

Insulin Chart

Each type of insulin has its own unique behavior. One difference among types of insulin is how long they take to start working at lowering blood-glucose levels. The “insulin peak” is the point at which the dose is working at its maximum, and the “duration” is how long the blood-glucose-lowering effect of the injection will last. The following is a list of insulin types available in the United States, along with how soon they start working, their peak, and how long they last. Talk to your healthcare provider about your insulin regimen.

Insulin Type	Onset of Action	Peak	Duration of Action
Lispro U-100 (Humalog)	Approx. 15 minutes	1-2 hours	3-6 hours
Lispro U-200 (Humalog 200)	Approx. 15 minutes	1-2 hours	3-6 hours
Aspart (Novolog)	Approx. 15 minutes	1-2 hours	3-6 hours
Glulisine (Apidra)	Approx. 20 minutes	1-2 hours	3-6 hours
Regular U-100 (Novolin R, Humulin R)	30-60 minutes	2-4 hours	6-10 hours
Humulin R Regular U-500	30-60 minutes	2-4 hours	Up to 24 hours
NPH (Novolin N, Humulin N, ReliOn)	2-4 hours	4-8 hours	10-18 hours
Glargine U-100 (Lantus)	1-2 hours	Minimal	Up to 24 hours
Glargine U-100 (Basaglar)	1-2 hours	Minimal	Up to 24 hours
Glargine U-300 (Toujeo)	6 hours	No significant peak	24-36 hours
Detemir (Levemir)	1-2 hours	Minimal**	Up to 24 hours**
Degludec U-100 & U-200 (Tresiba)	1-4 hours	No significant peak	About 42 hours
Afrezza	< 15 minutes	Approx. 50 minutes	2-3 hours

*Information derived from a combination of manufacturer’s prescribing information, online professional literature sources and clinical studies. Individual response to insulin preparations may vary.

**Peak and length of action may depend on size of dose and length of time since initiation of therapy

***Premixed insulins are more variable in peak and duration of action. For instance, even though the literature states that the effects may last for up to 24 hours many people find that they will need to take a dose every 10-12 hours.

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