

Accu-Chek Inform II: Point of Care Glucose Testing



Sharp Healthcare

2014



OBJECTIVES

At the completion of this module the participant will be able to:

- Learn the proper technique of performing a finger stick
- Identify and utilize glucometer features
- Demonstrate abilities for performing quality control and patient testing
- Understand that results are entered into Cerner wirelessly

Meter Parts



The meter has the following elements:

1. Test strip port

2. Touchscreen
(touch-sensitive display)

3. On/Off button
(Quick press/release)

Meter Parts



- 4. Barcode scanner
- 5. Battery Pack
- 6. Reset button
- 8. Charging contacts
- 9. Infrared window
For communication with a wired
base unit and the code key

Base Unit

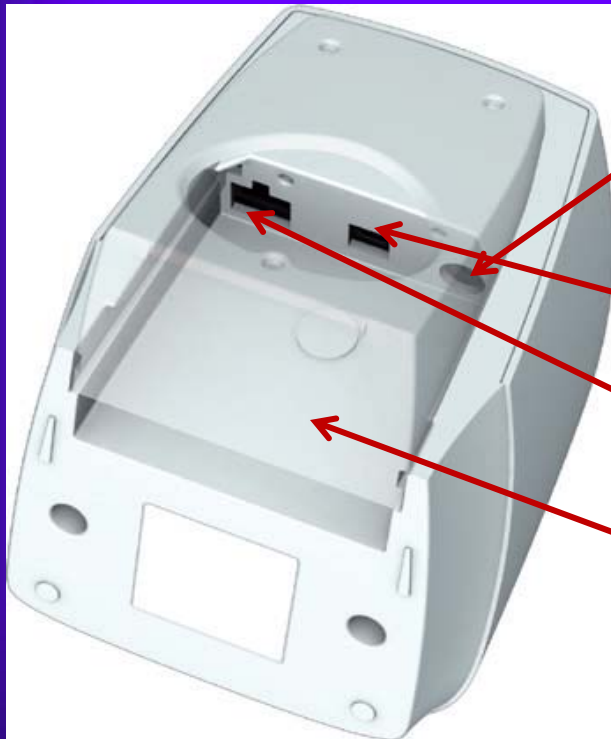


14. Charging contacts

15. Infrared window for communication with the meter

16. Status LED (lights up when power is connected):

Base Unit Underside



17 17. Jack for the power supply unit provided

18 18. USB connection

19 19. Network connection

20 20. Removable mount for wall installation

Code Key Reader



The code key reader is used by **POC** to change lot numbers of test strips.

Each box of test strips will have a code key that contains information about the lot of strips in the box. This can be discarded as POC will update the lot number for the whole institution when we switch lots.

Testing Supplies

Control Solutions

2 levels: High and Low

- *Scan lot number on side of bottle*
- *Controls are good for 90 days(3 months) from open date(Please date upon opening)*

Accu-Chek Inform II test strips

- *Strip must be used within 3 minutes following removal from test strip vial*
- *Strip may be used until expiration date*
- *Scan lot number on side of container*
- *New lot numbers are updated to the meters by POC*

QUALITY CONTROL

Why run controls?

- Verifies that the strips and monitor are working properly to give accurate patient results

When are controls run?

- 'QC due immediately' on screen
- If patient symptoms don't match results
- Glucose meter is dropped
- After opening a new bottle of test strips

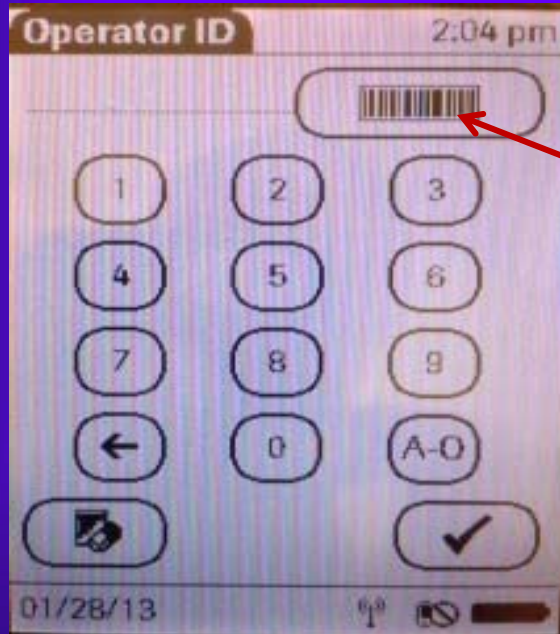
Quality Control Testing



1. Press the *On/Off* button to power on the meter (self-checks will be performed by the meter)
2. Once the *Power up* screen appears, touch the ► to proceed to the *Operator ID* screen
Or, wait 5 seconds and the *Power Up* screen will automatically move to the *Operator ID* screen.

