



**The Molly Center for Children with Diabetes and Endocrine Disorders
551-996-5329**

Calculation Sheet for Rapid-Acting Insulin Bolus

Step 1: Calculate Carbohydrate Bolus

$$\frac{\text{Carbohydrates (CHO) in Meal or Snack}}{\text{Carbohydrate (CHO) Ratio}} = \frac{\text{Carbohydrate (CHO) Bolus}}{\text{Carbohydrate (CHO) Bolus}}$$

Step 2: Calculate Correction Bolus (Choose one)

a. Meals:

$$\frac{\text{Present Glucose}}{\text{Target Glucose}} = \frac{\text{Glucose to Correct}}{\text{Correction Factor}} = \frac{\text{Correction Bolus}}{\text{Correction Bolus}}$$

b. Blood Ketones (If blood ketones > 1.0):

$$\frac{\text{Present Glucose}}{\text{Target Glucose}} = \frac{\text{Glucose to Correct}}{\text{Correction Factor}} = \frac{\text{Correction Bolus}}{\text{Correction Bolus}} \times 1.5 = \frac{\text{Correction Bolus}}{\text{Correction Bolus}}$$

c. Bedtime Snack:

$$\frac{\text{Present Glucose}}{\text{Target Glucose}} = \frac{\text{Glucose to Correct}}{\text{Correction Factor}} = \frac{\text{Correction Bolus}}{\text{Correction Bolus}} \div 2 = \frac{\text{Correction Bolus}}{\text{Correction Bolus}}$$

Step 3: Calculate Total Insulin Bolus

$$\frac{\text{Carbohydrates (CHO) Bolus}}{\text{Carbohydrates (CHO) Bolus}} + \frac{\text{Correction Bolus}}{\text{Correction Bolus}} = \frac{\text{Total Bolus}}{\text{Total Bolus}} \text{ units of rapid-acting insulin}$$

Hackensack University Medical Center is pleased to provide access to the resource material contained herein. **This material is provided for informational use only and is not intended to be medical advice.** It is important that you discuss any questions you may have with your physician or healthcare provider.

Created: 10/07
Revised: 3/17