

Each insulin has its own unique therapeutic effect. The *onset of action* of a particular insulin is how long it takes the hormone to start working at lowering blood glucose levels. The *insulin peak* is the point at which the dose is at the height of its therapeutic effectiveness, and the *duration* is how long the blood glucose lowering effect of a given insulin lasts from injection to end. Following is a list of insulin types available in the United States, along with their onset, peak, and duration. Talk to your healthcare provider about your insulin regimen.

Insulin Effectiveness by Type

Type	Onset	Peaks	Duration
Rapid Acting			
Humalog (Lisbro)	<15 min.	30^90 min.	<5 hrs
Novolog (Aspart)	10^20 min.	1^3 hrs	3^5 hrs
Apidra (Glulisine)	10-15 min.	.5-1.5 hours	<3 hrs
Regular (R)			
Humulin R	30^60 min.	2^3 hrs	4^6 hrs
Novolin R	30 min.	2.5^5 hrs	8 hrs
NPH			
Humulin N	2^4 hrs	4^10 hrs	14^18 hrs
Novolin N*	90 min.	4^12 hrs	up to 24 hrs
Pre-Mixed			
Humalog 75/25	15 min.	1^6.5 hrs	18^26 hrs
Humulin 70/30	15^30 min.	2^12 hrs	18^24 hrs
Novolin 70/30	30 min.	2^12 hrs	up to 24 hrs
Humulin 50/50	15^30 min.	2^12 hrs	18^24 hrs
NovoMix 30	10^20 min.	1-4 hrs	up to 24 hrs
Peakless Basal			
Lantus (Glargine)	1-4 hrs	minimal	24 hrs
Levemir (Detemir)	1-4 hrs	minimal	up to 24 hrs

*Novolin N is also sold as ReliOn at Wal-Mart in the U.S.

Onset: how much time it takes for the insulin to start affecting blood glucose levels

Peak: how long it takes for the insulin to reach maximum effectiveness

Duration: how long the insulin remains active upon blood glucose levels

Sources: Food & Drug Administration, NovoNordisk A/S, Sanofi-Aventis US, Eli Lilly and Company

These are approximate values for insulin effectiveness. Results may vary based upon the individual's diet, exercise program, and the absorption of the injection site. Please consult your medical team when making any changes to your diabetes management.