

Insulin Prescription

Choose insulin(s) from one of the columns and then complete the dosing and titration column.

Prescriber's Name: patMdName

Address: patMdAddrLabel

Tel: patFam.phone.default Fax: patFam.fax.default

Patient's Name: patName

Address: patAddressLabel

Tel: patHomePhone.default

STEP 1: Choose Insulin Type			→	STEP 2: Dosing and Titration				
BASAL Long-acting analogues (Clear)	<input type="checkbox"/> Levemir® <input type="checkbox"/> Cartridge <input type="checkbox"/> FlexTouch® (prefilled)	<input type="checkbox"/> Lantus® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> SoloSTAR® (prefilled) <input type="checkbox"/> Toujeo™ <input type="checkbox"/> SoloSTAR® (prefilled)	Starting dose: _____ units at _____ Increase dose by _____ units every _____ until fasting blood glucose has reached the patient's individual target of _____ mmol/L.					
Intermediate-acting (Cloudy)	<input type="checkbox"/> Humulin® N <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Kwikpen® (prefilled)	<input type="checkbox"/> Novolin® ge NPH <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial						
PRANDIAL (BOLUS) Rapid-acting analogues (Clear) Give 0-10 minutes before meal.	<input type="checkbox"/> Humalog® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Kwikpen® (prefilled) <input type="checkbox"/> Humalog® 200 units/mL <input type="checkbox"/> Kwikpen® (prefilled)	<input type="checkbox"/> NovoRapid® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> FlexTouch® (prefilled)	<input type="checkbox"/> Apidra® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> SoloSTAR® (prefilled)	Starting dose: _____ units ac breakfast _____ units ac lunch _____ units ac supper				
Short-acting (Clear) Give 30 minutes before meal.	<input type="checkbox"/> Humulin® R <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial	<input type="checkbox"/> Novolin® ge Toronto <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial						
PREMIXED Premixed analogues (Cloudy) Give 0-10 minutes before meal.	<input type="checkbox"/> Humalog® Mix25™ <input type="checkbox"/> Cartridge <input type="checkbox"/> Kwikpen® (prefilled) <input type="checkbox"/> Humalog® Mix50™ <input type="checkbox"/> Cartridge <input type="checkbox"/> Kwikpen® (prefilled)	<input type="checkbox"/> NovoMix® 30 <input type="checkbox"/> Cartridge	Starting doses: _____ units ac breakfast _____ units ac supper Increase breakfast dose by _____ units every day until pre-supper blood glucose has reached the target of _____ mmol/L. Increase pre-supper dose by _____ units every day until fasting blood glucose has reached the target of _____ mmol/L.					
Premixed regular (Cloudy) Give 30 minutes before meal.	<input type="checkbox"/> Humulin® 30/70 <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial	<input type="checkbox"/> Novolin® ge 30/70 <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Novolin® ge 40/60 <input type="checkbox"/> Cartridge <input type="checkbox"/> Novolin® ge 50/50 <input type="checkbox"/> Cartridge	Beware of hypoglycemia post-breakfast or post-supper. Stop increasing dose if hypoglycemia occurs					
PEN DEVICE Required if insulin cartridges selected. Insulin pen should match the insulin brand.	<input type="checkbox"/> HumaPen® Savvio™ <input type="checkbox"/> HumaPen LUXURA® HD <input type="checkbox"/> HumaPen® MEMOIR™	<input type="checkbox"/> NovoPen® 4 <input type="checkbox"/> NovoPen Echo®	<input type="checkbox"/> CliKSTAR™					
OTHER SUPPLIES	<input type="checkbox"/> Pen needles (if using a pen): Check needle size (refer to back for information): <input type="checkbox"/> 4mm <input type="checkbox"/> 5mm <input type="checkbox"/> 6mm <input type="checkbox"/> 8mm OR <input type="checkbox"/> At discretion of pharmacist <input type="checkbox"/> Glucose test strips <input type="checkbox"/> Lancets <input type="checkbox"/> Insulin Syringe (if using vials) <input type="checkbox"/> Glucagon Kit (if applicable) <input type="checkbox"/> Ketone Strips (if applicable)							
QUANTITY and REPEATS	Insulin	Mitte:	boxes	Repeats x	Supplies	Mitte:	boxes	Repeats x

Signature: _____

Print Name: patMdName

Date: ...tDate.yyyysmmsdd License #: patMdPhysN

- If fasting hypoglycemia occurs, the dose of bedtime should be reduced.
- Metformin and the secretagogue are usually maintained when basal insulin is added.
- If daytime hypoglycemia occurs, reduce the oral antihyperglycemic agents (especially secretagogues).
- Lantus®, Levemir® or Toujeo™ can be given at bedtime or in the morning.

the target of 4-7 mmol/L (usual target).