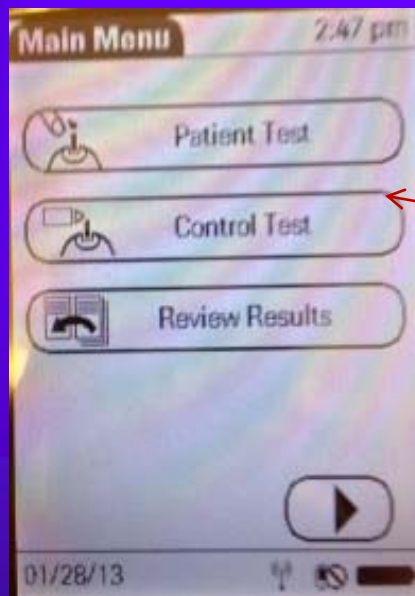


Quality Control Testing



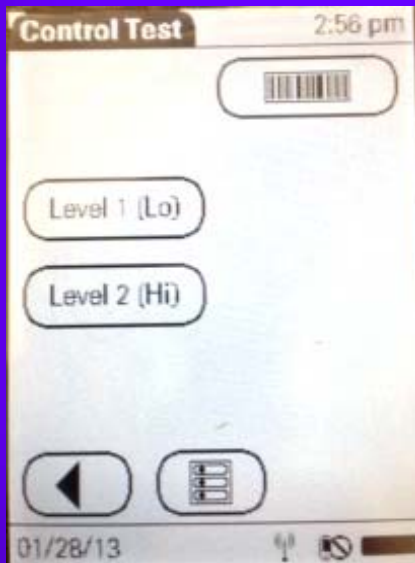
3. Place barcode on ID badge in front of the barcode scanner.
4. Touch '*Scan*' (barcode icon)
5. Your operator ID # will display briefly, then the meter will automatically proceed to the *Main Menu*, where only your name will be displayed.

Quality Control Testing Continued

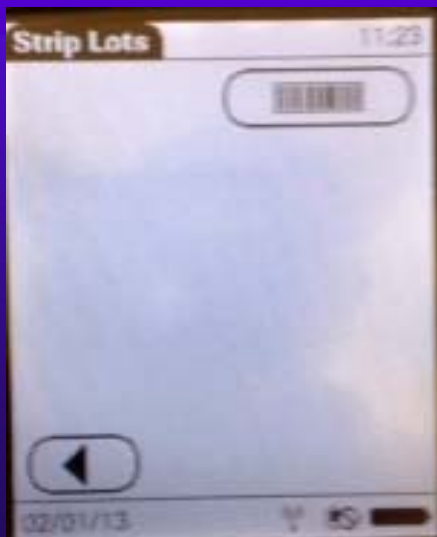


6. Select 'Control Test' option by touching the screen.

Quality Control Testing Continued



7. Choose a level of control, 1(Lo) or 2(Hi), by scanning the barcode on the vial. Verify the lot number by checking the number on the screen against the number on the vial.



8. Scan the barcode on the test strip vial and verify it with the number on the screen.

Quality Control Testing Continued



9. After confirming the test strip lot, you are prompted to insert the test strip. Remove the test strip from the test strip vial and close the vial with the cap.

10. Hold the test strip so the lettering "ACCU-CHEK" is facing upward.

11. Slide the test strip into the test strip port as far as it goes in the direction indicated by the arrows on the test strip. The meter will beep.

Quality Control Testing

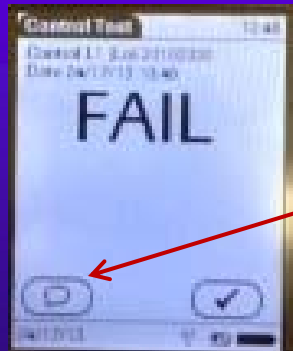


12. Once the meter has detected the test strip, you are prompted to apply the control solution.


Wait until the flashing drop appears in the display before applying the control solution.

13. Apply a drop of glucose control solution to the **front edge** of the test strip (yellow dosing area). **Do not apply the control solution to the top of the strip.** The control solution is pulled into the test strip by capillary action.

