter memory to your personal computer requires IN TOUCH® Diabetes Management Software with the accompanying LifeScan Interface Cable. (IN TOUCH® Software is available separately.)

### STEP 1

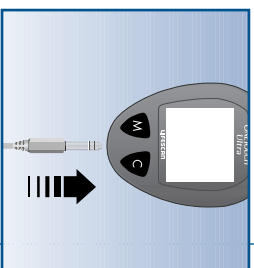
#### Install IN TOUCH Software.

Follow the instructions provided in the IN TOUCH® User's Manual.

### STEP 2

#### Connect the LifeScan Interface Cable.

Connect the LifeScan Interface Cable to a serial port on the back of your computer and (with the meter turned off) to the meter data port. **PT** will appear on the meter display when the first command is received, indicating that the meter is in the communication mode.



**NOTE:** While in the communication mode, you will be unable to perform a blood glucose test. If the meter is in either memory or setting mode, it will not respond to computer commands.

### STEP 3

#### Transfer Data.

Follow the instructions in the In Touch® User's Manual to initiate the data transfer command. If the command is not received within two minutes, the meter will turn itself off. Pressing the M button will also turn the meter off.



To learn more about In Touch® Diabetes Management Software or to obtain a LifeScan Interface Cable separately, contact LifeScan Customer Care Freephone: **UK 0800 121 200, Ireland 1800 535 676.**

## Comparing Meter and Laboratory Results

OneTouch® *Ultra* Meter test results and laboratory test results are both expressed in plasma-equivalent units. However, your meter result may differ somewhat from your laboratory result due to normal variation. Meter results can be affected by factors and conditions that do not affect laboratory results in the same way. Your OneTouch *Ultra* Meter glucose value should agree with a laboratory measurement within  $\pm 20\%$  most of the time under normal conditions. A result within that range is considered accurate when testing with the OneTouch *Ultra* Meter. However, results can differ by more than  $\pm 20\%$  in some situations. See the OneTouch® *Ultra* Test Strip package insert for typical accuracy and precision data and for important information on Limitations of Procedure.

To make an accurate comparison between meter and laboratory results, follow these guidelines:

### ***Before going to the lab:***

- Perform a control solution test to make sure the meter is working properly.
- It is best to fast for at least eight hours before doing comparison tests.
- Take your meter with you to the lab.

**While at the lab:**

- Make sure that the meter test and the lab test are performed within 15 minutes of each other.
- Wash your hands before obtaining a blood sample.
- Use only fresh capillary blood obtained from the fingertip.

You may still have a variation from the result because blood glucose levels can change significantly over short periods, especially if you have recently eaten, exercised, taken medication, or experienced stress.<sup>1</sup> In addition, if you have eaten recently, the blood glucose level from a fingerstick can be up to 3.9 mmol/L (70 mg/dL) higher than blood drawn from a vein (venous sample) used for a lab test.<sup>2</sup> Therefore, it is best to fast for eight hours before doing comparison tests. Factors such as the amount of red blood cells in the blood (a high or low haematocrit) or the loss of body fluid (severe dehydration) may also cause a meter result to be different from a laboratory result.

**References**

1. Surwit, R.S., and Feinglos, M.N.: *Diabetes Forecast* (1988), April, 49–51.
2. Sacks, D.B.: "Carbohydrates." Burtis, C.A., and Ashwood, E.R. (ed.), *Tietz Textbook of Clinical Chemistry*. Philadelphia: W.B. Saunders Company (1994), 959.

## Setting the Meter Time, Date, and Unit of Measure

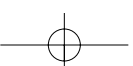
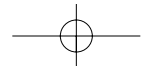
The OneTouch® Ultra Meter comes with the time, date, and unit of measure preset. However, if you need to change the time, or if you remove the battery, you may need to enter the setting mode and reset.

To set the time, you must enter the setting mode. Start with the meter off. Then press and hold the M button for three seconds. The meter is now in the setting mode.

