

How to Adjust My Carb Ratio (Carbohydrate to Insulin Ratio)

What is a carb ratio?

A carb ratio (also called carbohydrate to insulin ratio) is the number of grams of carbohydrate covered by one unit of rapid acting insulin.

Your carb ratio may:

- Need to change as basal doses or rates change.
- Need to change as your weight changes.
- Need to change as your food intake changes.
- Vary for different times of the day.

How do I check if my carb ratio is accurate?

1. Check your blood sugar before the meal.
2. Your blood sugar must be between 4 and 9 mmol/L.
3. Take the insulin according to your carb ratio for the meal.
4. Eat a low fat meal with a known carbohydrate amount (40 to 60 grams).
5. Check your blood sugar 4 hours after the meal.

Important!

- Do NOT drink alcohol the night before or the day of the meal you are checking.
- Do NOT exercise before or 4 hours after the meal.

If your blood sugar level 4 hours after the meal is within 1.7 mmol/L of your blood sugar level before the meal, your carb ratio is accurate.



It's important to check your carb ratio on 2 different days after the same meal to make sure there is a pattern.

Adjusting my carb ratio:

If your blood sugar level 4 hours after the meal is more than 1.7 mmol/L **above** your blood sugar level before the meal:

- You are not getting enough insulin for that meal.

What to do →

Lower your carb ratio by 1. The lower the carb ratio the **more** insulin for the same amount of carbohydrate.

For example:

My carb ratio	Blood sugar		What to do
	Before the meal	4 hours after the meal	
10	7.5 mmol/L	7.3	Blood sugar is at target. No change to the carb ratio.
	7.5 mmol/L	11.3	Blood sugar is too high. • Carb ratio changes to 9

If your blood sugar level 4 hours after the meal is more than 1.7 mmol/L **below** your blood sugar target:

- You are getting too much insulin for that meal.

What to do →

Increase your carb ratio by 1. The higher the carb ratio, the **less** insulin for the same amount of carbohydrate.

For example:

My carb ratio	Blood sugar		What to do
	Before the meal	3 hours after correction	
10	7.5 mmol/L	7.6	Blood sugar is at target. No change to the carb ratio.
	7.5 mmol/L	4.3	Blood sugar is too low. • Carb ratio changes to 11

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