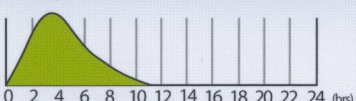
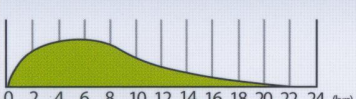
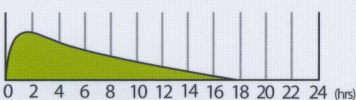
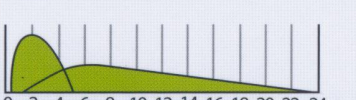


# Insulin Time Action Profiles

TYPE OF INSULIN*	DEVICE	ONSET OF ACTION (Min)	PEAKTIME (maximal effects) (Hrs)	DURATION OF ACTION (Hrs)	ADMINISTRATION TIME
<b>LONG ACTING (Basal Insulin)</b>					
<b>Lantus</b> <sup>®1</sup> Insulin glargine	SoloStar <sup>®</sup> Vial/Cartridge		No Peak	24	Same Time Every Day
<b>Levemir</b> <sup>®2</sup> Insulin detemir	FlexPen <sup>®</sup> Cartridge		3-14	Up to 24	
<b>RAPID ACTING</b>					
<b>Apidra</b> <sup>®3</sup> Insulin glulisine	SoloStar <sup>®</sup> Vial/Cartridge	15	1	4	Immediately Before Meal
<b>Humalog</b> <sup>®4</sup> Insulin lispro (rbe)	KwikPen <sup>®</sup> Vial/Cartridge	15	1	4	
<b>Novorapid</b> <sup>®5</sup> Insulin aspart	FlexPen <sup>®</sup> Vial/Cartridge	10-20	1-3	3-5	
<b>SHORT ACTING</b>					
<b>Actrapid</b> <sup>®6</sup> Human insulin (rys)	Vial/Cartridge	30	2.5-5	8	30 Minutes Before Meal
<b>Humulin R</b> <sup>®7</sup> Regular Soluble Human Insulin (rbe)	Vial/Cartridge	30	2-4	6-8	
<b>INTERMEDIATE ACTING</b>					
<b>Protaphane</b> <sup>®8</sup> Human insulin (rys)	Vial/Innolet <sup>®</sup> Cartridge	90	4-12	24	Same Time Every Day
<b>Humulin<sup>®</sup> NPH<sup>7</sup></b> Isophane – NPH – Human Insulin (rbe) Suspension	Vial/Cartridge	60	4-10	16-18	
<b>BIPHASIC</b>					
<b>Humulin<sup>®</sup> 30/70<sup>7</sup></b> Regular Human Insulin (rbe) Injection and Isophane Human Insulin (rbe) Suspension	Vial/Cartridge	30	2-12	16-18	30 Minutes Before Meal
<b>Mixtard<sup>®</sup> 30/70<sup>6</sup></b> Human insulin (rys)	InnoLet <sup>®</sup> Cartridge			24	
<b>Mixtard<sup>®</sup> 50/50<sup>6</sup></b> Human insulin (rys)	Cartridge	30	4-8	24	
<b>Humalog<sup>®</sup> MIX 25<sup>4</sup></b> Insulin lispro (rbe) and insulin lispro (rbe) protamine suspension	KwikPen <sup>®</sup> Cartridge	15	1	16-18	Immediately Before Meal
<b>Humalog<sup>®</sup> MIX 50<sup>4</sup></b> Insulin lispro (rbe) and insulin lispro (rbe) protamine suspension	KwikPen <sup>®</sup> Cartridge	15	1	16-18	
<b>NovoMix<sup>®</sup> 30<sup>3</sup></b> Insulin aspart	FlexPen <sup>®</sup> Cartridge	10-20	1-4	24	



# Insulin Time Action Profiles

TYPE OF INSULIN*	INSULIN PATTERN <sup>9</sup>	ONSET OF ACTION (Min)	PEAKTIME (maximal effects) (Hrs)	DURATION OF ACTION (Hrs)	ADMINISTRATION TIME	ROUTE OF ADMINISTRATION
<b>LONG ACTING (Basal Insulin)</b>						
Lantus <sup>®1</sup>			No Peak	24	Same Time Every Day	subcutaneous
Levemir <sup>®2</sup>			3-14	up to 24		
<b>RAPID ACTING</b>						
Apidra <sup>®3</sup> Humalog <sup>®4</sup> Novorapid <sup>®5</sup>		10-20	1-3	3-5	Immediately Before Meal	subcutaneous, <i>intravenous only in acute conditions</i>
<b>SHORT ACTING</b>						
Actrapid <sup>®6</sup> Humulin R <sup>®7</sup>		30	2-4	8	30 Minutes Before Meal	subcutaneous, <i>intravenous only in acute conditions</i>
<b>INTERMEDIATE ACTING</b>						
Protaphane <sup>®6</sup> Humulin <sup>®</sup> NPH <sup>7</sup>		60-90	4-12	16-24	Same Time Every Day	subcutaneous
<b>BIPHASIC</b>						
Humulin <sup>®</sup> 30/70 <sup>7</sup> Mixtard <sup>®</sup> 30/70 <sup>6</sup>		30	2-12	16-24	30 Minutes Before Meal	subcutaneous
Mixtard <sup>®</sup> 50/50 <sup>6</sup>		30	4-8	24		
Humalog <sup>®</sup> MIX 25 <sup>4</sup>		15	1	16-18	Immediately Before Meal	
Humalog <sup>®</sup> MIX 50 <sup>4</sup>		15	1	16-18		
NovoMix <sup>®</sup> 30 <sup>8</sup>		10-20	1-4	24		

**References:** 1. Lantus<sup>®</sup> Approved Product Information 2. Levemir<sup>®</sup> Approved Product Information 3. Apidra<sup>®</sup> Approved Product Information 4. Humalog<sup>®</sup> Approved Product Information 5. Novorapid<sup>®</sup> Approved Product Information 6. Actrapid<sup>®</sup>, Protaphane<sup>®</sup> and Mixtard<sup>®</sup> Approved Product Information 7. Humulin<sup>®</sup> Approved Product Information 8. NovoMix<sup>®</sup> Approved Product Information 9. Australian Clinical Practice Guidelines; Type 1 Diabetes in children and adolescents. 2005. [www.nhmrc.gov.au/publications](http://www.nhmrc.gov.au/publications). Accessed on 20/4/2015

\*Insulins that are currently marketed as of April 2015.

**Please review the full product information before prescribing.**

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