

ACCU-CHEK[®]

Advantage[®]

User's Manual

***Las instrucciones en español
están al reverso de este manual.***

BLOOD GLUCOSE MONITORING SYSTEM



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Welcome

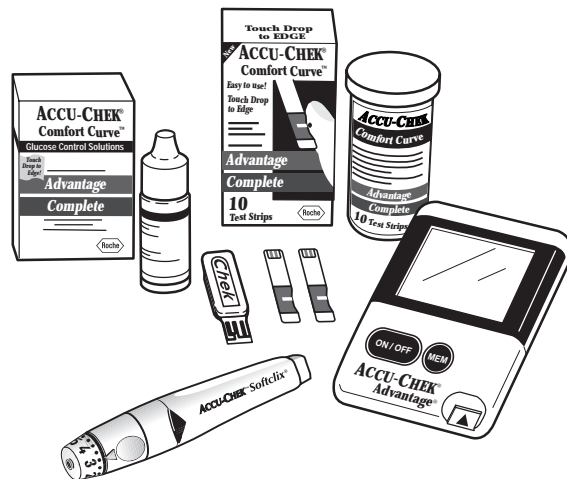
Thank you for selecting the Accu-Chek® Advantage® system. Designed for ease of use, this system was produced in close association with diabetes health care professionals, hospitals, and, most importantly, people with diabetes.

The lightweight, portable meter provides accurate results in seconds. When you place a drop of blood on the test strip, the Accu-Chek® Advantage® meter measures your blood glucose level and displays your result. There's no wiping and no timing. It's that simple.

Before you begin testing, please read this manual thoroughly. It provides all the information you need to use the Accu-Chek Advantage meter. Remember to return the enclosed warranty card. This ensures that you receive any updates on your Accu-Chek Advantage system.

Where to Find Help

Accu-Chek Customer CareSM is available to answer your questions 24 hours a day. We offer assistance in Spanish and many other languages! Call **1-800-858-8072**.



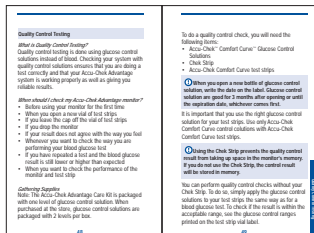
About This Manual

This manual is set up into the following sections:

Section	Title
1	Getting Started
2	Glucose Testing
3	Quality Control Testing
4	Other Information

Content	Page
Learn the system's parts and features, install batteries, and code meter	11
Run blood glucose test and understand results	31
Run quality control tests and understand results	52
Reference using Accu-Chek Advantage test strips, memory results, caring for your meter, and troubleshooting guide	66

- Some pages in this manual have a single column that may contain text, a flow chart and/or pictures:



- Other pages in this manual have 3 columns:

1

This column has pictures or introductory information about the section

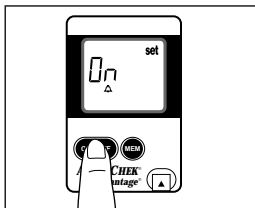
2

This column tells you what action to perform.



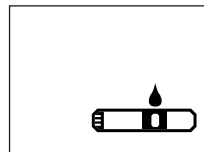
1. Turn on meter by pressing the ON/OFF button.

8



3

This column shows what the meter displays AFTER the action is completed and/or may give details about the action.



On the display screen, the symbols of a drop of blood and test strip will begin flashing to signal that you may apply a drop of blood.

9

- Any text that appears in the light blue shaded box with this symbol is important information that should be read carefully:

! The yellow window must be completely filled with blood.

Getting Started

Follow these 4 important steps before using the meter for the first time:

1. **Learn the system's parts and features**
2. **Install batteries**
3. **Code the meter**
4. **Run controls**

About Your Accu-Chek® Advantage® System



About Your Meter

Front of Meter

- 1 Display— Shows blood glucose results, messages and glucose results stored in memory.
- 2 On/Off Button— Press to turn meter ON or OFF.
- 3 MEM Button— Press to review up to 100 glucose values in memory.
- 4 Test Strip Slot— Insert test strip here.

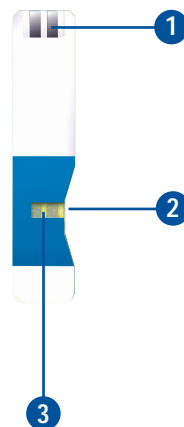
Back of Meter

- 5 Code Key— For coding your meter. New Code Key comes with every vial of test strips.
- 6 Battery Cover— Slide cover to change battery.
- 7 Code Key Slot— Insert Code Key here.

About the Test Strip

Your Accu-Chek Advantage kit comes with Accu-Chek® Comfort Curve® test strips. Accu-Chek Comfort Curve test strips are easy to use, touchable, and require only a small drop of blood for accurate results. If you prefer, Accu-Chek® Advantage® test strips may also be used with the Accu-Chek Advantage meter. See page 66.

Accu-Chek Comfort Curve Test Strip



1. Silver Bars - Insert strip with silver bars up and toward meter.
2. Comfort Curve - Touch drop of blood here, on the **edge** of the strip.
3. Yellow Window - Do not apply blood on the top of the test strip.
Before Applying Blood—This window should be yellow.
After Applying Blood—This window should be completely filled from the blood drop.
Note: Any area of the strip can be touched and not affect the glucose reading.

About the Chek™ Strip



Use the Chek Strip when performing quality control checks on your meter. Insert this end into meter with “Chek” side up.

Installing or Replacing the Batteries

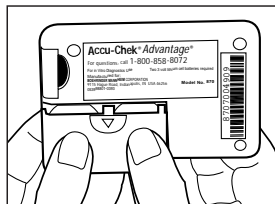
Your meter is shipped with two 3-volt lithium batteries that need to be installed before testing. Battery life will vary depending on usage, so always keep spares on hand.

Acceptable replacement batteries are:

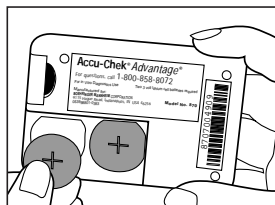
Duracell DL 2450 Sanyo CR 2450

The meter saves battery power by automatically turning off after 5 minutes of non-use. If the meter does automatically shut off, any tests in memory are saved.

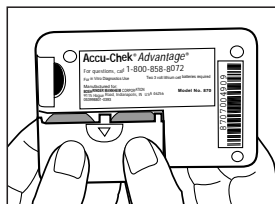
! When replacing batteries, always replace both at the same time and both should be of the same brand. Time and date will need to be reset when batteries are replaced.