Quality Control Testing




14. The meter will beep and an hourglass icon indicates the test is running. When the test is completed and the result is ready, the meter beeps again. Results will be displayed as a number and will tell you if it fails.

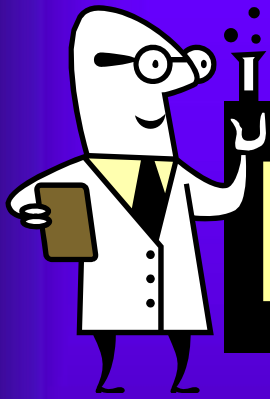
15. After all results, it will be necessary to enter a comment. After touching the comment button , the screen will display all options available. Select as many comments as apply.

Quality Control Testing

At Sharp Healthcare, controls are required at a minimum of every 24 hours or when a new bottle of strips is opened.

16. Remove and discard test strip.
Touch ✓ to continue with the next level.

17. Press the  to return to Main Menu to continue with patient testing after both QC levels have been run successfully.



Patient Testing



No matter how good your glucose monitor is, if you give it a

bad specimen,
it will give you a
bad result.





Fingerstick Do's

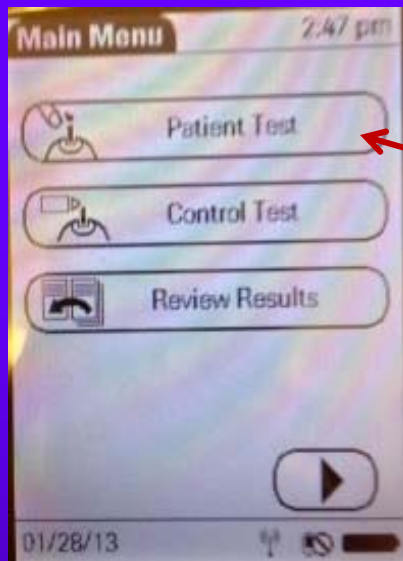
- ◆ Identify the patient by using their wristband.
- ◆ Gloves MUST be worn when testing a patient and when cleaning the meter.
- ◆ Massage gently from the base to the tip of the finger.
- ◆ Wipe away the first drop of blood.
- ◆ Make sure the next drop is large enough to cover the target area.
- ◆ The Inform II will not beep and will not allow testing to proceed if any yellow is left exposed.



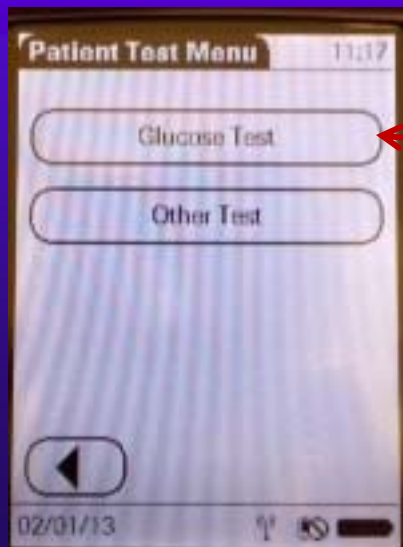
Fingerstick Don'ts

- ◆ Should not use the thumb or the pinky.
- ◆ Do not puncture at the center of the fingertip.
- ◆ Squeezing excessively at the puncture site may contaminate the specimen with tissue fluid, causing falsely low results.
- ◆ Avoid fingers that are swollen, cold, cyanotic, or edematous.

