



**Blood Glucose Test Strips  
Package Insert**  
For animal use. NOT for human use.

REF GK134-12C English

**PRINCIPLE AND INTENDED USE**

The *CentriVet™* Blood Glucose Test Strips are thin strips with a chemical reagent system which work with the *CentriVet™* GK Blood Glucose & Ketone Meter to measure the glucose concentration in whole blood. Blood is applied to the end tip of the test strip, then automatically absorbed into the reaction cell where the reaction takes place. A transient electrical current is formed during the reaction and the blood glucose concentration is calculated based on the electrical current detected by the meter, then the result is shown on the meter display. The meters are calibrated to display plasma equivalent results.

For *in vitro* diagnostic use. The *CentriVet™* Blood Glucose Test Strips can be used to test blood glucose levels in animals. The *CentriVet™* GK Blood Glucose and Ketone Monitoring System should be used by a veterinary professional or under the guidance of a veterinary professional. Test strips are only to be used outside the body for testing purposes. *CentriVet™* Glucose Test Strips are used by people at home and by veterinary professionals to test for the quantitative measurement of glucose in capillary whole blood from an animal. It is also used as an aid in monitoring the effectiveness of diabetes control programs. Professionals may also test venous and arterial blood samples. Results from the *CentriVet™* GK Blood Glucose and Ketone Monitoring System should be analyzed by your animal's veterinarian.

**COMPOSITION**

Each test strip contains the following reactive chemicals: Glucose dehydrogenase < 25 IU, Mediator < 300 ug, Buffer, Non-reactive Ingredient.  
Each test strip vial contains a drying agent.

**STORAGE AND HANDLING**

- Test strips should be stored tightly capped in their protective vial to keep them in good working condition.
- Store test strips in a cool, dry place at room temperature, 2-35°C (36-95°F). Store them away from heat and direct sunlight.
- Do not freeze or refrigerate.
- Use the test strips at room temperature. This is to ensure accurate results.
- Do not store the test strips outside their protective vial. Test strips must be stored in the original vial with the cap tightly closed.
- Do not store or use the test strips in a humid place such as a bathroom.
- Do not store the meter, the test strips or control solution near bleach or cleaners that contain bleach.
- Do not transfer the test strips to a new vial or any other container.
- Replace the vial cap immediately after removing a test strip.
- Use the test strip immediately after removing it from the vial.
- Do not use test strips past the unopened expiration date printed on the vial. Using test strips past the expiration date may produce incorrect test results. **Note:** All expiration dates are printed in Year-Month format. 2016-01 means January, 2016.
- A new vial of test strips may be used for 6 months after first being opened. Write the opened vial expiration date on the vial label after opening.

**PRECAUTIONS**

- For animal use. The test strips are to be used only outside the body for testing purposes. Do not test with human blood.
- Do not use test strips after the expiration date shown on the vial. Expired test strips may give incorrect blood glucose readings.
- Do not use test strips that are torn, bent, or damaged in any way. Do not reuse test strips.
- Only apply the sample to the tip of the test strip. Do not apply blood or control solution to the top of the test strip. This may result in an inaccurate reading.
- Check the code number before running a blood glucose test. Make sure the code number on the vial of test strips you are using matches the code number that appears on the meter display.
- Check that the code letter on the top side of the code chip before running a blood glucose test. Make sure that the code letter on the top side of the code chip matches the code letter that appears on the box and that it is being used for the correct species of animal you are testing.
- Discard the vial and any unused test strips 6 months after you first open it. Constant exposure to air may destroy chemicals in the test strip. This damage can cause incorrect readings.
- Keep the test strip vial away from children.
- Consult your veterinary professional before making any changes in your animal's treatment plan based on your animal's blood glucose test results. Blood glucose ranges have not been established in this insert, consult your animal's veterinarian for guidance on the correct blood glucose range for your animal.

**MATERIALS PROVIDED**

- *CentriVet™* Blood Glucose Test Strips
- *CentriVet™* Glucose Code Chip
- Package Insert

**MATERIALS REQUIRED BUT NOT PROVIDED**

- *CentriVet™* GK Blood Glucose & Ketone Meter
  - *CentriVet™* Glucose Control Solution
  - Items needed for blood collection
- Note:** Consult your veterinary professional on the appropriate method of blood collection for your animal.

**INSTRUCTIONS FOR USE**

1. Open the cap of the test strip vial only to remove a test strip for testing. Replace the cap immediately to protect the remaining test strips from moisture in the air.
2. Run the blood glucose test following the instructions contained in the user's manual.
3. The blood glucose test result will be shown on the meter display window. This result should fall within the target range recommended by your veterinary professional. If your animal's blood glucose test results are higher or lower than normal, ask your veterinarian what to do. Always consult your veterinarian before making any changes to your animal's treatment plan.

**IMPORTANT:** The *CentriVet™* Glucose Test Strips are designed to be used with fresh capillary or venous blood from a site that has been recommended by your veterinarian. Your veterinarian may also test arterial blood as well.

- Blood levels can change rapidly after events such as a meal, insulin dose, or exercise.

**REFERENCE FOR THE TEST RESULTS**

- The blood glucose test results are shown on the meter either in millimoles of glucose per liter of blood (mmol/L) or in milligrams of glucose per deciliter of blood (mg/dL). The meter is pre-set to either mmol/L or mg/dL depending on the loca standard.
- The meter displays blood glucose test results between 10 and 600 mg/dL or 0.6-33.3 mmol/L.
- This test strip insert does not establish blood glucose ranges for your animal. Your veterinarian should give you a range that is normal for your animal. If your animal tests outside of this range, contact your veterinarian and report the abnormal test results.