1. Slide battery cover from back of meter.



2. Insert both 3-volt lithium batteries (+ side facing up) one at a time. Do not let batteries touch each other. This can reduce the battery life or cause the batteries to lose power.



3. Slide battery cover back in place. Wait 5 seconds, then turn meter ON.



Do not let batteries touch each other. This can reduce the battery life or cause the batteries to lose power.



Temperature symbol will appear when batteries are first inserted. This is normal and will disappear after 30 seconds. If symbol remains after 30 seconds, call Accu-Chek Customer CareSM at 1-800-858-8072.

Setting the Beeper



Does the beeper have to be turned on? No, it is an optional feature.

Turning the beeper on or off does not affect the test results.

The Accu-Chek

Advantage meter is set to beep when:

- A strip is inserted.
- Blood or control solution is applied to strip.
- A result is displayed.
- An error occurs while testing.
- Buttons are pushed.

1. Turn meter ON.

2. Press ON/OFF and MEM buttons at the same time. The beeper is now on.

3. Press ON/OFF button. The Beeper is now off.

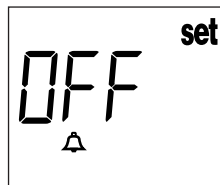
4. To turn beeper back on, simply press ON/OFF button again.

5. Press ON/OFF and MEM buttons at the same time to leave this function.

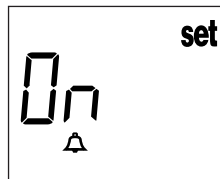


Code--- or the test strip symbol flashes.

"ON," "set" and a bell appear on the display.



"OFF," "set" and a bell appear on the display.



"ON," "set" and a bell appear on the display.

Setting the Time and Date



Do I have to set the time and date? No, it is an optional feature. However, there is a slight possibility that one result every seven days could be incorrectly recorded in the memory. If time and date are set on your meter, this situation will only occur when your meter clock reads 12:00 (midnight) -12:10 a.m. If time and date are not set on your meter, this situation can occur once every seven days at any time of the day.

Do not change your therapy based on one individual result recorded in memory. Time and date should be set prior to testing if you plan to down-load the results into software or if you plan to review your memory to check when a test was done.

! The meter is unable to account for February 29 each leap year. Therefore, on March 1 of a leap year (2000, 2004, and 2008) you will need to adjust the date by one day.

1. Turn meter ON.
2. Press ON/OFF and MEM buttons at the same time.
3. Press MEM button.
4. Press and release ON/OFF button until the correct hour is displayed.
5. Press MEM button.
6. Press and release ON/OFF button until the correct minutes are displayed.



Code or the test strip symbol flashes.

Bell and "ON" or "OFF" symbols flash.



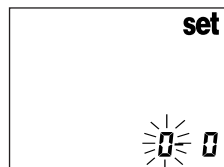
The hour display flashes.



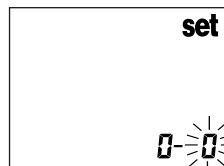
The minute display flashes.



7. Press MEM button.
8. Press and release ON/OFF button until the correct month is displayed.
9. Press MEM button.
10. Press and release ON/OFF button until the correct day is displayed.
11. Press MEM button.
12. To leave this function, press ON/OFF and MEM buttons at the same time.



The month display flashes.



The day display flashes.

Bell and "ON" or "OFF" symbols reappear.



You may leave this setting mode at any time by pressing ON/OFF and MEM at the same time. The settings you have entered will be saved.

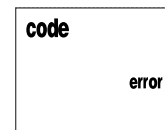
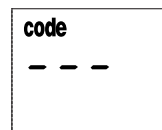
Coding Your Meter

To ensure accuracy of your Accu-Chek Advantage system, Roche Diagnostics recommends changing your Code Key with each new box of Accu-Chek Comfort Curve test strips. Each Code Key provides your Accu-Chek Advantage meter with the specific information that your meter needs to accurately measure your blood sugar. Do not use code keys with your Accu-Chek Advantage meter from any test strip manufacturer or system other than the Accu-Chek Comfort Curve or Accu-Chek Advantage systems from Roche Diagnostics. Use of other manufacturer's code keys may result in erroneous results with your system. Before you use your meter for the first time and every time you open a new box of test strips, you need to set the meter to "match" the strips. This is called coding or calibration.

The Accu-Chek Advantage system is coded automatically using the Code Key found with each new vial of test strips. The Code Key is properly inserted when it snaps into place.

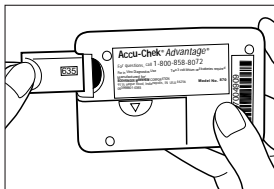
You will need to insert a new Code Key:

- Whenever you open a new box of strips.
- Whenever these displays appear:





1. Make sure the meter is turned off. Turn meter over so you are looking at the back.

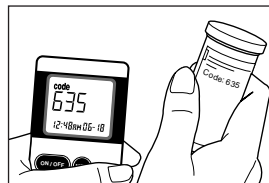


2. Insert new Code Key until it snaps into place.

3. Turn meter ON.



Remove old Code Key if one is installed.



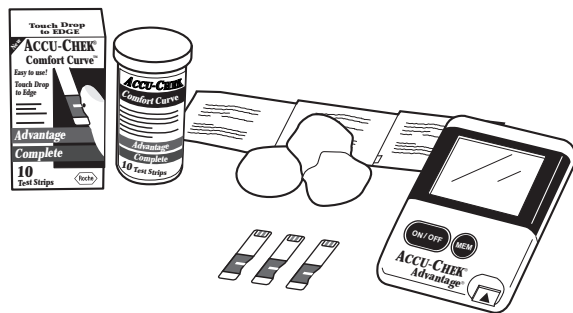
A 3-digit code number appears. This number must match the code number on your vial of test strips. If it does not, repeat steps 1-3.

