

## Dexcom G6 Dosing Guidelines

**What is a Dexcom?** The purpose of the Dexcom continuous glucose monitor (CGM) is to provide continuous real time readings that help patients and families in managing blood sugars based on the current reading and the expected reading in the next 30 minutes. Current blood glucose monitoring is 3-6 readings per day. This does not give a complete picture of where the blood sugars are throughout the entire day and how and when they change. The Dexcom measures interstitial (tissue fluid) glucose every 5 minutes and provides information about changes in the glucose levels as they are occurring. There are rate of change arrows on the Dexcom that indicate if the blood sugar is rising, falling or is stable. This information can then be used to make decisions on treatment based on the current sensor reading and how it is changing. This helps to decrease the number of low blood sugars and high blood sugars that occur and in turn increases the time that glucose levels are within target range.

The guidelines below are intended to assist you in the use of the Dexcom for making decisions about insulin dosing based on the current glucose values and how they are changing. This is done by looking at the current glucose value and the direction and number of arrows (rate of change of the glucose level) displayed on the Dexcom. Then determine what the expected blood sugar is based on the arrows and the current reading (See *Calculations* table below)

### Calculations:

Pre meal calculations for insulin doses are based on the predicted glucose as based on the rate of change arrows:

#### Arrow Use: General Guidelines

Dexcom Arrow	Anticipated glucose in 30 minutes (mg/dL )
Two arrows up ↑↑	Current glucose + more than 90 mg
One arrow up ↑	Current glucose + 60-90 mg
Angled arrow up ↗	Current glucose + 30-60 mg
Straight arrow →	Current glucose
Angled arrow down ↘	Current glucose minus 30-60 mg
One arrow down ↓	Current glucose minus 60-90 mg
Two arrows down ↓↓	Current glucose minus more than 90 mg

**\*REMEMBER THAT THESE ARE STARTING RECOMMENDATIONS AND CAN BE MODIFIED TO BE MORE INDIVIDUALIZED AS NEEDED\***

\*Please see page 9 of Dexcom G6 Manual for more information on dosing guidelines

**Keep in mind!:** Use the insulin to carbohydrate ratios and correction factors and target ranges as determined by your diabetes provider for meals and other insulin doses. Look at the Dexcom arrow and make the following adjustments to the glucose on the Dexcom screen.

**Current glucose on screen with up arrows add the following:**

- Two arrows Up ↑↑ : add 90 mg/dL to current glucose
- One arrow Up ↑ : add 60-90 mg/dL to current glucose
- Angled arrow up ↗ : add 30-60 mg/dL to current glucose
- Straight arrow → : use current glucose

**Current glucose on screen with down arrows then subtract the following:**

- Two arrows down ↓↓ - subtract 90 mg/dL from current glucose
- One arrow down ↓ - subtract 60-90 mg/dL from glucose
- Angled arrow down ↘ - subtract 30-60 mg/dL from glucose
- Straight arrow → - use current glucose

**Examples:**

1) Dexcom reads 200 with single arrow up ↑:

Use anticipated glucose of 260 ( $200 + 60$ ) insulin dosing.

2) Dexcom reads 125 with angled arrow up ↗:

Use anticipated glucose of 155 ( $125 + 30$ ) for insulin dosing.

3) Dexcom reads 195 with angled arrow down ↘:

Use anticipated glucose of 165 ( $195 - 30$ ) for insulin dosing.

4) Dexcom reads 105 with single arrow down ↓:

This predicts a glucose of 45 ( $105 - 60$ ). **Treat the low blood sugar following Children's Hypoglycemia Guidelines and wait to dose until blood sugar is within normal age range**

5) Dexcom reads 300 with two arrows up ↑↑:

**Consider checking fingerstick blood glucose to confirm glucose rise. May use anticipated glucose of 390 ( $300 + 90$ ) for insulin dosing.**

### **Additional Considerations**

- If you did take the pre meal insulin, then make sure it has been 2.5 – 3 hours before taking a correction dose for the high glucose.
- A fingerstick blood glucose meter reading should be used to make insulin dose decisions if the Dexcom is not showing both a glucose reading and a directional arrow
- A calibration of the Dexcom sensor using a fingerstick blood glucose may be done to ensure accuracy of the sensor. Check a blood sugar with a fingerstick if symptoms are not consistent with Dexcom reading

#### *CALIBRATION TIPS:*

- Use the same meter for each calibration as each meter has a different accuracy.
- Wash your hands before every fingerstick calibration.
- Once you check a fingerstick, calibrate the Dexcom right away
- Dexcom accuracy (with fingerstick blood glucose) is generally within:
  - 30% if the Dexcom G6 is reading greater than 70mg/dL
  - 30 point difference if the Dexcom G6 is reading less than 70mg/dL
- Avoid stacking of insulin: Corrective doses of insulin should not be given any more frequently than every 2.5 to 3 hours unless ketones are present.

- If ketones are small or larger, additional insulin may be needed up to every 2 hours based on provider instructions
- Phone Applications: The application for the Dexcom needs to be open at all times on the phone in order for it to transmit information.
- If using the receiver, your followers and Clarity will not be able to see your blood sugars automatically
- Alerts:
  - Customize High/Low/Rate of Change alerts to what works best for you and your child. Consult your provider if you are unsure how to do so.
  - When setting the dexcom alert settings keep in mind the target blood sugars per your provider:

### **Target Glucose Values:**

<b>Age</b>	<b>Daytime</b>	<b>Bedtime/Overnight</b>	<b>Correction Target</b>	<b>Treat Low when less than</b>
Younger than 2 years	90-200	130-200	150	90
2-5 years	80-180	100-180	150	80
5 years and older	70-150	90-150	120	70

### **Contact Dexcom CARE**

The Dexcom CARE team of trainers and certified diabetes educators (CDEs) are available to help to you learn more about your Dexcom CGM system. They provide live, interactive support as you discover the value of CGM. They can provide advanced learning education at your convenience.

Toll-free phone: 1-877-339-2664

Available Monday - Friday: 8AM - 8PM PST, Saturday: 8AM - 4PM PST (hours subject to change)