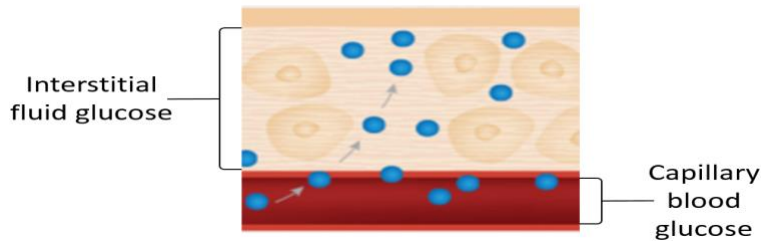


Continuous Glucose Monitoring

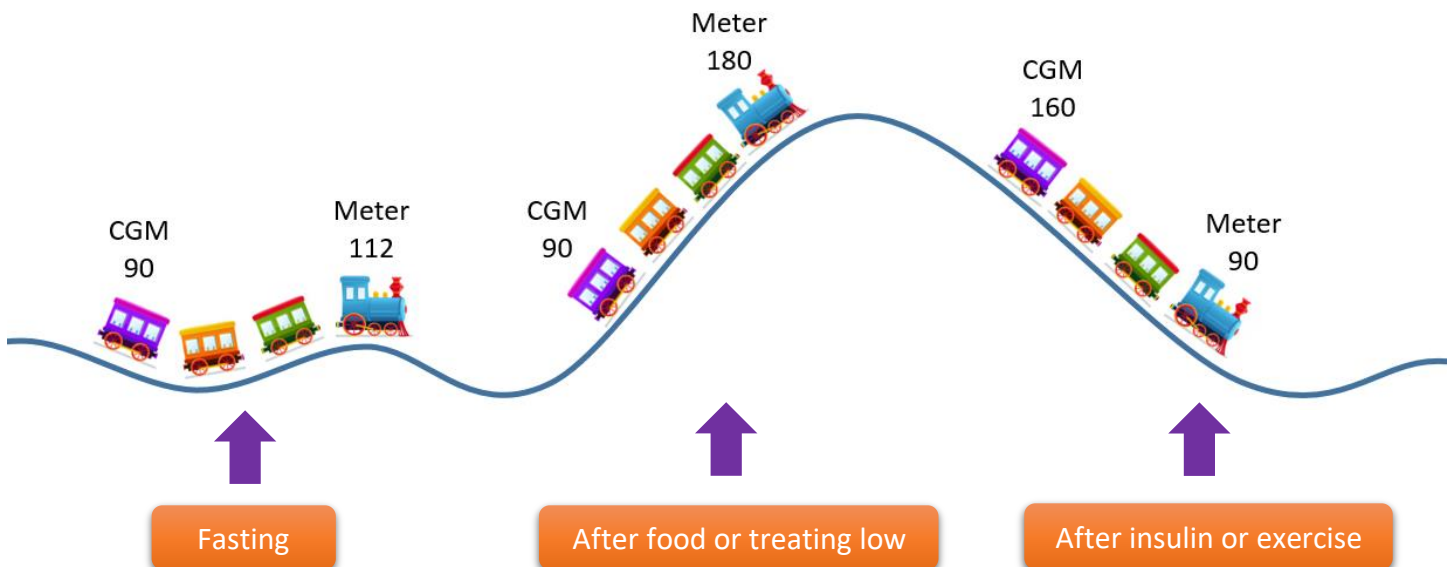
Capillary Blood Glucose VS. Interstitial Blood Glucose

Glucometers and CGMs test two different sources of blood glucose. Glucometers test capillary blood glucose while CGMs test interstitial fluid glucose. Capillaries are closer to the central blood stream than interstitial fluid. Therefore, glucometers will provide the most accurate blood glucose level at any single point in time. CGMs are able to provide the speed and direction in which the blood glucose is headed, but can be delayed up to 20 minutes from the central blood stream's current blood glucose level. It is very rare for capillary and interstitial fluid glucose levels to be exactly the same. CGM readings ARE FDA (Food and Drug Administration) approved to determine insulin dosing for.



Glucometers	CGMs
<p>Test <u>capillary</u> blood glucose. More accurate at any single point in time.</p>	<p>Test <u>interstitial fluid</u> glucose. Provide speed and direction of blood glucose (trend), but can be up to 20 minutes delayed.</p>

Anytime the blood sugar is changing i.e.: after a meal, during/after physical activity, or after a dose of insulin, the interstitial blood glucose level (CGM) will be behind the capillary blood glucose level (blood glucometer). Changes in blood glucose will always be seen first in the capillary blood (blood glucometer reading). Rapid changes in blood glucose will result in bigger differences between the capillary blood glucose (blood glucometer) and interstitial blood glucose (CGM).



