

what is an insulin sensitivity factor (ISF)?

- An insulin sensitivity factor – also called a correction factor – helps you figure out how much insulin to take to bring your high blood sugars down to the normal range.
- If your ISF = 2, this means that 1U of insulin will decrease your blood sugar by 2 mmol/L.
- In most circumstances, you should only take a correction insulin dose before food, along with your meal dose. As insulin lasts in the body for approximately 4 hrs, you do not want to administer another dose less than 4 hrs after your previous one

how to test your ISF

test your correction factor when:

- 1 | your blood sugar is above target
- 2 | it has been at least 3 hrs since you last ate
- 3 | it has been at least 4 hrs since your last rapid insulin injection

steps for testing:

- 1 | administer your correction dose
 - 2 | do not eat for 4 hrs unless your sugar goes low
- ❖ It is difficult to set aside time to do this test. Alternatively you could make sure your ICR is accurate first, then test your correction dose with your meal

when not to use a correction dose

- 1 | if your high #'s often come down on their own*
- 2 | if it has been <4 hrs since your last rapid insulin dose
- 3 | when pending exercise will lower it

assessing ISF test results

your ISF is adequate if: your blood sugar is within 2 mmol/L of your target by 4 hrs without going low

your ISF may be too high if: your blood sugar is >2 mmol/L above your target after 4 hrs

your ISF may be too low if: your blood sugar is >2 mmol/L below your target after 4 hrs

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.



correction factor tips

bedtime corrections

- Be careful when correcting high readings before bed. Consider the use of a larger correction factor (less insulin) near bedtime to lessen the risk of overnight lows. Consider setting an alarm and checking your blood sugar.

when do we need to increase our correction dose?

- A larger correction dose of insulin (lower ISF) may be needed for extremely high blood sugar, ketoacidosis, an infection, pre-menstrual periods, or the use of prednisone.*

when do we need to lower our correction dose?

- Weight loss and increased activity will lower your insulin needs, leading to a lower correction dose of insulin (higher ISF).*
- ❖ To find out your insulin sensitivity factor, make an appointment with your diabetes educator

* Ask your diabetes educator for advice in this situation.