Patient Testing

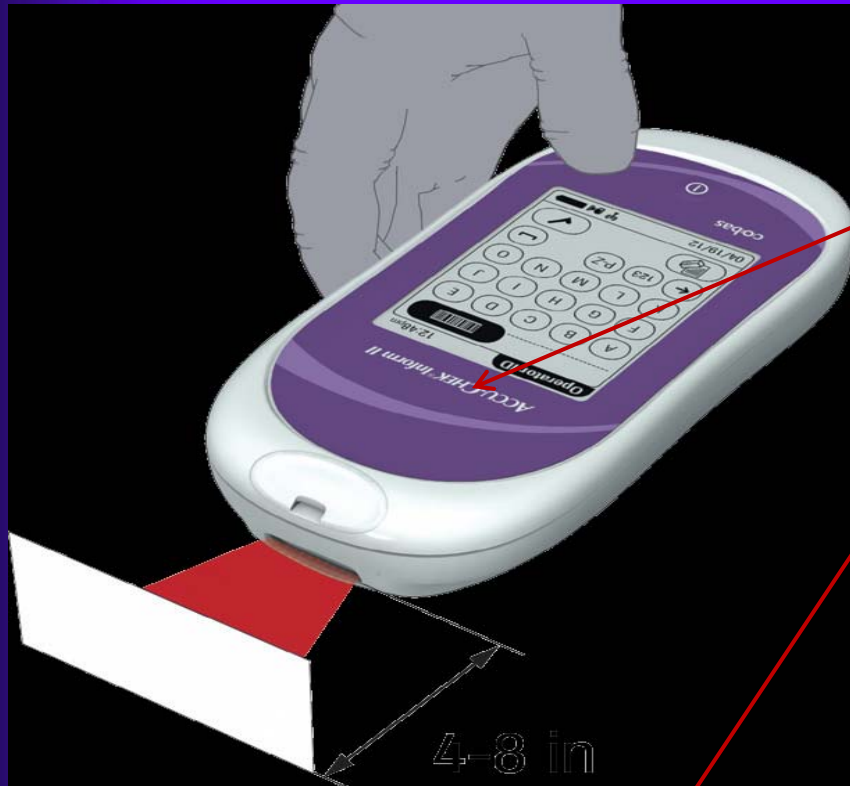


1. With the *Main Menu* displayed, touch 'Patient Test'

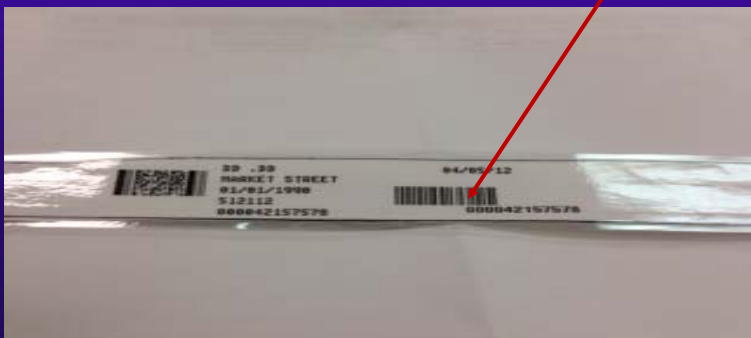


2. Select 'Glucose Test'

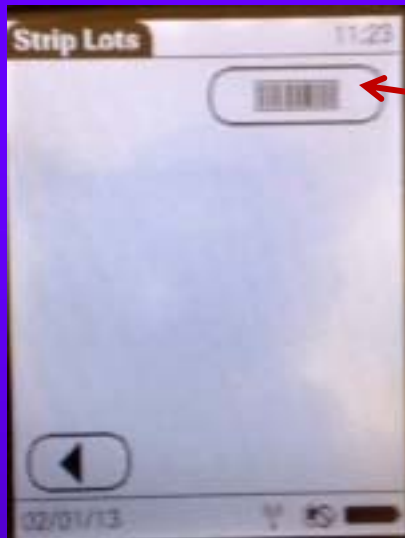
Patient Testing



3. Enter the Patient ID by pressing the scan button on the upper right hand of the screen and positioning the scanning beam, located on the top of the underside of the meter, about 4 to 8 inches above the patient ID barcode. *A beep indicates a successful scan of the patient ID.*
4. The patient's FIN number and name will display on the meter. **Verify that this information is correct before proceeding.**