### STEP 1

#### Set the Hour.

With the **hour** setting flashing, press and release the C button to advance one **hour**. To move faster, hold the C button down. With the correct hour on the display, press the M button and the minutes setting will start flashing.

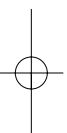


*Before setting the date, you must have first set the time.*

### STEP 2

#### Set the Minutes.

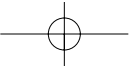
Press and release the C button to advance one **minute**. To move faster, hold the C button down. With the correct minute on the display, press the M button and the AM/PM (12-hour) format setting will start flashing.



### STEP 3

#### Set the Time Format.

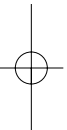
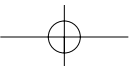
The meter can display the time in either an AM/PM (12-hour) format or a 24:00 (24-hour) format. The 24-hour format is preset in the meter. If you wish to display the time in the 12-hour format, press the C button. With the preferred time format on the display, press the M button and the year setting will start flashing.



### STEP 4

#### Set the Year.

Press and release the C button to advance one year. To move faster, hold the C button down. With the correct year on the display, press the M button and the date will appear on the display with the month segment flashing.



### STEP 5

#### Set the Month.

Press and release the C button until the correct **month** appears. To move faster, hold the C button down. With the correct month on the display, press the M button and the day segment will start flashing.



### STEP 6

#### Set the Day.

Press and release the C button until the correct **day** appears. To move faster, hold the C button down. With the correct day on the display, press the M button and the unit of measure segment will start flashing.



**NOTE:** The 1<sup>4</sup>- and 30-day averages in the meter memory are calculated from results obtained during the 1<sup>4</sup> and 30 calendar days preceding the current date and time settings. When the date and time are changed, the averages may change.

The OneTouch® *Ultra* Meter can display test results in millimoles per litre (mmol/L) or milligrams per decilitre (mg/dL).

### STEP 7

#### Select mmol/L or mg/dL.

The OneTouch® *Ultra* meter can display test results in either millimoles per litre (mmol/L) or milligrams per decilitre (mg/dL). Your meter was set at the factory to the unit generally used in your country. It should be changed only on the recommendation of your health care professional. If the units are incorrect or have been changed, press the C button to select the correct units. If the units are correct, press the M button to exit the setting mode.



mmol/L

**NOTE:** You must move through the hour, minutes, time format, year, month, day, and unit of measure to turn off the meter and exit the setting mode.

## Caring for Your OneTouch® Ultra System

### Meter

Your OneTouch® *Ultra* Meter does not require special maintenance or cleaning. Take care to avoid getting dirt, dust, blood, control solution, or liquids inside the meter through the test port or data port. Lifescan recommends that you store the meter in its carrying case after each use.

A cloth dampened with water and mild detergent can be used to wipe down the outside of the meter. Your OneTouch® *Ultra* Meter is a precision instrument. Please handle it with care.

### OneTouch® *UltraSoft*™ Sampler

Clean the sampler and caps with soap and water. To disinfect the sampler, prepare a disinfectant solution of one part household bleach to 10 parts water. Dampen a cloth with this solution and wipe the sampler thoroughly.

**Soak only the cap or caps** for at least 30 minutes in the disinfectant solution. Do not soak the sampler in liquid. Rinse the sampler and cap with water and dry thoroughly.


## Battery

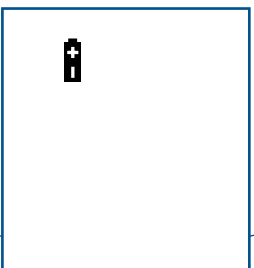
Your OneTouch® *Ultra* Meter comes with a pre-installed 3.0 V (#2032 or equivalent) lithium battery. The battery will provide you with enough power to perform about 1,000 tests. When replacing the battery, use only a 3.0 V (#2032 or equivalent) lithium battery.

