

CORTEZ DIAGNOSTICS, INC.

23961 Craftsman Road, Suite E/F,
Calabasas, CA 91302 USA
Tel: (818) 591-3030 Fax: (818) 591-8383
E-mail: onestep@rapidtest.com
Web site: www.rapidtest.com

Gluco InstaTest

Catalog No. BGSOT-25

Blood Glucose Test

1. Before You Begin

- Carefully read this entire insert
- Use blood glucose strips with ONE TOUCH Profile™, ONE TOUCH™□, ONE TOUCH BASIC™ and ONE TOUCH BASIC PLUS .

2. Description of the Test Strip

The test strips are supplied to you in a moisture-resistant, light-protected vial which protects them from contamination. The vial cap contains a dry agent which absorbs moisture and keeps the test strips dry. The test spot on a normal test strip is cream-colored. Do not use a test strip if its test spot is discolored.



3. Precautions to Ensure Accurate Results

- Do not use the test strips after the expiration date printed on the vial
- Expired strips may give false blood sugar reading.
- Discard vial 4 months after you first open it. Constant exposure to the air may destroy chemicals on the strip causing false readings.
- Keep test strip vial away from children. A child could choke on the cap or be harmed if the drying agent in cap is swallowed, inhaled or contacts skin.
- Excessive water loss or dehydration, which may occur in diabetic ketoacidosis or from use of some drugs (such as diuretics), may cause false low results.
- Abnormal red blood cell counts (hematocrits below 25% or above 60%) can cause incorrect results.
- If you have symptoms which are not consistent with your blood test results and you have eliminated common procedural errors described in the Owner's Booklet as the cause, contact your healthcare professional immediately.
- If your readings are above or below your prescribed range of expected blood sugar values, repeat the test, if you have symptoms that do not match your results or if your results continue to fall outside your prescribed range follow the treatment advice of your healthcare professional.
- Never make significant changes in your diabetes treatment program or ignore symptoms without consulting a physician.
- A HIGH result on the meter display indicates very high blood sugar levels (severe hyperglycemia); contact your physician immediately.

4. Purpose of Glucose Testing

Blood sugar (glucose) monitors are for people with diabetes who need to check the level of sugar in their blood. If taking insulin, the amount they will use may depend on the reading this meter gives them. By taking a sample of blood from a finger and placing it on the test strips, people with diabetes can tell what their current blood sugar level is. They can use this information to follow their doctor's advice for insulin dosage or other medications, diet and exercise.

5. What to Do When You Open a New Vial of Strips

- When you open a new box of strips:
 - Enter the "Code" number into your meter.
 - Write the date that the vial should be discarded in the space provided.

6. How to Test Your Blood

(Carefully follow the detailed instructions in your Owner's Booklet when testing your blood.)

1. A fresh drop of blood is needed to perform the blood sugar test.

- Test a blood drop obtained from a clean, dry fingertip or earlobe.
- Use a PENLET Automatic Blood Sampler or similar lancing device to obtain the blood drop.
- 2. Take cap off test strip vial only to remove a strip to perform a test. Immediately replace the cap to protect remaining strips from moisture in the air.
 - Check that the TEST SPOT on the test strip is cream-colored; do not use the test strip if it is discolored.
- 3. Perform the blood glucose (sugar) test following the step-by-step instructions contained in your meter Owner's Booklet.
- 4. The blood test result will appear in the meter display window. Your healthcare professional will tell you what your own range of blood glucose values should be, how often you should test your blood and explain the meaning of your results.

7. Cleaning Your Meter

Your ONE TOUCH Meter must be handled carefully and cleaned regularly to give accurate results. Refer to your Owner's Booklet for detailed instructions.

8. Checking the System

You can check the performance of your blood Glucose monitoring system by comparing your meter results to a clinical laboratory test. For such a comparison you should:

- Perform the test at least 4 hours after eating.
- Have blood drawn for a laboratory test within 10 minutes of testing fingerstick blood with your meter.

Glucose measurements made with these test strips are calibrated to whole blood while most laboratories measure glucose on "plasma " or "serum"- the part of remaining when red blood cells are removed. This means that laboratories using plasma or serum samples will produce concentrations about 12% higher than your Meter results. To compare your Meter results to the laboratory results by 1.12. Your Meter reading should be within 20% of this value.

Example:

Glucose Meter result	190 mg/dl
Laboratory plasma or serum result	224 mg/dl
Converted laboratory result	$224 \div 1.12 = 200$ mg/dl
Acceptable range	200 mg/dl \pm 20%
	160 to 240 mg/dl

9. How to Store Your Test Strips

Store the strips in a cool, dry place not above 86 °F(30°C) and away from heat and direct sunlight. Do not refrigerate. Improper storage may cause the strips to give false readings.

10. Summary

Range of Expected Values

- Expected blood glucose levels for people without diabetes:

Time	Range. mg/dL	Range. mmol/L
Before meals	70-110	3.9-6.1
1 hour after meals	Less than 160	Less than 8.9

Limitations of Procedure

- **Hematocrit:** Very high(above 60%) and very low hematocrits (below 25%) can cause incorrect results.
- **Neonates:** Do not use the Test Strips to test neonates with Profile and Lifescan Basic Meters; the performance of these meters has not been validated with neonatal samples.
- **Lipemic Effects:** Highly lipemic (fatty blood samples) have no significant affect on the Test Strip results up to 3000 mg/dL Triglycerides.
- **Ascorbic Acid:** Ascorbic Acid (vitamin C) has no significant effect the Test strip results at physiologic concentrations of 3 mg/dL.
- **Hyperglycemic-hyperosmolar state:** an acute complication of diabetes is the hyperglycemic-hyperosmolar state, with or without ketosis, which can be life- threatening if not treated. The severe dehydration associated with it increases the viscosity of the blood which can affect blood's ability to properly penetrate the Test Spot. As a consequence, meter results may be inaccurately low in this and any other conditions involving excessive water loss/severe dehydration.

Principles or Procedure

Glucose and oxygen react in the presence of glucose oxidase yielding gluconic acid and hydrogen peroxide. Hydrogen peroxide subsequently oxidizes the dyes in a reaction mediated by peroxidase producing a blue colored form of the dyes. The intensity of this blue color is proportional to the glucose concentration in the sample.

References

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