

BLOOD GLUCOSE (BG) ON ARRIVAL IN ICU

>11.1 mmol/L

Start insulin at 2-4 U/hr

11.1 - 6.1 mmol/L

Start insulin at 1-2 U/hr

<6.1 mmol/L

Do not start insulin

MEASURE BG EVERY 1 – 2 HOUR, UNTIL 4.4 – 6.1 MMOL/L

>7.8 mmol/L

Increase Insulin by 1 – 2 U/hr

6.1 - 7.8 mmol/L

Increase Insulin by 0.4 – 1 U/hr

MEASURE BG EVERY 4TH HOUR

Close to target?

Adjust Insulin by 0.2 – 0.6 U/hr

4.4 - 6.1 mmol/L

No action

MEASURE BG WITHIN ONE HOUR

Sudden decrease
(>50%)

Halve the Insulin dose

3.3 - 4.4 mol/L

Reduce Insulin dose

2.2-3.3 mmol/L

Stop Insulin, check glucose infusion lines, pumps and bags

<2.2 mmol/L

Stop Insulin, check glucose lines, pumps and bags. Give bolus of 20 ml glucose 50% (500mg/ml). Check BG and repeat bolus as needed.

ALGORITHM FOR STRICT GLUCOSE CONTROL

- Consult physician if BG >20 mmol/L or <2.2 mmol/L or if you have to divert from the algorithm
- Beware fluctuations in insulin demands as patient medical status improves or deteriorates.
- Stop Insulin when nutrition is interrupted (e.g. tracheotomy, CAT-scan etc)
- Beware medications that may affect your patients BG, e.g. beta-blockers, steroids, ACE-inhibitors and thyroid hormones.
- BG ≤ 11mmol/L without insulin is accepted when admitting your patient to the ward.

This is a guide; Insulin administration must always be guided by common sense and adjusted according to the patients individual condition.