

what is an insulin:carb ratio?

- Your insulin:carb (i:c) ratio tells you how many grams of carbohydrate 1 unit of insulin will cover. For example, if your insulin:carb ratio is 1:10 that means that you need to take 1U of insulin for every 10g of carbs that you eat
- Some people need a different insulin:carb ratio for each meal because their insulin sensitivity changes throughout the day
- ❖ **Remember:** your basal insulin dose needs to be accurate before any adjustments are done to i:c ratios!

how to test ICRs

test your ICR when:

- 1 | you have not had a low blood sugar in the last 4 hrs
- 2 | your blood sugar is within target before a meal and you have not eaten or given an injection in the past 4 hrs
- 3 | you are eating a low fat meal that you can reasonably predict the carb content for – try to avoid mixed meals (i.e. casseroles, pasta dishes)

steps for testing your ratio:

- 1 | test your blood sugar and take your mealtime insulin no more than 20 mins before eating
 - 2 | test blood sugar 2 hours after the meal
- *stop the test if your blood sugar goes below 4mmol/l and treat

BG before lunch	Carbs (g)	BG 2 hours later	BG 4 hours later

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assessing the results

if your blood sugar rises 2 - 4 mmol/L

2 hrs after eating: your i:c ratio is adequate

if your blood sugar rises by more than 4 mmol/L 2 hours after eating:

use a smaller i:c ratio to give more insulin (decrease the grams of carbs in the ratio)

if your blood sugar rises by less than 2 mmol/L 2 hours after eating:

use a larger i:c ratio to give less insulin (increase the grams of carbs in the ratio)

practice makes perfect!

Repeat the test on a different day to make sure the results you're seeing are consistent. Wait until you see the same pattern at least 3 times before making a change.

reasons for unexplained highs or lows:

- was the carb count accurate (or close enough)?
- was the meal an unusually high or low glycemic index meal?
- was it a higher fat or protein meal than usual?
- were you more or less active than usual that day?
- did you have any recent hypoglycemia?
- are you on the correct basal insulin dose?
- was the mealtime insulin taken early enough before eating?
- were you more or less stressed that day?

**For more information on these factors, speak to your diabetes educator*