Glucose Testing

Gathering Supplies

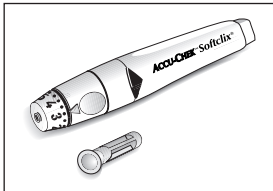
To begin testing, you will need the following items:

- Accu-Chek Advantage meter
- Accu-Chek Comfort Curve test strips (Cat. Nos. 2030365, 2030373, 2030381, 2030420, 3000133, 3000141, 3000150) or Accu-Chek Advantage test strips (Cat. Nos. 551, 553, 966, 336, 338, 787). See page 66 for testing instructions when using these strips.
- Lancet
- Lancet device (optional)
- Cotton balls
- Alcohol wipes (optional)

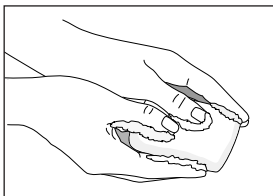




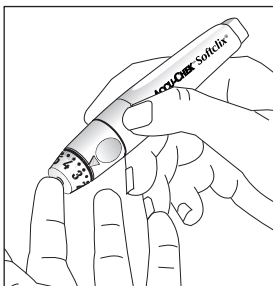
Getting a Good Drop of Blood



1. Prepare lancet device.



2. Wash hands in warm, soapy water. Rinse and dry completely. Warm fingers to increase blood flow.



3. Let arm hang down at side briefly to allow blood flow to fingertip.

4. Grasp finger near area to be pricked and squeeze for three seconds.

5. Keeping hand down, prick side of fingertip and squeeze gently until you get a drop of blood.



Follow manufacturer's instructions.

! Do not reuse disposable lancets.

If you use an alcohol wipe, let your finger dry completely before testing.

Be careful not to squeeze the finger too hard.

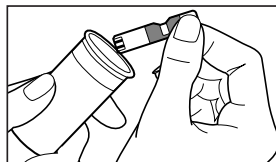
! Health Care Professionals: Follow the infection control procedures appropriate for your facility.

Running a Test

Running a Test with Accu-Chek Comfort Curve Test Strips



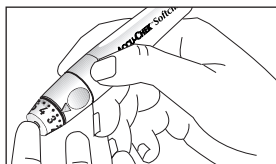
1. Turn meter ON.



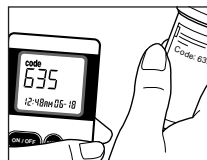
2. Remove a new test strip from vial.



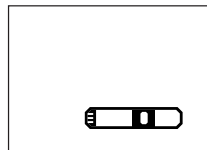
3. Gently insert test strip (yellow window facing up) into test strip guide.



4. Use the lancet to obtain a small drop of blood resting on the side of your finger.

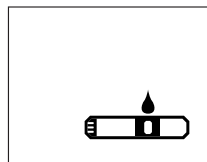


Check that code number displayed matches code number on vial of test strips.

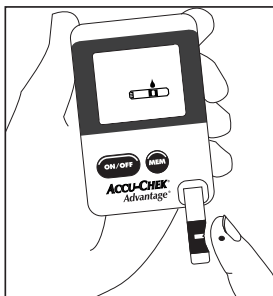
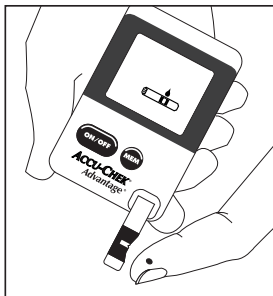
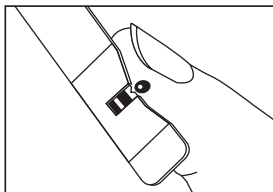


When the test strip symbol flashes, meter is ready to accept a test strip.

Be sure to tightly replace vial cap after removing test strip.



Once strip is correctly inserted, a blood drop symbol flashes.



5. Touch and hold the drop of blood to the edge of the strip. Bring the finger and the strip together in a way that is most comfortable for you.

You may pick up the meter, turn the meter, or move the meter to the edge of the table in order to touch the edge of the strip to the blood drop resting on your finger.



The blood will be drawn into the strip automatically.

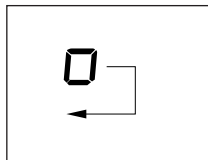


6. Hold your finger to the **edge** of the Comfort Curve until the yellow window is completely filled with blood. Do not place the blood drop on top of the yellow window.



! If you see any yellow color in the window after you have applied the initial drop of blood, a second drop of blood may be applied to the Comfort Curve within 15 seconds of the first drop. If more than 15 seconds have passed, the test result may be erroneous and you should discard the test strip and repeat the test.

Although only a small amount of blood is needed, it is very important that you put enough blood on your test strip so that, at the end of the test, the entire yellow window is completely and evenly colored red. This ensures that your meter can produce accurate and reliable results.



When blood is applied correctly to the strip, a box rotates on the display until measurement is completed.



The blood glucose result is displayed. Your result is automatically recorded in the meter's memory.



7. Remove the test strip from meter and discard.

8. If you are done testing, turn meter OFF.

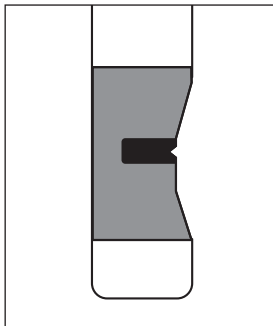
9. Dispose of strip and lancet in a puncture-proof container with a lid such as a coffee can.



When the test strip is removed, the test strip symbol flashes indicating the meter is ready to accept another strip.

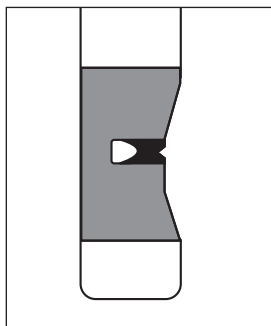
Running a Test

Proper Test Strip Appearance



Correct Blood Application

This strip has the correct amount of blood on it.



Incorrect Blood Application

Notice that the yellow window is not completely filled with blood. This strip has too little blood on it and may produce an error message or an inaccurate result.

Glucose Testing

Understanding Your Test Results

What's Normal?

The normal fasting adult blood glucose range for a non-diabetic is 70 - 105 mg/dL¹. One or two hours after meals, normal blood glucose levels should be less than 140 mg/dL². Your doctor will determine the range that is appropriate for you.

Unusual Test Results

IF...	AND...
your blood glucose result seems unusually high, or low, or inconsistent with your previous results or glucose trends	<p>does not reflect the way you feel, check the following:</p> <ul style="list-style-type: none"> • Does the test strip code number match the code number on the meter? • Was the blood sample applied to the test strip within 3 minutes of removing it from the vial? • Was the size of the blood sample sufficient? • Was the test strip vial cap tightly sealed? • Was the test strip used before the expiration date? • Were the test strips stored away from extreme temperatures such as in the car in very cold or hot weather? • Were the test strips stored away from areas of high humidity such as the kitchen or bathroom?

THEN...

run a quality control check with your glucose control solutions and a new test strip. (See page 52, **Quality Control Testing**). If the control result is within the acceptable range, review proper testing procedure and repeat your blood glucose test with a new test strip. If your blood glucose result is still inconsistent with your previous results, glucose trends or how you feel, please contact your doctor. Follow the advice of your doctor before you change your therapy.

