

Insulin Chart

Type of Insulin & Brand Names	Onset	Peak	Duration	Role in Blood Sugar Management
Rapid-Acting - inject 5-10 minutes before mealtime; can also be taken immediately after a meal				
Humalog or lispro	15-30 min.	30-90 min	3-5 hours	Rapid-acting insulin covers insulin needs for meals eaten at the same time as the injection. This type of insulin is used with longer-acting insulin.
Novolog or aspart	10-20 min.	40-50 min.	3-5 hours	
Apidra or glulisine	20-30 min.	30-90 min.	1-2½ hours	
Short-Acting - inject 30 to 60 minutes before a meal				
Regular (R) humulin or novolin	30 min.-1 hour	2-5 hours	5-8 hours	Short-acting insulin covers insulin needs for meals eaten within 30-60 minutes
Velosulin (for use in the insulin pump)	30 min.-1 hour	2-3 hours	2-3 hours	
Intermediate-Acting - inject up to 1 hour prior to a meal				
NPH (N)	1-2 hours	4-12 hours	18-24 hours	Intermediate-acting insulin covers insulin needs for about half the day or overnight. This type of insulin is often combined with rapid- or short-acting insulin.
Lente (L)	1-2½ hours	3-10 hours	18-24 hours	
Long-Acting – Give daily at the same time; not "timed" to mealtime because of long duration of action				
Ultralente (U)	30 min.-3 hours	10-20 hours	20-36 hours	Long-acting insulin covers insulin needs for about 1 full day. This type of insulin is often combined, when needed, with rapid- or short-acting insulin.
Lantus	1-1½ hour	No peak time; insulin is delivered at a steady level	20-24 hours	
Levemir or detemir (FDA approved June 2005)	1-2 hours	6-8 hours	Up to 24 hours	
Pre-Mixed* - A combination of specific proportions of intermediate-acting and short-acting insulin. Depending on product used, inject before mealtime, e.g. 10 minutes >% short-acting; 30 to 45 minutes >% intermediate acting. The numbers following the brand name indicate the percentage of each type of insulin)				
Humulin 70/30	30 min.	2-4 hours	14-24 hours	These products are generally taken twice a day before mealtime.
Novolin 70/30	30 min.	2-12 hours	Up to 24 hours	
Novolog 70/30	10-20 min.	1-4 hours	Up to 24 hours	
Humulin 50/50	30 min.	2-5 hours	18-24 hours	
Humalog mix 75/25	15 min.	30 min.-2½ hours	16-20 hours	

- Physician prescribes type and dose
- Snacks are provided to prevent hypoglycemia when >4 hours between meals. Some physicians recommend afternoon and HS snack, brittle diabetics may also require mid-morning snack
- Peak insulin action is most common time for insulin reaction
- Caution
 - Lantus is clear may be mistaken with regular or lispro insulins which are also clear
 - Never mix human or pork insulins (causes inactivation)
 - NPH can only be mixed with rapid or short-acting insulins

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