

Insulin Reference Sheet

Not a complete reference of all insulins -please refer to CPS for more detailed info.

March 2011. References: Canadian Pharmacist's Letter; Canadian Diabetes Association 2008 Clinical Practice Guidelines

Single entity products

Insulin Type	Brand	Onset of Action	Peak Response	Duration of Action	Administration	Comments
Insulin, Rapid- Acting	Humalog (Lispro)	10-15 minutes	1-2 hours	3.5-4.75 hours	within 15 minutes before or immediately after meals	CLEAR solution- can mix with Humulin N (draw Humalog into syringe first)
	NovoRapid (Aspart)	10-15 minutes	1-1.5 hours	3-5 hours	within 5-10 minutes before or immediately after meals	CLEAR solution- can mix with Novolin ge NPH (draw NovoRapid into syringe first). Administer <i>immediately</i> .
	Apidra (Glulisine)	10-15 minutes	1-1.5 hours	3-5 hours	within 15 minutes before or within 20 minutes after meals.	CLEAR solution- can mix with NPH insulin (draw Apidra into syringe first). Administer <i>immediately</i> .
Insulin, Short-Acting	Humulin R	- 30 minutes	2-3 hours	6.5 hours	30-45 minutes before meals	CLEAR solution- can mix with Humulin N (draw regular into syringe first).
	Novolin ge Toronto					CLEAR solution- can mix with Novolin ge NPH (draw regular into syringe first).
Insulin, Intermediate Acting	Humulin N	1-3 hours	5-8 hours	Up to 18 hours	INDIVIDUALIZED When mixed with:	Re-suspend prior to administration by rolling vial between hands.
	Novolin ge NPH				a rapid acting insulin: 15 minutes before meals a short-acting insulin: 30 minutes before meals	CLOUDY suspension- can mix with rapid acting and short acting insulins. Refer to specific info above.
Insulin, Long acting	Lantus (Glargine)	90 minutes 90 minutes	Not applicable	Up to 24 hours (glargine 24 hours; detemir 16-24 hours	Usually give once daily at the same time, but may be given twice daily.	CLEAR- do NOT mix with other insulins
	Levemir (Detemir)		Not applicable			

Mixed Insulins

Insulin Mixtures	Brand	Onset of Action	Peak Response	Duration of Action	Administration	Comments
Rapid-Acting/ Intermediate Acting	Humalog Mix 25 Humalog Mix 50	Faster than Humulin 30/70	0.75-2.5 hours	Effective: 10-14 h Max: up to 18-24 h	INDIVIDUALIZED ADMINISTRATION TIMING. When applicable, give within 15 minutes of a meal.	CLOUDY- Re-suspend prior to administration by rolling vial between hands. Do NOT mix with other insulins
	Novomix 30	10-20 minutes	1-4 hours	Up to 24 hours	INDIVIDUALIZED ADMINISTRATION TIMING. When applicable, give 5-10 minutes before meal.	
Short Acting/ Intermediate Acting	Humulin 30/70	30-60 minutes	2-4 hours	Effective: 10-14 h Max: up to 18-24 h	INDIVIDUALIZED ADMINISTRATION TIMING When applicable, give approximately 30 minutes before meals.	CLOUDY- Re-suspend prior to administration by rolling vial between hands. Do NOT mix with other insulins
	Novolin ge 30/70 Novolin ge 40/60 Novolin ge 50/50	30 minutes	2-8 hours	Max: up to 24 hours		