Understanding Your Test Results

IF...

you get a low blood glucose result or **LO** is displayed (blood glucose result is lower than the low end of the system's reading range—refer to your test strip package insert for more information.),

you get a low blood glucose result or **LO** is displayed

your blood glucose result is *above* 240 mg/dL

AND...

you also experience symptoms of low blood glucose: sweating, trembling, blurred vision, rapid heart beat, tingling or numbness around the mouth or fingertips,

symptoms are absent,

this has occurred for several days,

THEN...

seek proper treatment **immediately**.

run a quality control check with your glucose control solutions and a new test strip. (See page 52, ***Quality Control Testing***.) If the control result is within the acceptable range, review the proper testing procedure and repeat your blood glucose test with a new test strip and a larger drop of blood. If **LO** still appears for your blood glucose test, follow your doctor's instructions. If the control result is not within the acceptable range, turn to page 64.

check urine ketone levels with Chemstrip® K or Chemstrip® uGK Test Strips. **Contact your doctor.**

Understanding Your Test Result

IF...

HI is displayed (blood glucose result is higher than the high end of the system's reading range - refer to your test strip package insert for more information.),

HI is displayed (blood glucose result is higher than the high end of the system's reading range - refer to your test strip package insert for more information.),

mg/dL and **error** are displayed,

AND...

you also experience symptoms of high blood glucose: fatigue, increased appetite or thirst, frequent urination, blurred vision, headache or achiness,

this does not confirm the way you feel,

you also experience symptoms of high blood glucose: fatigue, increased appetite or thirst, frequent urination, blurred vision, headache or achiness,

THEN...

contact your doctor **immediately**.

check that test strip has not expired or been damaged, then retest. If **HI** still appears, run a quality control check with your glucose control solutions and a new test strip. (See page 52, **Quality Control Testing**.) If the control result is within the acceptable range, review the proper testing procedure and repeat your blood glucose test with a new test strip. If **HI** still appears for your blood glucose test, **follow your doctor's instructions**. If the control result is not within the acceptable range, turn to page 64.

your blood glucose result may be extremely high and above the system's reading range. Contact your doctor **immediately**.

Understanding Your Test Results

IF...

mg/dL and **error** are displayed,

AND...

symptoms are absent,

THEN...

run a quality control check with your glucose control solutions and a new test strip. (See page 52, ***Quality Control Testing***). If the control result is within the acceptable range, review the proper testing procedure and repeat your blood glucose test with a new test strip. If **mg/dL error** still appears for your blood glucose test, your blood glucose result may be extremely high and above the system's reading range. Contact your doctor **immediately**. If the control result is not within the acceptable range, turn to page 64.

Quality Control Testing

What is Quality Control Testing?

Quality control testing is done using glucose control solutions instead of blood. Checking your system with quality control solutions ensures that you are doing a test correctly and that your Accu-Chek Advantage system is working properly as well as giving you reliable results.

When should I check my Accu-Chek Advantage meter?

- Before using your meter for the first time
- When you open a new vial of test strips
- If you leave the cap off the vial of test strips
- If you drop the meter
- If your result does not agree with the way you feel
- Whenever you want to check the way you are performing your blood glucose test
- If you have repeated a test and the blood glucose result is still lower or higher than expected
- When you want to check the performance of the meter and test strip

Gathering Supplies

Note: The Accu-Chek Advantage Care Kit is packaged with one level of glucose control solution. When purchased at the store, glucose control solutions are packaged with 2 levels per box.

To do a quality control check, you will need the following items:

- Accu-Chek® Comfort Curve™ Glucose Control Solutions
- Chek Strip
- Accu-Chek Comfort Curve test strips

! When you open a new bottle of glucose control solution, write the date on the label. Glucose control solution are good for 3 months after opening or until the expiration date, whichever comes first.

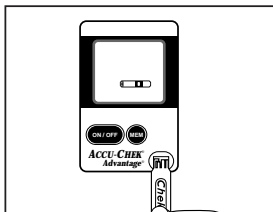
It is important that you use the correct glucose control solution for your test strips. Use only Accu-Chek Comfort Curve control solutions with Accu-Chek Comfort Curve test strips.

! Using the Chek Strip prevents the quality control result from taking up space in the meter's memory. If you do not use the Chek Strip, the control result will be stored in memory.

You can perform quality control checks without your Chek Strip. To do so, simply apply the glucose control solutions to your test strips the same way as for a blood glucose test. To check if the result is within the acceptable range, see the glucose control ranges printed on the test strip vial label.

Running a Control Test with Accu-Chek Comfort Curve Test Strips

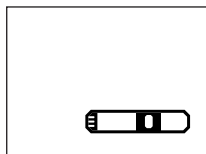
Important: Use only Accu-Chek Comfort Curve control solutions with Accu-Chek Comfort Curve test strips.



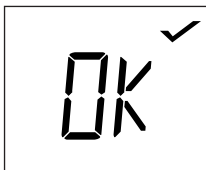
1. Turn meter ON.

2. Insert Chek Strip ("Chek" side up) into the meter.

You may stop here by removing the Chek Strip and turning the meter OFF or you may continue your quality control checks with steps 3-8 using your Accu-Chek Comfort Curve glucose control solution.

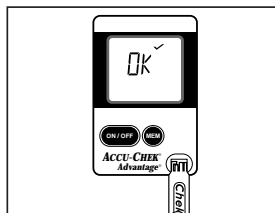


Test strip symbol flashes.



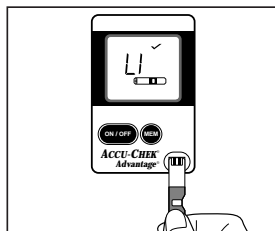
The meter quickly goes through a series of internal checks.

This brief test allows you to make sure your meter is functioning properly. "OK" and "✓" should appear on the display.

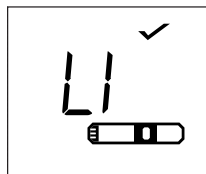


3. Remove Chek Strip from meter.

4. Open test strip vial and remove test strip.

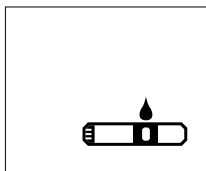


5. Gently insert test strip (yellow window facing up) into test strip guide.

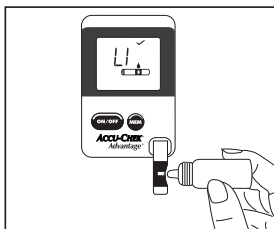


The test strip symbol flashes. "L1" and "✓" appear.