**CHECKING THE SYSTEM**

The meter must be handled carefully. See the user's manual for detailed instructions for meter care. The glucose quality control test should be used to check that the *CentriVet™* GK Blood Glucose & Ketone Meter and the *CentriVet™* Blood Glucose Test Strips are working together properly. Follow the test procedure in the user's manual to run a glucose quality control test. The control solution range will be shown on the test strip vial label under the symbol CTRL. If you think the meter or strips may not be working correctly, contact your distributor for help.

For confirmation of results, control solution tests should fall within the CTRL range.

**CAUTION:** If the quality control test result falls outside the control range shown on the test strip vial, **DO NOT** use the system to test your animal's blood, as the system may not be working properly. If you cannot correct the problem, contact your distributor for help.

**LIMITATIONS**

**WARNING:** To avoid false readings, do not use the *CentriVet™* GK Blood Glucose & Ketone Monitoring System if the animal you are testing is taking medication that breaks down to maltose or galactose. These drugs can cause inaccurate blood sugar test results due to the increase in maltose or galactose presence in the blood.

The following represent some drugs that may lead to false readings:

- Peritoneal dialysis solutions containing icodextrin (e.g., Extraneal, Icodial)
- Certain types of intravenous immunoglobulin therapies (e.g., Octagam® 5%)
- Intravenous solutions containing maltose as a means for patient hydration
- Note:** To determine if a drug breaks down to maltose or galactose, please consult the drug package insert. The list above is not meant to be an all inclusive list and may be missing other drugs.
- Don't use the *CentriVet™* GK Blood Glucose & Ketone Monitoring System during a xylose absorption test.
- For animal use. Not for human use.
- Blood glucose level readings may be overestimated if concentration for galactose levels > 10 mg/dL, maltose levels > 13 mg/dL in the blood, or lactose levels > 5 mg/dL.
- The meter, test strips and other components have been designed, tested and proven to work together effectively to provide accurate blood glucose measurements. Do not use components from other brands.
- Do not use the meter in any manner not specified by the manufacturer. Otherwise, the protection provided by the meter may be impaired.
- The *CentriVet™* Glucose Test Strips are for testing fresh capillary, venous, or arterial whole blood. Do not use with serum or plasma samples.
- The *CentriVet™* GK Blood Glucose & Ketone Monitoring System is indicated

for veterinary professional use and over the counter sale. Over the counter purchasers should be using the *CentriVet™* GK Blood Glucose & Ketone Monitoring System under the guidance of a veterinary professional.

- Blood glucose measurement with venous or arterial blood must be performed within 15 minutes of sample collection.
- Anticoagulant preservatives such as heparin or EDTA are recommended for best results in using venous or arterial blood. Use of anticoagulants such as iodoacetate, sodium citrate, or those containing fluoride is not advised.
- Very high (above 60%) and very low (below 20%) hematocrit can cause false results. Talk to your veterinary professional to find out your animal's hematocrit level.
- Abnormally high levels of Vitamin C (ascorbic acid), acetaminophen, uric acid or other reducing substances will produce falsely high blood glucose measurements.
- The system is tested to accurately read the measurement of glucose in whole blood within the range of 0.6-33.3 mmol/L (10 to 600 mg/dL).
- Fatty substances (Triglycerides up to 3,000 mg/dL or Cholesterol up to 500 mg/dL) have no major effect on blood glucose test results.
- The *CentriVet™* GK Blood Glucose & Ketone Monitoring System has been tested and shown to work properly up to 10,000 ft (3,048 meters).
- Test results may be erroneous if the animal is severely dehydrated, or severely hypotensive, in shock or in a hyperglycemic-hyperosmolar state.
- Dispose of blood samples and materials carefully. Treat all blood samples as if they are infectious materials. Follow proper precautions and obey all local regulations when disposing of blood samples and materials.

**PERFORMANCE CHARACTERISTICS**

The test result range for the *CentriVet™* Blood Glucose Test Strips is 10 – 600 mg/dL or 0.6 – 33.3 mmol/L.

**Dairy Bovine Venous Study**

Blood samples from dairy bovine were collected from the vein at the base of the tail in lactating dairy cows. The venous blood glucose measurements were taken by a trained technician on the *CentriVet™* GK Blood Glucose & Ketone meter. The same samples were also tested on the YSI 2300 STAT Plus as reference. The results from three lots are shown in the charts below.

**Linear Regression Results:** *CentriVet™* Blood Glucose Tests vs. YSI 2300 STAT Plus as Reference

Blood Sample	Slope	Intercept	R	N
Tail Vein	0.962	1.2395	0.9987	360

**System Accuracy Results for Glucose Concentration ≥ 75 mg/dL**

Within ±10%	Within ±15%	Within ±20%
173/180 (96.1%)	180/180 (100%)	180/180 (100%)

**System Accuracy Results for Glucose Concentration < 75 mg/dL**

Within ± 5 mg/dL	Within ± 10 mg/dL	Within ± 15 mg/dL
163/180 (90.6%)	180/180 (100%)	180/180 (100%)

**System Accuracy for Results for Glucose Concentration ≥ 75 mg/dL and < 75 mg/dL**

Within ±15% or ± 15 mg/dL	Within ±20% or ± 15 mg/dL
360/360 (100%)	360/360 (100%)

For complete instructions, please refer to the *CentriVet™* GK Blood Glucose & Ketone Monitoring System user's manual. For additional questions or issues with this product, please contact your dealer for help.



**ACON Laboratories, Inc.**  
10125 Mesa Rim Road  
San Diego, CA 92121, USA  
[www.centrivet.com](http://www.centrivet.com)

Number: 1150874201  
Effective Date: 2016-04-05