

**Guidelines for the Use of Basal, Nutritional and Correction Insulin
For patients who are on intermittent tube feeds**

GOAL OF THERAPY

- The goal of therapy is to use as little correction insulin as possible and to provide most of the insulin as regularly scheduled basal and nutritional insulin to **maintain fasting CBG between 5 mmol/L and 8 mmol/L**

Basal insulin (longer acting insulin that targets hyperglycemia caused by liver glucose production when not eating)

- **Formulary basal insulins:** glargine (BASAGLAR, LANTUS) and NPH
- **Patients previously on insulin should receive scheduled basal insulin at all times regardless of nutritional status**
- **Patients with type 1 diabetes should have basal and nutritional insulin ordered at all times to avoid developing ketoacidosis**
- Patients with Type 2 diabetes not previously on insulin can also be started on basal insulin if they have either:
 - poorly controlled glucose on admission (i.e. A1C above 8.5%) ***OR***
 - two or more high doses of oral agents which are being held while in hospital
- For patients using insulin NPH prior to admission: order insulin NPH BID (the second NPH dose may be given at bedtime to avoid nocturnal hypoglycemia)

Nutritional insulin (shorter acting insulin that targets hyperglycemia caused by meals)

- insulin LISPRO is the preferred nutritional insulin for tube feeds

Correction Scale – selection of low, medium or high insulin dose

- If blood glucose is above 8 mmol/L, correction insulin is given in addition to the scheduled nutritional insulin dose.
- Add up all insulin over 24 hours from all components of pre-admission regimen and choose the appropriate dose scale according to the 24-hour insulin use. Consider starting at low dose for patients at high risk of hypoglycemia such as patients with type 1 diabetes, renal dysfunction, hypoglycemia unawareness, insulin naïve patients and the elderly.

Daily review of blood glucose results

- *Basal insulin:* assess basal insulin daily and adjust as needed every 1 to 3 days by targeting the morning (pre-first feed) glucose.
- *Nutritional insulin:* assess nutritional insulin doses daily and adjust as needed every 1 to 3 days by targeting glucose level at next CBG.
- *Correction insulin:* If correction insulin is being administered frequently, the basal and nutritional insulin doses should be reassessed.

Ensure appropriate discharge insulin and diabetic medications

- If an insulin naïve patient requires more than 10 units of insulin daily in hospital, they may require insulin after discharge.