Be sure to tightly replace vial cap after removing test strip.



The test strip symbol stops flashing and a blood drop symbol appears.

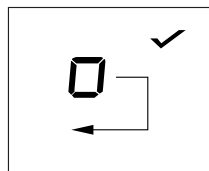


6. Hold the control bottle horizontally with the tip pointed directly at the right-hand edge of the strip in line with the edge of the Comfort Curve.

7. Gently squeeze the bottle to form one small drop.

8. Bring the drop to the edge of the strip within the Comfort Curve. Allow the strip to automatically draw the solution into the yellow window until it is completely covered.

9. Replace cap of glucose control solution.



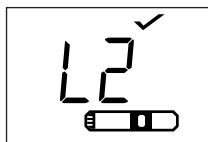
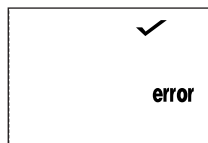
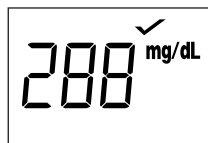
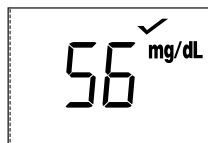
A box rotates in the display until the measurement is complete.

! If the solution comes in contact with clothing, immediately rinse out with soap and water.



10. Control result appears.

11. Remove test strip from meter and discard.



If result is within the acceptable range, the result and "OK" flash. Continue with step 11.

If result is not within the acceptable range, "error," "✓" and the result flash. See ***Understanding Control Results*** on page 64 for more information.

The test strip symbol, "L2" and "✓" appear on the display.



12. To perform another control check using Level 2 glucose control solution, return to step 4 and follow the same steps again. Turn meter OFF when you are done with your quality control check.



Understanding Your Quality Control Results

The test strip vial label indicates the acceptable range for Low Level and High Level glucose control solutions. The result displayed on your meter should fall within the acceptable range for the level of solution you used.

If the result is within the acceptable range:

- You can feel confident that your test strips and meter are working correctly.

If the result is outside the acceptable range:

- Check the expiration date of the test strips and control solutions. If the strips or control solution are expired, dispose of them promptly.
- Make sure the cap was on the vial of test strips.
- Check if the code in the meter matched the code on the test strip vial label.
- Make sure you followed the testing steps exactly.
- Repeat the glucose control test with a new test strip.

If the result is still not within the acceptable range, your blood glucose results may not be reliable. Contact Accu-Chek Customer CareSM for help at **1-800-858-8072**, 24 hours a day.

Other Information

Using Accu-Chek Advantage Test Strips

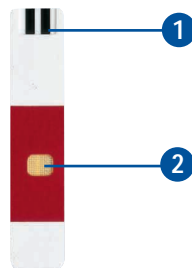
Your Accu-Chek Advantage kit comes with Accu-Chek Comfort Curve test strips. If you prefer, Accu-Chek Advantage test strips may also be used with the Accu-Chek Advantage meter.

Supplies

- Accu-Chek Advantage Test Strips (Cat. Nos. 551, 553, 966, 336)
- Accu-Chek Advantage Glucose Control Solutions (Cat. Nos. 552, 906, 986, 989)

About the Test Strip

Accu-Chek Advantage Test Strip



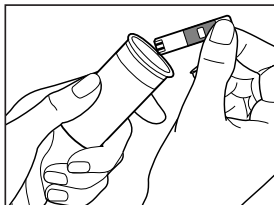
1. Silver Bars - Insert strip with silver bars up and toward meter.
2. Yellow Target Area - Apply blood here.

Running a Test

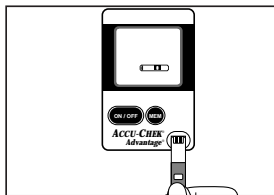
Running a Test with Accu-Chek Advantage Test Strips



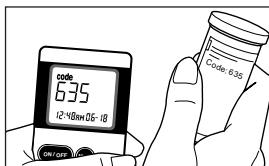
1. Turn meter ON.



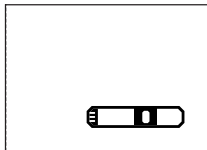
2. Remove a new test strip from vial.



3. Gently insert test strip (yellow window facing up) into test strip guide.

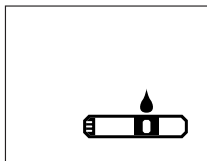


Check that code number displayed matches code number on vial of test strip.



When the test strip symbol flashes, meter is ready to accept a test strip.

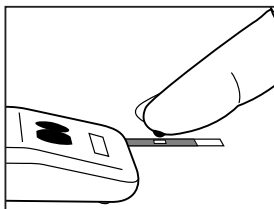
Be sure to tightly replace vial cap after removing test strip.



Once strip is correctly inserted, a blood drop symbol flashes.



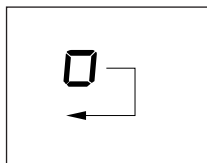
4. Obtain a blood sample. Make sure you have an adequate drop of blood before you apply it to the test strip.



5. Touch drop of blood to the center of the yellow window. Do not smear blood with your finger on the target area.



! If any yellow mesh is still visible after you have applied the initial drop of blood, a second drop of blood may be applied to the target area within 15 seconds. If more than 15 seconds have passed, the test result may be erroneous and you should discard the test strip and repeat the test. Although only a small amount of blood is needed, it is very important that you put enough blood on your test strip so that, at the end of the test, the entire yellow target area is covered. This ensures that your meter can produce accurate and reliable results.



When blood is applied correctly to the strip, a box rotates on the display until measurement is completed.



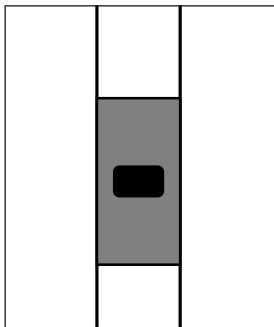
6. Blood glucose result is displayed.
7. Remove test strip from meter and discard.
8. If you are done testing, turn meter OFF.
9. Dispose of lancet in a puncture-proof container with a lid, such as an empty coffee can.



Your result is automatically recorded in the meter's memory.

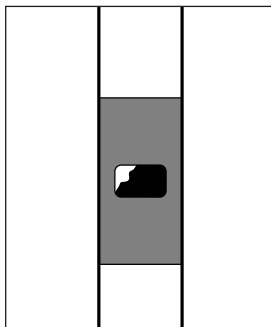
Running a Test

Proper Test Strip Appearance



Correct Blood Application

This strip has the correct amount of blood on it.

