INSULIN CALCULATION INSTRUCTIONS

DEFINITIONS:

Goal Blood Sugar: = Target blood sugar (mg/dl)

Correction Factor: = 1 unit of insulin for every _____ mg/dl (points) that the blood sugar is above or below _____ (Target Blood Sugar).

Insulin to Carbohydrate Ratio: = 1 unit of insulin for every _____ grams of carbohydrates eaten

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1. **TO CALCULATE INSULIN FOR CORRECTION FACTOR:**
    Use the following formula:
    Blood sugar value, **minus** Goal Blood Sugar = _____, **divided by** Correction Factor.

    The result is the **# of units of insulin for blood sugar correction.** *This can be a **NEGATIVE number!**

2. **TO CALCULATE INSULIN FOR FOOD**: **(insulin to carbohydrate ratio)**
    a. Determine total number of grams of carbohydrates eaten.
    b. Use doctor's order for Carbohydrate ratio: 1 unit of insulin for every _____ gm of carbohydrate eaten.
    c. Use the following formula:
       Divide # of grams of carbohydrates eaten by carbohydrate ratio.

       The result is the **# of units of insulin needed for food.**

3. **TO CALCULATE TOTAL UNITS OF INSULIN**
        # of units insulin needed for food
    <u>+ # of units insulin needed for Blood Sugar</u>   (*This can be a negative number.)
    =   Total # of units of insulin

*If the # of units of insulin needed for blood sugar is negative, then the TOTAL # of units of insulin will be SMALLER than the # of units of insulin needed for food.

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EXAMPLES:
Blood sugar goal: ____150___ mg/dl
Correction factor or Insulin Sensitivity: ___100____
Carbohydrate ratio: __1:20__

1. Blood sugar is 220 and 40 gm of carbs are eaten.	2. Blood sugar is 129 and 60 gms of carbs are eaten.
220 – 150 = 70 ÷ 100 = __.7__ units	129 – 150 = -21 ÷ 100 = __-.21__ units
40 gm of carbs ÷ 20 = __2__ units	60 gm of carbs ÷ 20 = __3__ units
.7 + 2 = __2.7__ units	-.21 + 3 = __2.79__ units
Round up to **3 units** total insulin needed	Round up to **3 units** total insulin needed