Basal + Bolus Insulins

- When basal insulin added to antihyperglycemic agents is not enough to achieve glycemic control, bolus (prandial) insulin should be added before meals. The regimens below incorporate bolus (prandial) insulin. There is the option of only adding bolus insulin to the meal with the highest postprandial BG as a starting point for the patient who is not ready for more injections.
- Typically, insulin secretagogues are stopped and only metformin is continued when bolus (prandial) insulin is added.
- For current basal insulin users, maintain the basal dose and add bolus insulin with each meal at a dose equivalent to 10% of the basal dose. For example, if the patient is on 50 units of basal insulin, add 5 units of bolus insulin with each meal.
- For new insulin users starting a full Basal + Bolus regimen, calculate Total Daily Insulin dose (TDI) as 0.3 to 0.5 units/kg, then distribute as follows:
 - 40% of TDI dose as basal insulin (Lantus®, Levemir®, Toujeo™, Humulin® N, Novolin®ge NPH) at bedtime.
 - 20% of TDI dose as prandial (bolus) insulin prior to each meal.
 - Rapid-acting insulin analogues (Apidra®, Humalog®, NovoRapid®) should be given 0-10 minutes before eating.
 - Short-acting insulin (Humulin® R, Novolin® ge Toronto) should be given 30 minutes before eating.
- An alternative distribution is 50% basal insulin (at bedtime) and 50% bolus insulin (distributed among the meals of the day).
- Adjust the dose of the basal insulin to achieve the target fasting BG level (usually 4-7 mmol/L).
- Adjust the dose of the bolus (prandial) insulin to achieve postprandial BG levels (usually 5-10 mmol/L) or pre-prandial BG levels for the subsequent meal (usually 4-7 mmol/L).

Dosing Example (100kg person)

Total daily insulin = 0.5 units/kg:

0.5 x 100kg (TDI)

- TDI = 50 units

Basal insulin = 40% of TDI:

40% x 50 units

- Basal bedtime = 20 units

Bolus insulin = 60% of TDI:

60% x 50 units

- Bolus = 30 units
- = 10 units with each meal

Premixed Insulin Before Breakfast and Before Dinner (Humalog® Mix25™, Humalog® Mix50™, NovoMix® 30, Humulin® 30/70, Novolin®ge 30/70)

- Target fasting and pre-supper BG levels of 4-7 mmol/L.
- Most patients with type 2 diabetes will need 40-50 units twice a day to achieve target but there is no maximum dose.
- Start at a low dose of 5 to 10 units twice daily (before breakfast and before supper).
- Patient can gently self-titrate by increasing the breakfast dose by 1 unit every day until the pre-supper BG is at target.
- Patient can gently self-titrate by increasing the supper dose by 1 unit every day until the fasting BG target is at target.
- Beware of hypoglycemia post-breakfast or post-supper. Stop increasing dose if this occurs.
- Premixed analogue insulins (Humalog® Mix25™, Humalog® Mix50™, NovoMix® 30) should be given 0 to 10 minutes before eating.
- Premixed regular insulins (Humulin® 30/70, Novolin® ge 30/70) should be given 30 minutes before eating.
- Continue Metformin and consider stopping secretagogue.

Dosing and Titration

10 units ac breakfast , 10 units ac supper.

Increase breakfast dose by 1 unit every 1 day until pre-supper blood glucose has reached the target of 4-7 mmol/L (usual target).

Increase supper dose by 1 unit every 1 day until fasting blood glucose has reached the target of 4-7 mmol/L (usual target).

Selection of Pen Needle

- Forum for Injection Technique (FIT) Canada recommends that 4, 5, and 6mm needles are suitable for all people with diabetes regardless of BMI. In addition, there is no clinical reason for recommending needles longer than 8mm. Initial insulin therapy should start with the shorter needle length (Berard L, et al. FIT Forum for Injection Technique Canada. Recommendations for Best Practice in Injection Technique. October 2011).

- Premixed analogue insulins (Humalog® Mix25™, Humalog® Mix50™, NovoMix® 30) should be given 0 to 10 minutes before eating.
- Premixed regular insulins (Humulin® 30/70, Novolin® ge 30/70) should be given 30 minutes before eating.
- Continue Metformin and consider stopping secretagogue.

Created March 2011

Increase supper dose by 1 unit every 1 day until fasting blood glucose has reached the target of 4-7 mmol/L (usual target).

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