Insulin Bolus Calculator

Do not use the blood glucose correction bolus:

- If blood glucose is less than correction target.
- If it's been less than 3 hours since the last dose of fast-acting insulin was given.
- If a low blood glucose has been treated in the past 3 hours.
- If it's been less than 1 hour since exercise.
- At bedtime or during the night until directed otherwise.

Step 1) Calculate Carbohydrate Bolus

$$\boxed{} \div \boxed{} = \boxed{}$$

Grams of Carbohydrate ÷ Carbohydrate Ratio = Carbohydrate Bolus

Carbohydrate Ratio:
How many grams (g) of carbohydrate will be covered by 1 unit of insulin.
Example: 1:20 = 1 unit of insulin covers 20 g of carbohydrate.

Step 2) Calculate Blood Glucose Correction Bolus

$$\boxed{} - \boxed{120} = \boxed{} \div \boxed{} = \boxed{}$$

Glucose Reading - Glucose Target = Amount to Correct ÷ Glucose Correction Factor = Glucose Correction Bolus

Glucose Target:
Is the highest number in the target range. Example: If the target range is 70 to 120 milliliters per deciliters (mg/dL), the correction target will be 120 (mg/dL).

Glucose Correction Factor:
How many points 1 unit of insulin will lower the blood glucose. Example: 1:50 = 1 unit of insulin lowers blood glucose by 50 points.

Step 3) Calculate Total Insulin Bolus Dose

$$\boxed{} + \boxed{} = \boxed{} \rightarrow \boxed{}$$

Carbohydrate Bolus + Glucose Correction Bolus = Total Bolus Dose → Total Rounded Bolus Dose

Rounding Rules for ½ Unit:
0.1 to 0.3 = round down to whole unit
0.4 to 0.7 = round to ½ unit
0.8 to 0.9 = round up to whole unit

Rounding Rules for Whole Unit:
0.1 to 0.4 = round down to whole unit
0.5 to 0.9 = round up to whole unit

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