The meter will alert you when the power is getting low by displaying two different messages:

The  symbol appears on the display with the unit of measure when the meter is turned on and all other display messages are functional. From the time the  symbol first appears, there is enough power left for about 50 tests. The test results will be accurate, but it is time to change the battery.

 mmol/L

When the  symbol appears on the display by itself, it means that the battery will not provide enough power for a test. You must change the battery.

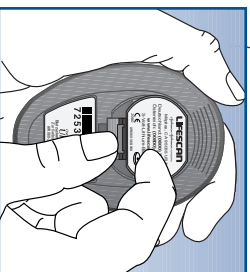


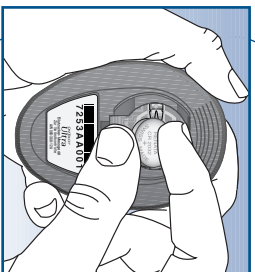
To replace the battery, make sure that the meter is turned off. Turn the meter over and locate the battery compartment.

### STEP 1

**Open the battery compartment.**

Push up on the tab and pull the battery compartment cover toward you.





## STEP 2

### Remove the old battery.

Pull upward on the ribbon. Insert one 3.0 V (#2032 or equivalent) lithium battery, making sure the positive “+” side of the battery is facing up.

## STEP 3

### Place the cover.

Place the cover over the battery compartment. Push down until you hear the tab click into place.



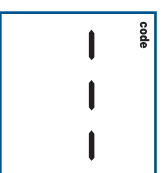
### NOTE:

- ▶ Replacing the battery **does not** affect previous test results stored in memory. However, the time and date settings may need to be updated.
- ▶ After replacing the battery, turn the meter on by inserting a test strip or pressing the M button. If the meter is in setting mode, confirm that the time, time format, date and, most importantly, the unit of measure are set correctly. If they are not, use the M and C buttons to reset the meter before testing. See "Setting the Meter", pages 38-41

## Display Messages and Problem-Solving Guide

Following is a summary of all display messages. These messages help to identify certain problems but do not appear in all cases when a problem has occurred. Improper use may cause an inaccurate result without producing an error message or a symbol. In the event of a problem, refer to the information under ACTION. Assistance is available from LifeScan Customer Care.

MESSAGE	WHAT IT MEANS	ACTION
	Display check. Appears whenever the meter is turned on. To verify that all segments are present on the display, press and hold the C button. Compare the meter display with pages 6–7.	If segments are missing, contact LifeScan Customer Services for further action. Missing segments can lead to misinterpretation of test results.



- |  |   |
|--|---|
| 1. This message appears immediately after the display check if your meter has not been coded.  | 1. See “Coding the Meter,” pages 10–12.   |
| 2. If this message appears at any time after the first time meter was coded, the code number has been lost. The test results stored in the meter memory may be out of order. | 2. Do not rely on the 14- and 30-day averages. It is important to call LifeScan Customer Care Freephone UK 0800 121 200, Ireland 1800 535 676 |

MESSAGE

WHAT IT MEANS

ACTION



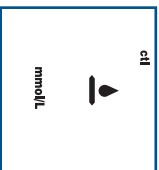
This is the code number stored in the meter:

Make sure that this code number matches the code number on the vial of the test strips you are using.



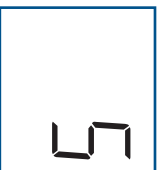
The system is ready to accept a blood sample.

You may now apply the blood sample.



The system is ready to accept a control solution test sample.

You may now apply the control solution.



Five-second countdown. The meter is calculating the result. After the countdown, the meter will display the test result.

None required.

**MESSAGE**

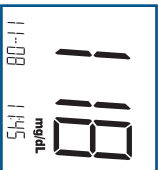
**WHAT IT MEANS**

**ACTION**



A blood glucose test result in mmol/L.

None required if this is the unit your healthcare professional has recommended. If you should be using mg/dL, reset the unit of measure. See page 41.



