perfecting pumps | correction factors

what is a correction factor?

A correction factor – also called insulin sensitivity factor (ISF) – helps you figure out how much insulin to give yourself to bring your high blood sugars down to the normal range without going low. If your correction factor = 2, this means that 1u of insulin will decrease your blood sugar by 2 mmol/L.

how to test correction factors

test your correction factor when:

1 | your blood sugar is >11 mmol/L
2 | it has been at least 3 hrs since you last ate
3 | it has been at least 4 hrs since your last bolus

steps for testing:

1 | administer your correction dose
2 | do not eat for 4 hrs unless your sugar goes low
3 | test blood sugar every hour for 4 hrs

when NOT to use a correction dose

1 | if your high #'s often come down on their own*
2 | if you are having frequent or severe low blood sugars*
3 | when pending exercise will lower it

** Ask your diabetes educator for advice in this situation.*

assessing correction factor (ISF) test results

your ISF may be too high if:

- your blood sugar ends up 2 mmol/L above your target blood sugar range after 4 hrs

your ISF may be too low if:

- your blood sugar ends up >2 mmol/L below your target blood sugar range after 4 hrs

practice makes perfect!

- repeat the test on a different day until a correction factor consistently brings your blood sugar within 2 mmol/L of your target by 5 hrs without going low

correction factor tips

bedtime corrections

- Be careful when correcting high readings before bed. Consider the use of a larger correction factor near bedtime to reduce the size of correction boluses and lessen the risk of night lows. Consider setting an alarm and checking your blood sugar.

when do we need larger correction boluses?

- 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 factors?

- Weight loss and increased activity will lower your insulin needs, leading to a lower correction dose of insulin (higher ISF).*

signs your basal rates need to be changed:

- If your correction factors vary significantly throughout the day, your basal rates likely need to be changed.*

** Ask your your diabetes educator for advice in this situation.*