

## Example 6 — The Leuven Algorithm

Van den Berghe G, Wouters P, Weekers F, et al. *N Engl J Med.* 2001;345:1359–1367.

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### Measure glucose on entry to ICU

- BG > 11.1 mmol/L? Start insulin 2–4 IU/hour
  - BG 11.1–6.1 mmol/L? Start insulin 1–2 IU/hour
  - BG < 6.1 mmol/L? Don't start insulin but continue BG monitoring every 4 hours
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### Measure glucose every 1–2 hours until in normal range

- BG > 7.8 mmol/L? Increase insulin dose by 1–2 IU/hour
  - BG 5.1–7.8 mmol/L? Increase insulin dose by 0.5–1 IU/hour; measure glucose every 1–2 hour until
  - BG near normal range? Adjust insulin dose by 0.1–0.5 IU/hour
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### Measure glucose every 4 hours

- BG near normal range? Adjust insulin dose by 0.1–0.5 IU/hour
  - BG normal? Insulin dose unchanged
  - BG falling steeply? Reduce insulin dose by half and check more frequently
  - BG 3.3–4.4 mmol/L? Reduce insulin dose and check BG within 1 hour
  - BG 2.2–3.3 mmol/L? Stop insulin infusion, ensure adequate baseline glucose intake, and check BG within 1 hour
  - BG < 2.2 mmol/L? Stop insulin infusion, ensure adequate baseline glucose intake, administer glucose per 10-g IV boluses, and check BG within 1 hour
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