A blood glucose test result in mg/dL.

None required if this is the unit your healthcare professional has recommended. If you should be using mmol/L, reset the unit of measure. See page 41.



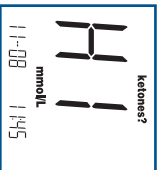
A blood glucose test result with a suggestion to check your ketone levels.

Follow the instructions of your healthcare professional regarding ketone testing.

**MESSAGE**

**WHAT IT MEANS**

**ACTION**



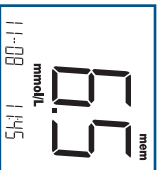
You may have a very high blood glucose level, exceeding 33.3 mmol/L (600 mg/dL).

You should recheck your glucose level and if H1 call your doctor immediately.



You may have a very low blood glucose level, lower than 1.1 mmol/L (20 mg/dL).

Treat this condition according to your health-care professional's recommendations.



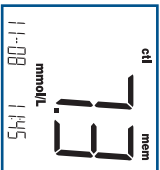
A blood glucose test result stored in the memory.

None required.

MESSAGE

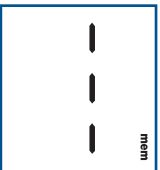
WHAT IT MEANS

ACTION



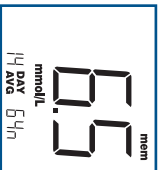
A control solution test result stored in the memory.

None required.



There is no test result stored in this place in the memory.

None required.



Average of the last 14 days (6 1/2 means that 64 tests were performed within the period). The 30-day average appears with a 30.

No action required.

MESSAGE

WHAT IT MEANS

ACTION



Error message that indicates that there is a problem with the meter.


Do not use the meter.  
Contact LifeScan  
Customer Care Freephone  
**UK 0800 121 200**  
**Ireland 1800 535 676**  
for a replacement meter.




Error message could be caused either by a used test strip or a problem with the meter.

Repeat the test with a new test strip. Refer to pages 8 and 9 for test strip information. If the error message persists, contact LifeScan Customer Care Freephone  
**UK 0800 121 200**  
**Ireland 1800 535 676.**



Error message that indicates that the blood or control solution sample was applied before the  symbol appeared on the display.

Repeat the test with a new test strip. Apply blood or control solution sample only after the  symbol appears on the display. Refer to page 27 for information on sample application.

**MESSAGE**

**WHAT IT MEANS**

**ACTION**

Error message that indicates one of the following conditions may be present:



1. You may have high glucose and have tested in an environment near the low end of the system's operating temperature range (6-44/43-111F)

1. If you tested in a cool environment, repeat the test in a warmer environment with a new test strip. If the message appears again, contact LifeScan Customer Care Freephone UK 0800 121 200, Ireland 1800 535 676.

2. There may be a problem with the test strip. For example, it may have been damaged or moved during testing.

2. If you were testing in a normal or warm environment, repeat the test with a new test strip. (See pages 8-9 for test strip information.) If the error message appears again, contact LifeScan Customer Care UK 0800 121 200, Ireland 1800 535 676.

3. The sample was improperly applied

3. If you applied the blood incorrectly, review pages 26-29 on blood application and repeat the test with a new test strip. If the error message appears again, contact LifeScan Customer Care UK 0800 121 200, Ireland 1800 535 676.

MESSAGE

WHAT IT MEANS

ACTION



Error message that indicates that the meter has detected a problem with the test strip. Possible causes are test strip damage or an incompletely filled confirmation window.

Repeat the test with a new test strip. Refer to page 27–28 for information on sample application.



The battery sign appears on the display with the unit of measure. The power is getting low. You can complete about 50 more tests from the time this symbol first appears.

Test results will still be accurate, but replace the battery as soon as possible.



The battery sign appears on the display by itself. The power is too low to perform a test.

Replace the battery at once. The meter will not operate.

