CGMs can be used to calculate insulin doses and make treatment decisions. Make sure you know the recommendations for the device you are using before using CGM data to calculate a dose.

As a general rule, you should use a blood glucose meter if your symptoms don't match the readings on the CGM or if you suspect the CGM reading is inaccurate for any reason. In addition, it's good practice to double check with a meter when values are very low or very high.

Lows and CGM

If your CGM reading is below 70, we recommend you always confirm with a meter. Always do a fingerstick if a low is suspected, even if your CGM shows a glucose level in the target range.

CGM data can be inaccurate if you are dehydrated or if the area around the sensor gets compressed. Confirm with your meter!

CGM data can lag after you have treated a low. The CGM may continue to alert you that you are low 10 minutes after treatment, but checking with your blood glucose meter may reveal your BG is already over 70 mg/dL. Due to this lag, always check with your meter so you don't overtreat a low and experience a spike in glucose levels.

Taking Insulin Before Meals Using CGM Data and Trend Arrows

We know that food starts to affect glucose immediately, and we also know that rapid acting insulin doesn't begin to work for about 15 minutes and doesn't peak for 1 to 1.5 hours. You can use your pre-meal CGM data to help prevent post-meal highs.

Let's say it mealtime and the following conditions apply:

- Your last insulin dose was given three or more hours ago.
- Your CGM trend arrow is flat or pointing up (no arrows pointing down).
- You are not below 100 mg/dL

If your CGM number is in the:

- 100s – Use that number to calculate your insulin dose and take your insulin 10 minutes before meal.
- 200s – Use that number to calculate your insulin dose and take your insulin 20 minutes

before the meal.
- 300s – Use that number to calculate your insulin dose and take your insulin 30 minutes before meal.

This is a great strategy to prevent post-meal highs.

Preventing Lows with CGM:

You can also use the CGM to prevent lows. Consider the following guidelines to treat a potential low using the Rule of 15:

- 120 with double down arrows (treat with 15 grams of rapid acting carbohydrate)
- 100 with single down arrow (treat with 15 grams of rapid acting carbohydrate)
- 90 with angled down arrow (treat with 15 grams of rapid acting carbohydrate)

Updated on 06/26/24

This document is not intended to take the place of the care and attention of your personal physician or other professional medical services. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your physician.

Recommended

Glucose Monitoring

Interpreting CGM Data

Sharing Data with Your Clinic

Product Websites

Dexcom Clarity

Medtronic Carelink

Diasend

Glooko

Tidepool