

How does the Guardian RT work?

The Guardian RT measures glucose levels in interstitial fluid: the fluid found between the body's cells. It is from this fluid that cells get oxygen and nutrients, including glucose. Glucose levels in interstitial fluid typically match glucose levels in the blood. The Guardian RT Continuous Glucose Monitor gives real-time interstitial fluid glucose values on demand (updated every five minutes). The monitor also features low glucose and high glucose alerts that are triggered once limits you have preset are reached. Glucose values are calculated and displayed based on the blood glucose reference values entered periodically into the monitor for calibration.

Program the Monitor:

Set Low limits, High Limits, Alarm type, Time, Display, Unit, Language

Sensor Placement:

1. Shave a small patch of hair around the lateral thoracic region. Clean the skin of excess hair and wipe with alcohol swab.
2. The sensor and attached stylet are inserted under the skin at a 45-degree angle. (Use of sensor helps to penetrate correct depth)
3. Hold the sensor and gently take out the introducer needle.

Attachment of the Transmitter:

1. Enter the Transmitter ID into the monitor. Then start a search on the monitor. (This allows the veterinarian to use multiple units/animals at the same time)
2. With the monitor in SEARCH mode, connect the transmitter to the sensor. When the monitor identifies the transmitter, SUCCESS will display on the screen. Then secure the transmitter to the animal with Vetwrap, SurgiSox, etc.

Operating the Monitor:

1. The system automatically initializes the sensor before starting to record glucose data. (Could take up to 120 mins.)
2. When initialization is done, the system will alarm and the Enter BG (Enter Blood Glucose Value). This will calibrate the sensor. Calibration will take place within the next 10-15 minutes.
3. A minimum of one glucose reading must be entered every 12 hours. More frequent daily readings will optimize the accuracy of the sensor glucose readings. If you have not entered a reading into the METER BG screen in 12 hours, an alarm will be triggered.
4. You can also input into the monitor event information that is helpful in evaluating glucose trends and patterns displayed in the software reports. Event information include when you gave the animal insulin, carb amounts or when you fed the animal, when you exercised the animal, and other.

The veterinarian can use the sensors for a one-day, two-day, or three-day glucose curves, giving the veterinarian up to 864 glucose readings.

Sensor Reports:

1. When monitoring in the cage is completed or the animal returns to the hospital, the sensor will be removed and the monitor will be attached to the Com Station and entered in the computer.
2. The reports given can help better understand how the glucose levels of the animal change continuously. It will teach the veterinarian more about the animal's glycemic patterns than from discrete blood testing alone.
3. The graphs show details of the animal's day-to-day diabetes management and lifestyle.
4. The data will identify periods when the animal's glucose levels are high or low, or issues with medication, diet, or exercise.