



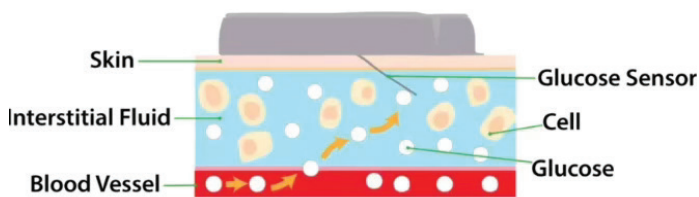
DIABETES AND ENDOCRINOLOGY DIGEST

QUARTER 4 • 2025

CONTINUOUS GLUCOSE MONITORS AND TIME IN RANGE

A Continuous Glucose Monitor (CGM) is a device that continually or always checks your blood sugar. CGMs have grown in popularity over the years and can make one’s life easier by greatly reducing the number of finger stick blood sugar checks a person needs to do. CGMs can help individuals see their blood sugar trends in real time so that they know if they are trending high or trending low and take the necessary actions to correct their blood sugar. Some of the most common ones on the market are the Libre, Dexcom, Eversense and Guardian.

One common question regarding CGMs is “Why is the finger stick blood sugar reading and the CGM reading 2 different values?” The finger stick blood sugar reading and CGM blood sugar reading are 2 different values because each one checks your blood sugar in different bodily fluids. The finger stick reading is checking your blood sugar in your blood and the CGM reading is checking your blood sugar in the interstitial fluid. Refer to image below:



Additionally, there are several factors that can affect both the accuracy of a finger stick blood sugar and CGM blood sugar:

- **Hand Hygiene and Test Strips** – outdated or damaged test strips can affect the accuracy of a finger stick reading as well as the cleanliness of your hands. Dirt, food residue and alcohol residue can all affect the finger stick reading.
- **Pressure** – Sometimes when pressure is applied to the CGM Sensor (in the example of lying down on the sensor) the blood sugar value may be affected. If possible, remove the pressure and the blood sugar value should resolve.
- **Sensor’s first day** – if you are on day 1 of wearing

your sensor, your sensor may still be learning your blood sugar pattern which therefore, may affect the reading.

- **Quick changes in blood sugar** – if your blood sugar is changing quickly, this may lead to wider variations in your blood sugar readings between the finger stick and CGM.
- **High dose Vitamin C** – Does of Vitamin C >1,000 mg/day may falsely raise CGM blood sugar readings.

TIME IN RANGE

One of beneficial aspects of having a CGM is that it tells your Provider the percentage of time that your blood sugar was within range. Most adults should aim for at least 70% time in range where the blood sugar is 70-180.



HYPOGLYCEMIA (LOW BLOOD SUGAR)

Low blood sugar, or hypoglycemia, is when your sugar levels have dropped low enough that your body is not getting the energy it needs to perform basic functions. Low blood sugar levels can be very dangerous and you need to take action.

Typically these are sugar levels of 70 or under, but this number can differ between patients. While low blood sugars can happen for several reasons, here are some signs and symptoms of lows and how you can treat them.

SIGNS AND SYMPTOMS

- Shakiness
- Nervous/ Anxious Feeling
- Sweating or chills
- Mood swings or irritability
- Rapid heart rate
- Confusion
- Dizziness
- Hunger
- Nausea
- Feeling sleepy
- Weakness or no energy
- Vision changes
- Headaches
- Coordination problems
- Nightmares
- Seizures
- Tingling or numbness in lips, tongue, or cheeks

You may feel several of these symptoms, or you may not feel any.

TREATING LOW BLOOD SUGARS

1. Check your sugar. **Do not treat based on how you feel.**
2. If your level is low, consume 15 grams of carbohydrates (CHOs)
 - a. 3-4 Glucose tablets or gel
 - b. 4 oz of juice/ regular soda
 - c. 1 T of sugar or honey
 - d. ½ of a sandwich
 - e. Hard candy or jellybeans – see the nutrition label for how many to eat and be sure not to OVER treat your low level
3. Wait 15 minutes for the CHOs to reach your system and raise your sugar levels
4. Retreat after 15 minutes only if your sugar levels are still low

If your sugar levels remain low after treating three times, be sure to contact your healthcare provider.

NATIONAL DIABETES MONTH

November is National Diabetes Month and Friday, November 14 is World Diabetes Day! World Diabetes Day is the world's largest diabetes awareness day. It is recognized on November 14 which is the birthday of Sir Fredrick Banting who discovered insulin in 1922.

Our clinic is bringing awareness to diabetes with an event in the Hamilton Medical Center Mensa, located near the cafeteria, on Friday, November 14. Come join us as we provide diabetes awareness and educational information!



VitruvianHealth.com/diabetes
706.278.1622