ADA Algorithm for Type 2 Diabetes

Start with bedtime intermediate-acting insulin or bedtime or morning long-acting insulin (can initiate with 10 units or 0.2 units per kg)

Check fasting glucose (fingerstick) usually daily and increase dose, typically by 2 units every 3 days until fasting levels are consistently in target range (3.9–7.2 mmol/l [70–130 mg/dl]). Can increase dose in larger increments, e.g., by 4 units every 3 days, if fasting glucose is >10 mmol/l (180 mg/dl)

A1C ≥7% after 2–3 months

If hypoglycemia occurs, or fasting glucose level <3.9 mmol/l (70 mg/dl), reduce bedtime dose by 4 units or 10%—whichever is greater

If fasting bg is in target range (3.9–7.2 mmol/l [70–130 mg/dl]), check bg before lunch, dinner, and bed. Depending on bg results, add second injection as below. Can usually begin with ~4 units and adjust by 2 units every 3 days until bg is in range

Pre-bed bg out of range. Add rapid-acting insulin[a] at dinner

Pre-dinner bg out of range. Add NPH insulin at breakfast or rapid-acting at lunch

Pre-lunch bg out of range. Add rapid-acting insulin at breakfast[a]

Continue regimen. Check A1C every 3 mo

A1C ≥7% after 3 months

Recheck pre-meal bg levels and if out of range, may need to add another injection. If A1C continues to be out of range, check 2 h postprandial levels and adjust preprandial rapid-acting insulin

Yes

No

No

Yes