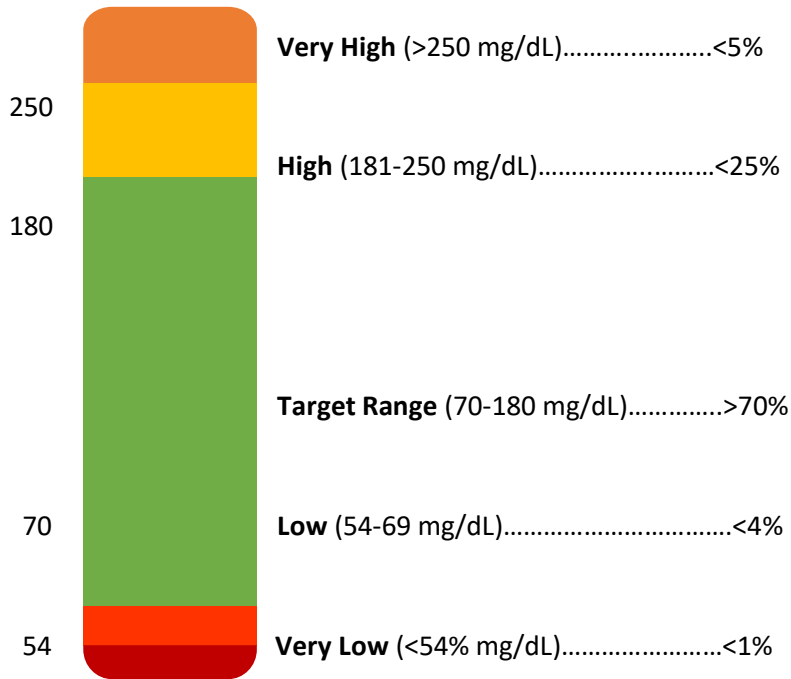
This is why it is important when treating lows to use finger sticks: to help prevent overtreatment and rebound hyperglycemia

Continuous Glucose Monitoring

Interpreting your CGM Data

For most accurate interpretation make sure you have 14 days' worth of CGM data.

Glucose Ranges	Targets [% of readings (time/day)]
Target Range 70-180 mg/dL.....	>70% (16 h 48 min)
Below 70 mg/dL.....	<4% (58 min)
Below 54 mg/dL.....	<1% (14 min)
Above 180 mg/dL.....	<25% (6 h)
Above 250 mg/dL.....	<5% (1 h 12 min)



Terminology

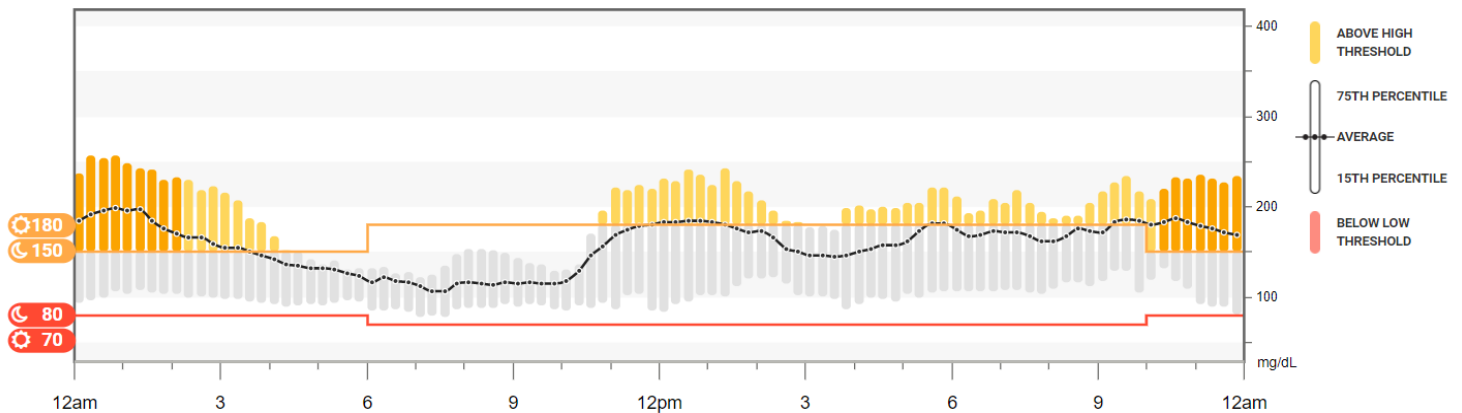
Average Glucose: Goal 169 mg/dL

Glucose Management Indicator (GMI): aka estimated A1C

Approximate HbA1c level: Goal <7.5%

Standard Deviation (SD): <35

How much CGM glucose readings rise and fall. Also known as glycemic variability.



When Should I Calibrate My Sensor?

Dexcom: Only calibrate after at least 3 consecutive readings with horizontal arrows, anytime the blood sugar is fluctuating a greater margin of error is expected and could lead to inaccurate calibration and confusion of the device

Medtronic Guardian: When prompted and/or every 12 hours