Procedure to Follow in the Event of a Missed Bolus or a Bolus Administration Error (insulin pump)

The automatic modulation of the basal rate done by hybrid closed-loop systems can somewhat compensate for an error, but you still have to apply the following to prevent any complications that can still occur.

MISSED PRANDIAL (meal) BOLUS

A missed insulin bolus will result in **higher blood sugar.**

I need to remember that:

- When this happens, blood sugar results may be different than usual. It's essential to **avoid ketoacidosis** in this case until the situation is back to normal.
- **I need to stay vigilant and check my blood sugar more often (e.g., every 1–2 hours) until my blood sugar is stable and keep an eye on my active insulin.**
- There is no need to avoid eating because this could stimulate the production of ketone bodies.
- I need to remember to drink water to stay hydrated.

If I realize I missed a dose **less than an hour after my meal**	If I realize I missed a dose **more than an hour after my meal**
I can inject myself with **the missed dose** right after that meal.	I check my blood sugar and ketone bodies as needed. I take a correction bolus based on my blood sugar level.

Remember to:

Measure your blood sugar frequently.
Check the amount of active insulin before administering another bolus.

Fact sheet taken from the SUPPORT training platform
Developed by the BETTER project

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DOSAGE ERROR — BOLUS BEING DELIVERED

If I immediately realize my error, I can stop the bolus delivery on my pump and see how many units were administered.

DOSAGE ERROR — BOLUS ALREADY DELIVERED

If I realize my error once the whole bolus has been delivered, I need to follow the steps below depending on the dosage.

Less insulin administered (e.g., you injected 6 units instead of 10)

- This error will generally cause your **blood sugar to go up.**
- Check your blood sugar and ketone bodies as needed.
- Take a correction bolus based on your blood sugar level.
- **Check your blood sugar regularly**, and keep in mind that it can take several hours for it to go back within your target range.
- Before administering another bolus, make sure you **check the amount of active insulin.**

Too much insulin administered (e.g., forgetting that a bolus has been administered and taking a second bolus)

- This error poses a **risk of hypoglycemia**, which can come on **quickly** and **last between 4 and 6 hours (insulin duration of action)**.
- It's important to take into consideration the number of extra units administered and to **immediately ingest more carbs.** You can calculate the number of carbs you need to eat based on your insulin-to-carb ratio and the number of extra units that were administered.
- You can also consider temporarily reducing your basal rate for the entire insulin duration of action (4 – 6 hrs) or program a higher blood sugar target if your pump doesn't allow temporary basal rates
- **Check your blood sugar frequently** to prevent potential hypoglycemia.
- **In the event of hypoglycemia,** keep in mind that it will probably be more **difficult to treat** and that **you may need a higher than usual quantity of** fast-acting **carbs.**

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