**MESSAGE**

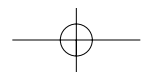
**WHAT IT MEANS**

**ACTION**



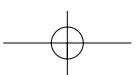
The meter has detected that the temperature is below the system operating range. Do not perform a test until the meter and test strips reach a temperature within the operating range of 6–44°C (43–111°F).

Repeat the test after the meter and test strips have reached a temperature within the operating range.



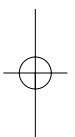
The meter has detected that temperature is above the system operating range. Do not perform a test until the meter and test strips reach a temperature within the operating range of 6–44°C (43–111°F).

Repeat the test after the meter and test strips have reached a temperature within the operating range.



Flashing time means the meter has lost power and entered the setting mode.

You must reset the time, time format, date, and most importantly, the unit of measure. See "Setting the Meter", pages 38–41.



**If the meter does not display a message after inserting a test strip:**

**POSSIBLE CAUSE WHAT TO DO**

Need battery	Replace the battery.
No battery or battery incorrectly installed	Check that the battery is correctly installed with the positive “+” side up.
Test strip inserted incorrectly or incompletely	Insert the test strip correctly with the contact bars end first and facing up. Push it in until it will go no further.

Defective meter or test strip **Call LifeScan Customer Care**  
**Freephone: UK 0 800 121 200, Ireland 1800 535 676.**

**If the test does not start after applying the sample:**

**POSSIBLE CAUSE WHAT TO DO**

Insufficient blood sample	Repeat the test with a new test strip and a larger sample.
Defective test strip	Repeat the test with a new test strip.
Sample applied after automatic shutoff (two minutes after last user action)	Repeat the test with a new test strip; apply sample only when the ▲ appears on the display.

Defective meter **Call LifeScan Customer Care**  
**Freephone: UK 0 800 121 200, Ireland 1800 535 676.**

## Specifications

**Result Range:** 1.1 to 33.3 mmol/L (20 to 600 mg/dL)

**Calibration:** Plasma-equivalent

**Sample:** Fresh capillary whole blood

**Sample Size:** Minimum 1 microlitre

**Test Time:** 5 seconds

**Assay Method:** Glucose oxidase biosensor

**Power Source:** One replaceable 3.0 V (#2032 or equivalent) lithium battery

**Battery Life:** 1,000 tests or about one year at three tests per day

**Glucose Units:** Either mmol/L or mg/dL

**Memory:** 150 blood glucose and control solution tests

**Automatic Shutoff:** Two minutes after last user action

**Size:** 3.12" X 2.25" X .85"

**Approximate Weight:** 42.5 grams (1.5 ounces) with battery

**Operating Ranges:**

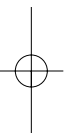
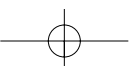
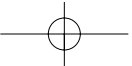
**Temperature** 6–44°C/43–111°F

**Relative Humidity** 10–90%

**Haematocrit** 30–55%

## Guarantee

The makers guarantee that the OneTouch® Ultra Meter shall be free of defects in material and workmanship for a period of three years. This guarantee is valid from the date of purchase. The guarantee extends only to the original purchaser and is not transferable.



Times of Day	Glucose Ranges for People Without Diabetes, mmol/L	Your Target Ranges, mmol/L
Before breakfast	3.9–5.8	_____
Before lunch or dinner	3.9–6.1	_____
1 hour after meals	Less than 8.9	_____
2 hours after meals	Less than 6.7	_____
Between 2 and 4 AM	Greater than 3.9	_____

Source: Krall, L.P., and Beaser, R.S.: *Joslin Diabetes Manual*. Philadelphia: Lea and Febiger (1989), 138.

Meter Serial No. \_\_\_\_\_

**Important phone numbers:**

Lifescan Customer Care Freephone:  
UK 0800 121 200 Ireland 1 800 535 676

Healthcare Professional \_\_\_\_\_ Pharmacist \_\_\_\_\_

Diabetes Educator \_\_\_\_\_ Other \_\_\_\_\_