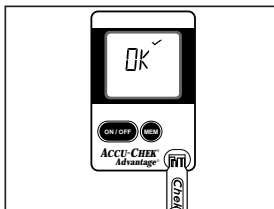
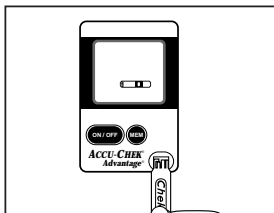


Incorrect Blood Application

Notice that the upper left corner is not covered with blood. This strip has too little blood on it and may produce an error message or an inaccurate result.

Running a Control Test with Accu-Chek Advantage Test Strips

Important: Use only Accu-Chek Advantage control solutions with Accu-Chek Advantage test strips.

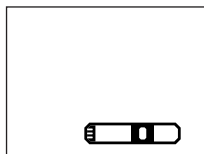


1. Turn meter ON.

2. Insert Chek Strip ("Chek" side up) into the meter.

You may stop here by removing the Chek Strip and turning the meter OFF or you may continue your quality control checks with steps 3-8 using your Accu-Chek Advantage glucose control solution.

3. Remove Chek Strip from meter.

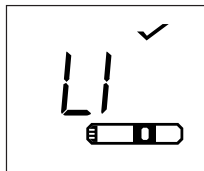


Test strip symbol flashes.



The meter quickly goes through a series of internal checks.

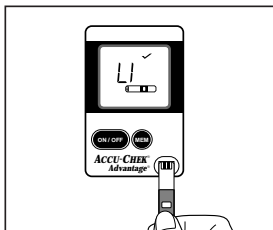
This brief test allows you to make sure your meter is functioning properly. "OK" and "✓" should appear on the display.



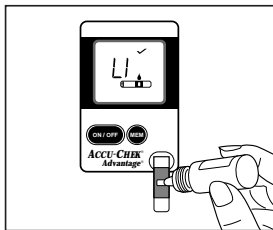
The test strip symbol flashes. "L1" and "✓" appear.



4. Open test strip vial and remove test strip.



5. Gently insert test strip (yellow window facing up) into test strip guide.

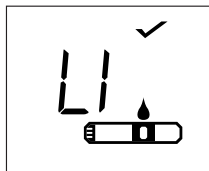


6. Apply one drop of Level 1 glucose control solution to the center of the yellow target area of the test strip.

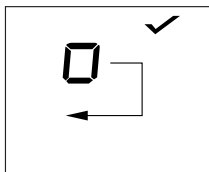
7. Replace cap of glucose control solution.



Be sure to tightly replace vial cap after removing test strip.



The test strip symbol stops flashing and a blood drop symbol appears.



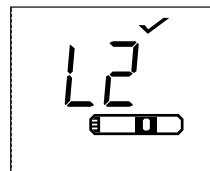
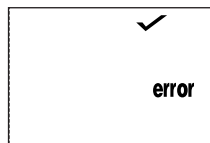
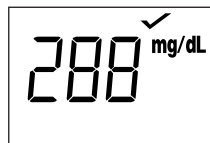
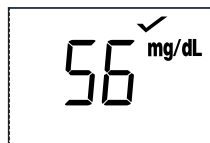
A box rotates in the display until the measurement is complete.

! If the solution comes in contact with clothing, immediately rinse out with soap and water.



- Control result appears.

- Remove test strip from meter and discard.



If result is within the acceptable range, the result and "OK" flash. Continue with step 9.

If result is not within the acceptable range, "error," "✓" and the result flash. See ***Understanding Control Results*** on page 64 for more information.

The test strip symbol, "L2" and "✓" appear on the display.



10. To perform another control check using Level 2 glucose control solution, return to step 4 and follow the same steps again. Turn meter OFF when you are done with your quality control check.



Memory

Storing Results

The Accu-Chek Advantage meter automatically stores 100 glucose results, letting you review them in order from the most recent to the oldest. If you have set the time/date feature, the time and date of the results are also displayed.

There is a situation that can occur no more than once every seven days during a ten minute period, which can cause an individual result to be stored incorrectly in the memory of the Accu-Chek Advantage meter. If time and date are set on your meter, this situation will only occur when your meter clock reads 12:00 (midnight) - 12:10 a.m. If time and date are not set on your meter, this situation can occur once every seven days at any time of day. **Do not change your therapy based on one individual result recorded in memory.**

IF...

the memory is full with 100 glucose results,
the memory is full and a new result is added,

THEN...

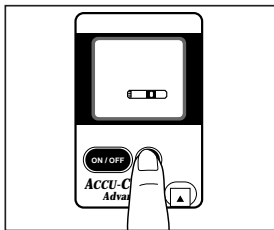
“mem” flashes in the display when the meter is turned on.
meter deletes the oldest result.



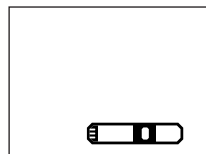
Results stored in memory will not be lost when you replace the batteries.

Memory

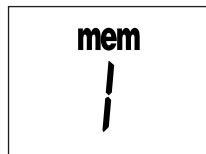
Recalling Stored Values



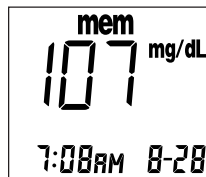
1. Turn meter ON.
2. Press and hold the MEM button down.
3. Release the MEM button.
4. Press and release MEM button to see the remaining stored results.
5. Turn meter OFF.



Test strip symbol flashes.



The order number (1-100) of the result is displayed. The most recent result is "mem 1."



The result, date and time are displayed.

Stored results are displayed from the most recent to the oldest (mem 1, mem 2, mem 3...).

Caring For Your Meter

Storage and Handling

Keep your meter free of dust. Protect it from extremes in temperature and humidity, and handle it with care. Avoid storing in areas such as the bathroom, kitchen, or laundry room. It is recommended to store the meter together with the test strips at temperatures between 30° and 86° F (2° and 30° C).

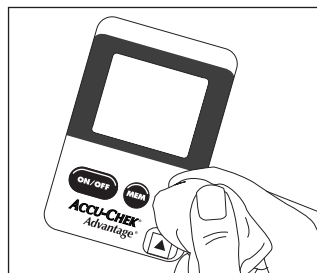
If meter is dropped, perform a quality control check with the Chek Strip and the glucose control solutions before doing a blood glucose test.

The Advantage travel case is designed to let you store a variety of supplies you may need and helps to protect your meter.

