



## Review of Types of Insulin

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(Presented at ASHP Midyear Clinical Meeting 2010)

*What are the different types of insulin?*

- Rapid acting
- Short acting
- Intermediate acting
- Long acting
- Mixed

*What insulin products are available?*

	<b>Eli Lilly &amp; Company</b>	<b>Novo Nordisk</b>	<b>Sanofi Aventis</b>
<b>Rapid</b>	Humalog® (insulin lispro)	Novolog® (insulin aspart)	Apidra® (insulin glulisine)
<b>Short</b>	Humulin® R (regular insulin)	Novolin® R (regular insulin)	
<b>Intermediate</b>	Humulin® N (NPH insulin)	Novolin® N (NPH insulin)	
<b>Long</b>		Levemir® (insulin detemir)	Lantus® (insulin glargine)
<b>Mixed</b>	Humalog® 75/25 (insulin lispro protamine/insulin lispro)  Humalog® 50/50 (insulin lispro protamine/insulin lispro)  Humulin® 70/30 (NPH/regular insulin)	Novolog® 70/30 (insulin aspart protamine/insulin aspart)  Novolin® 70/30 (NPH/regular insulin)	

*What are the time-action profiles of the different types of insulin?*

Type of insulin	Onset	Peak effect	Effective duration
<b>Rapid acting</b>	10-30 minutes	30 minutes-3 hours	3-5 hours
<b>Short acting</b>	30-60 minutes	2.5-5 hours	5-8 hours
<b>Intermediate acting</b>	1-4 hours	4-12 hours	10-16 hours
<b>Long acting</b>			
<b>Insulin glargine</b>	2-4 hours	No pronounced peak	24 hours
<b>Insulin detemir</b>	3-4 hours	Small peak – 3-9 hours	6-24 hours

*\*Approximate values and averages, based on available insulin products of each type; mixed insulin products have pharmacokinetic properties of individual components*

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