Patient Testing

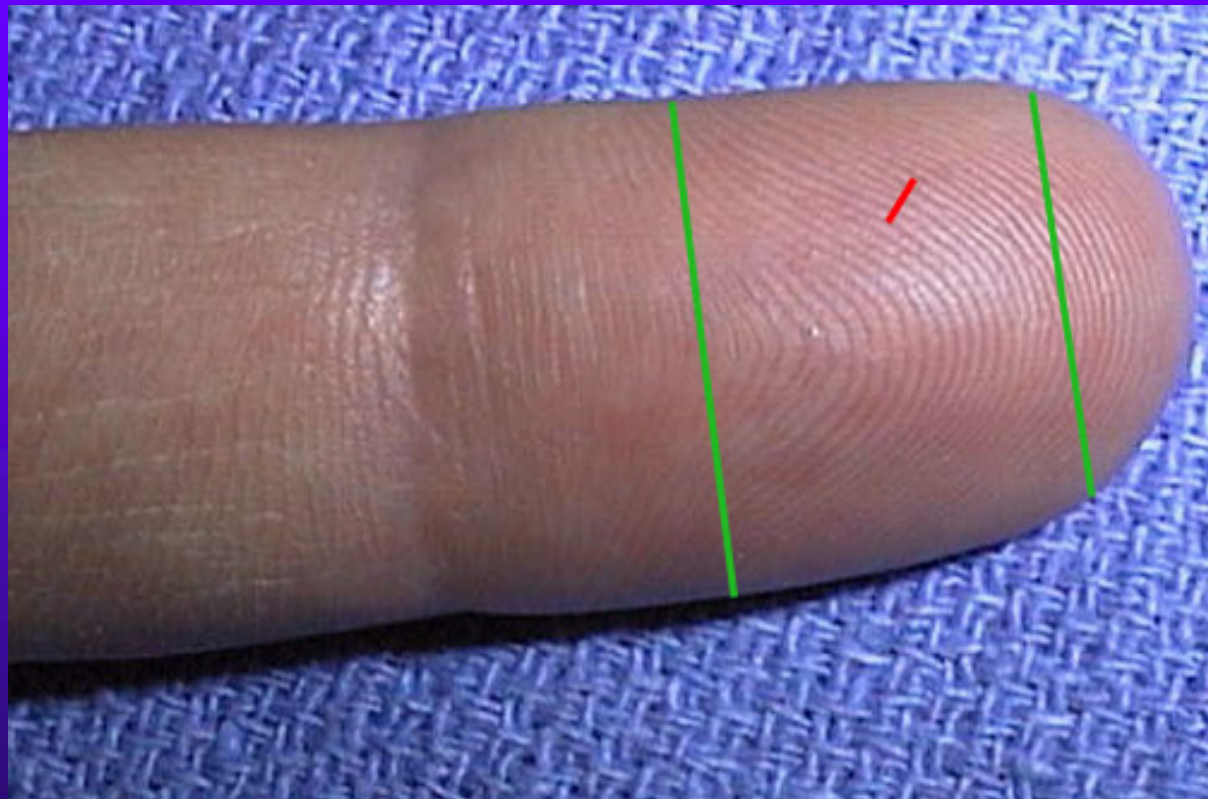


5. Scan the barcode on the test strip vial and verify it with the number on the screen.



6. The Insert Strip screen appears. Slide the test strip into the test strip port as far as it will go in the direction indicated by the arrows on the test strip. The meter beeps.

Correct place to perform a fingerstick puncture



Performing a fingerstick

- Clean the finger with isopropyl alcohol.
- Massage the finger from the base (knuckle) to the tip as necessary.

Performing a fingerstick



- Hold the Accu-Chek Safe-T-Pro Plus Lancet and twist off the purple sterility cap
- Select the depth you want by turning the depth adjuster (the depth is pre-set at the medium setting)
- Gently press the lancet against the side of the fingertip and press the purple button while holding pressure on the fingertip

Performing a fingerstick



- Discard used lancet into sharps container
- Wipe away first drop of blood to avoid tissue contamination of the sample

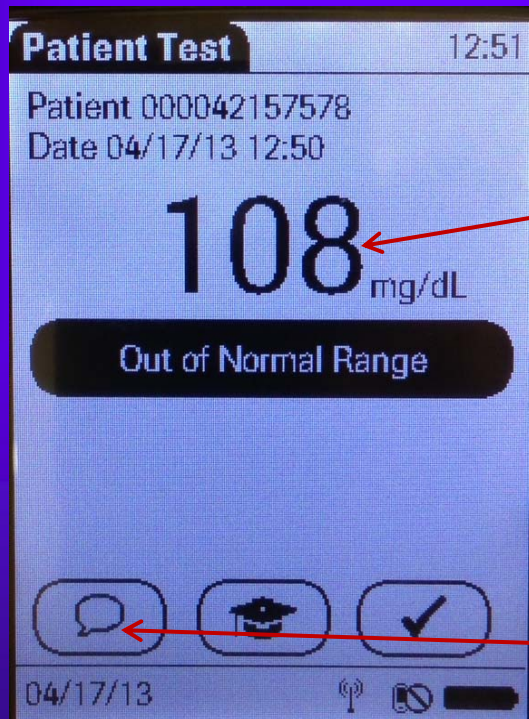
Patient Testing



7. Once the meter has detected the test strip, you are prompted to apply a blood sample. **Wait until the flashing drop appears in the display before applying the blood.**


8. Apply the drop of blood to the front **edge** (yellow dosing area) of the test strip. **Do not apply the blood to the top of the strip.** Blood is pulled into the test strip by capillary action. Blood on top of the test strip is not available for testing.