Cleaning

Clean your meter as needed using one of the following:

- 70% alcohol
- a solution of mild dishwashing liquid and water
- 10% household bleach solution (1 part bleach in 9 parts water) made fresh daily



With meter turned off, clean outside with a soft cloth slightly dampened with cleaning solution.

- **DO NOT** get moisture into the Code Key slot or the test strip guide.
- **DO NOT** spray any cleaning solution directly onto the meter.



Health Care Professionals: Follow the infection control procedures appropriate for your facility.

Troubleshooting Guide

The following are display messages and error messages that may appear on the meter. If you are unable to resolve a concern, please call Accu-Chek Customer CareSM at **1-800-858-8072**, 24 hours a day, 365 days a year.

DISPLAY

Result that appears in memory does not match the result seen on the screen at the time the test was performed or is outside the 10-600 mg/dL reading range.

CAUSE

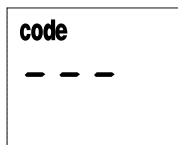
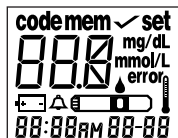
If a test is performed at precisely the same moment the Accu-Chek Advantage meter is checking its internal calendar and clock settings, which happens automatically once every seven days, an incorrect test result can be stored in the meter memory.

If time and date are set on your meter, this situation will only occur once every seven days when your meter clock reads from 12:00 (midnight) - 12:10 am. If time and date are not set on your meter, this situation can occur once every seven days at any time of day.

CAUSE

Do not use one individual result stored in memory to make therapy adjustments.

DISPLAY



CAUSE

Blood glucose result is higher than the measuring range of your test strips.

Blood glucose result is lower than the measuring range of your test strips.

This is a normal display check that appears each time the meter is turned on.

Meter needs to be coded or Code Key is not inserted completely.

CAUSE

See Page 48.

See Page 46.

All functions and display elements are tested automatically **for about 2 seconds**. If a segment is missing from an 8, false readings could result. Call Accu-Chek Customer CareSM at **1-800-858-8072**.

Turn meter OFF and insert Code Key. See page 27, ***Coding the Meter.***

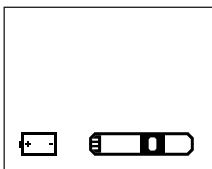
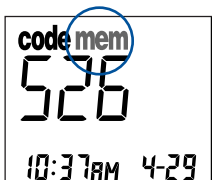
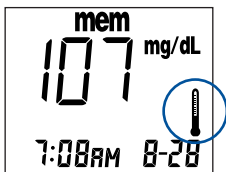


Do not make treatment decisions based on an error message.

DISPLAY

code

error



CAUSE

Code key is faulty or Code Key was removed while the meter was on.

Temperature is above or below the operating range of test strips (57°-104° F or 14°-40° C).

Appears when meter is turned on and memory is full with 100 test values.

Battery power is low.

ACTION

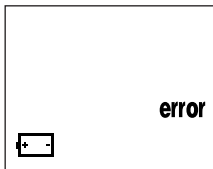
Turn meter OFF and reinsert Code Key. If this error display still appears, contact Accu-Chek Customer CareSM at **1-800-858-8072**.

The result you have obtained may not be accurate. A temperature symbol will appear next to your result in memory. Move to an area between 57° and 104° F, wait 5 minutes and repeat the test. Do not artificially heat or cool the meter.

If new result is added, the oldest result is deleted.

Change batteries.

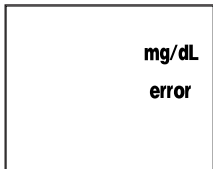
DISPLAY



error

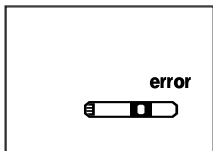
CAUSE

Battery is dead. Only memory results can be recalled.



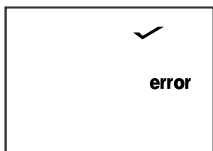
mg/dL
error

Blood glucose result may be extremely high and above the system's reading range.



error

Test strip may be damaged or test was not performed correctly.



error

Meter has failed its system check.

ACTION

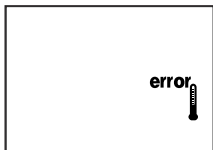
Change batteries.

See Page 48 **immediately**.

If this display appears *before* blood is placed on strip, remove test strip and reinsert. If this display appears *after* blood is applied to the strip, there is an incorrect amount of blood on the strip. Repeat the test with a new test strip.

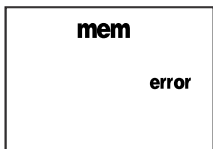
Remove Chek Strip, turn meter OFF and repeat quality control check. See page 52, **Quality Control Testing**. If this error display still appears, **testing cannot take place**. Call Accu-Chek Customer CareSM at 1-800-858-8072.

DISPLAY

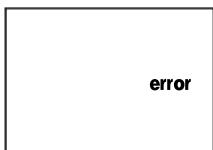


CAUSE

Normally appears when batteries are removed or replaced.



Loss of all results in memory.



Meter has failed its series of electronic checks.

ACTION

If this symbol disappears after approximately 30 seconds, you may continue with a test. If this symbol remains after 30 seconds, call Accu-Chek Customer CareSM at **1-800-858-8072**.

Turn meter OFF, then ON again. You will not be able to recall the results previously stored in memory although your meter will store any future test results.

Turn meter OFF, then ON again. If this error display still appears, testing cannot take place. Call Accu-Chek Customer CareSM at **1-800-858-8072**.

Product Limitations

Please read the information packaged with your test strips regarding up-to-date product specifications and limitations.

Product Specifications

System Operating Conditions	Refer to your test strip package insert
Humidity Range	Less than 85%
Meter Storage Conditions	-13° – 149° F (-24° – 65° C) Less than 95% humidity
Measuring Range	Refer to your test strip package insert
Memory Capacity	100 blood glucose results with time and date
Display	LCD display
Minimum Sample Volume	Refer to your test strip package insert
Size	3.6" x 6" x 2.3" (90.4 mm x 16.7 mm x 59.5 mm)

Weight

3 oz with batteries (80 gm)

Power Supply

Two 3-volt lithium coin cell batteries

These alkaline batteries may be purchased in camera or electronics sections of department stores, drug stores, and electronics stores. Or, ask your pharmacist.