Patient Testing



9. The meter beeps and an hourglass icon indicates the test is running. When the test is completed and the result is ready, the meter beeps again and results are displayed.

The adult normal range is set in the meter: **fasting** normal range of 60-109 mg/dl

If result is critical, a comment is required. Touch the comment icon  and select all comments that apply.

Patient Testing

- ◆ Critical Values: *Notify patient caregiver*
 - Adults: *less than 50 and greater than 350 mg/dl*
 - Neonates: *less than 40 mg/dl & greater than 200 mg/dl*
- ◆ **System Measurement Range (10 mg/dl – 600 mg/dl)**
 - ◆ “**LO**” and no result means the result is less than 10 mg/dl and cannot be quantified properly
 - ◆ “**HI**” and no result means the result is greater than 600 mg/dl and cannot be quantified properly
- ◆ Venous and Capillary results can differ as much as 70 mg/dl in non-fasting state or if sugar is rapidly changing

Patient Testing

- ◆ Account number and patient name are used as patient identification in the glucometer.
- ◆ Take the glucose meter into the patient's room to perform the test.
- ◆ Patients whose hands are swollen, cold, cyanotic, or edematous are not good candidates for fingerstick (capillary) glucose testing.
- ◆ If the lab is doing a venipuncture for other labs, a drop of blood off the end of their needle would work fine on the glucose meter.
- ◆ Arterial and neonatal samples are also acceptable.
- ◆ Cord blood samples *cannot* be used.

Infection Control

- ◆ Clean the meters after each patient with approved bleach wipes. Follow the manufacturer's recommendation necessary to disinfect the glucometer's surface; allow surface to air dry.
NOTE: Gluco-Chlor® requires a five minute contact time.
- ◆ Do not get cleanser in the test strip port!
- ◆ Glucose meter must be taken into a patient's room under contact precaution alert, BUT must be disinfected with a bleach germicidal wipe before exiting the room.
- ◆ DO NOT take a strip with blood outside the patient's room.

Meter Reset



A meter reset can be performed to correct a number of unspecified errors (e.g., “frozen” screen).


1. Place the meter face down on a level surface.
2. Press the reset button in the middle of the battery pack using a tool such as a screwdriver or a paper clip.
3. Turn over the meter. The Roche logo is displayed.

Meter Reset

If the Roche logo does not appear within 60 seconds, place the meter on a base unit for a minimum of 15 minutes to recharge the battery.

4. The screens for entering the date and the time appear if date and time need to be set. After you have entered the correct information, confirm each screen with a ✓.
5. Finally, the *Power Up* screen and the *Main Menu* are displayed as usual if the reset was successful.

Operator ID Requirements

- 
- ◆ You must enter your employee number for the operator ID (May use barcode on your badge).
 - ◆ You cannot loan your badge to staff to use for them to perform Point of Care Testing.
 - ◆ You cannot borrow someone else's badge.

“Badging with another employee's badge is considered falsification of records”.

Odds & Ends

◆ Download:

- Meters will transmit data wirelessly at most Sharp locations, but each location will also have one “wired” downloader.
- The Inform II must be docked in the downloader (base unit) when not in use to insure that the batteries are fully charged.

◆ Recertification:

- Required at six and 12 months after initial competency, and annually thereafter by successful completion of online Learning Center module and eQuiz.
- Need to run 1 set of quality control per year.

Odds & Ends

- ◆ ACCU-CHEK Inform II test strips have been developed such that there is **NO** interference due to **Maltose**.
- ◆ Patient hematocrit should be between 10-65%
- ◆ Lipemic samples (triglycerides) in excess of 1800 mg/dl may produce elevated results
- ◆ Blood concentrations of galactose >15 mg/dl will cause overestimation of blood glucose results
- ◆ Intravenous administration of ascorbic acid which results in blood concentrations >3 mg/dl will cause overestimation of blood glucose results

Congratulations!

You have completed part one of the recertification for a certified operator of the ACCU-CHEK Inform II.



Exit

- ◆ Click on the “X” (close button) in the upper right hand corner of the screen when you are ready to complete the requirements for this course.