Test Strip Storage Conditions

Refer to your test strip package insert

Data Port

Multiplexed TTL UART

Additional Supplies

The following supplies and accessories are available from your authorized Roche Diagnostics Diabetes Health Care Center, pharmacies or your medical/surgical supply dealer:

Test Strips

Accu-Chek® Comfort Curve® Test Strips
Cat. Nos. 2030365, 2030373, 2030381, 2030420,
3000133, 3000141, 3000150

Accu-Chek® Advantage® Test Strips
Cat. Nos. 553,966,787

Glucose Controls

Accu-Chek® Comfort Curve™ Glucose Control
Solutions
Cat. Nos. 2030390, 2030403, 2030411

Accu-Chek® Advantage® Glucose Control Solutions
Cat. Nos. 552, 906, 986, 989

Lancets

Accu-Chek® Softclix® Lancet Device
Cat. No. 957

Accu-Chek® Softclix® Lancets (100/box)
Cat. No. 971

Accu-Chek® Softclix® Lancets (200/box)
Cat. No. 988

Warranty

Accu-Chek® Advantage® Limited 3-year Warranty

Roche Diagnostics warrants that your Accu-Chek® Advantage® meter will be free from defects in materials and workmanship for 3 years from the date of purchase. If, during this 3-year period, the meter does not work properly because of a defect in materials or workmanship, Roche Diagnostics will repair the meter or replace it with a new Accu-Chek Advantage meter or equivalent product free of charge. The warranty of the repaired or replacement meter will expire on the date of the original warranty expiration or ninety (90) days after shipment of a replacement system, whichever period is longer. This warranty applies only to the original purchaser of the meter.

This warranty does not apply to the performance of an Accu-Chek Advantage meter that has been damaged by accident or has been altered, misused, tampered with or abused in any way. Roche Diagnostics will handle meters that show damage or abuse according to its Non-Warranty Service Policy described on page 102.

The purchaser's exclusive remedy with respect to the Accu-Chek Advantage meter shall be repair or replacement, at Roche Diagnostics' option. In no event shall Roche Diagnostics be liable to the pur-

chaser or any other person for any incidental, consequential, indirect, special, or punitive damages arising from or in any way connected with the purchase or operation of the meter or its parts. No warranty of merchantability or fitness for a particular purpose, if any is implied from the sale of the meter, shall extend for a longer duration than 3 years from the date of purchase.

Some states do not allow limitations on how long an implied warranty will last or the exclusion of incidental or consequential damages, so the above elimination and exclusion may not apply to you. This warranty gives you specific legal rights, which vary from state to state.

Non-Warranty Service Policy

Roche Diagnostics' Non-Warranty Service Policy applies to meters if the above warranty has not become effective, has become inapplicable, or has expired. Roche Diagnostics will repair or replace at its option meters returned to it for a service charge (not to exceed \$35). Replacement will be with like or similar product.

Replacement (or repaired) meters will be warranted for a period of 90 days from shipment under a limited warranty providing for replacement of parts and labor at no charge.

Warranty and Service Instructions

All requests for return of Accu-Chek Advantage meters under the above warranty or service policy must be made to Accu-Chek Customer CareSM by calling 1-800-858-8072. You will be mailed a return authorization label which must be affixed to your carton for shipping the system to Roche Diagnostics. Cartons received without this label will be returned to you at your expense.

Customers experiencing difficulties should review the ***Troubleshooting Guide*** on page 88 of this manual. Further inquiries should be directed to Accu-Chek Customer CareSM at **1-800-858-8072**.

Be sure to fill out and mail the warranty card that comes with the Accu-Chek Advantage System.

CAUTION — A RESTRICTED LICENSE LIMITS USE OF THE ACCU-CHEK® ADVANTAGE® SYSTEM — READ CAREFULLY THE LIMITATIONS RECITED BELOW.

The Accu-Chek® Advantage® system (meter, including the code key, and test strips) and its use is protected by US Patent Nos. 5,508,171; 5,053,199; 5,288,636; 5,405,511; 5,366,609; 5,762,770 (applies only to Accu-Chek® Advantage® test strips); Re. 36,268 (applies to the Accu-Chek® Advantage® and Complete™ systems when used with Accu-Chek® Comfort Curve® test strips); and 5,352,351. A license to use the Accu-Chek Advantage system is only

granted when the Accu-Chek® Advantage® meter is used with the Accu-Chek® Advantage® or Comfort Curve® test strips and Accu-Chek™ Advantage™ or Comfort Curve™ code keys.

Accu-Chek Advantage and Comfort Curve test strips are provided with a specifically matched Accu-Chek Advantage or Comfort Curve code key. These test strips and code keys are specifically manufactured for operation with the Accu-Chek Advantage meter. Use of other test strips with an unmatched code key or even with the matched code key supplied by another manufacturer may prevent or impair the proper function of the Accu-Chek Advantage system.

Using the Accu-Chek Advantage system indicates your acceptance of the restricted license to use the Accu-Chek Advantage system only with Accu-Chek Advantage or Comfort Curve test strips and the Accu-Chek Advantage or Comfort Curve code key. Further, if you have purchased an Accu-Chek® Advantage® monitoring kit or an Accu-Chek® Advantage® meter that includes this restricted license, then this restricted license applies regardless of any additional offers found in Accu-Chek® Advantage® or Comfort Curve® test strip packages. If you do not agree to the terms and conditions of the restricted license, you may return, at the place of purchase, the unused Accu-Chek Advantage system for a full refund. If you have any questions, please call Accu-Chek Customer CareSM at 1-800-858-8072.

Except where prohibited by statute, all warranties covering the Accu-Chek Advantage system are voided by use of the Accu-Chek Advantage system with any test strips or code keys other than Accu-Chek Advantage or Accu-Chek Comfort Curve test strips or code keys.

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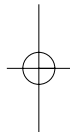
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References

1. Tietz, N.W., *Textbook of Clinical Chemistry*, p. 2190 (1994).
2. American Diabetes Association Position Statement, *Diabetes Care*, Vol. 19 (Suppl. 1), p. S4 (1996).

This product is covered by U.S. Patent Nos. 4,999,632; 4,999,582; 4,963,814; 5,508,171; 5,352,351; 5,405,511; 5,438,271; 5,997,817; 5,288,636; 5,627,075; 4,891,319; 5,762,770 (when used with Accu-Chek[™] Advantage[®] test strips); 5,053,199; Re. 36,268 (when used with Accu-Chek[™] Comfort Curve[®] test strips); and 5,366,609. U.S. Patent No. 4,891,319 is licensed from Quadrant Holdings Cambridge Limited.

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Roche Diagnostics Corporation
9115 Hague Road, Indianapolis, IN 46256

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056042613-0401



Roche Diagnostics Corporation
9115 Hague Road
Indianapolis, Indiana 46256

www.accu-check.com