

Insulins Commonly Used in the United States

TYPE 1 • TYPE 2

RESOURCE GUIDE 2005
INSULIN

Generic Name	Brand Names	Form	Manufacturer	Cloudy or Clear
Rapid-acting insulin lispro insulin aspart	Humalog* NovoLog*	analog analog	Eli Lilly and Company Novo Nordisk Pharmaceuticals, Inc.	clear clear
Regular regular regular	Humulin R Novolin R* ReliOn (Wal-Mart)	human human	Eli Lilly and Company Novo Nordisk Pharmaceuticals, Inc.	clear clear
Intermediate-acting NPH NPH	Humulin N* Novolin N* ReliOn (Wal-Mart)	human human	Eli Lilly and Company Novo Nordisk Pharmaceuticals, Inc.	cloudy cloudy
Long-acting insulin glargine	Lantus	analog	Aventis Pharmaceuticals	clear
Mixtures 70% NPH/30% regular 70% NPH/30% regular	Humulin 70/30* Novolin 70/30*† ReliOn (Wal-Mart)	human human	Eli Lilly and Company Novo Nordisk Pharmaceuticals, Inc.	cloudy cloudy
75% lispro protamine/ (NPL) 25% lispro	Humalog Mix 75/25*	analog	Eli Lilly and Company	cloudy
70% aspart protamine/ 30% aspart	NovoLog Mix 70/30*†	analog	Novo Nordisk Pharmaceuticals, Inc.	cloudy

*Available in prefilled, disposable pens or cartridges for reusable pens (see pages RG24). †Note difference between Novolin 70/30 (70% NPH/30% regular) and NovoLog Mix 70/30 (70% aspart protamine/30% rapid-acting aspart).

Human & Analog Insulin: Time of Action

Insulin	Onset	Peak (hours)	Duration (hours)
lispro, aspart	<15 minutes	1–2	3–4
regular	0.5–1 hour	2–3	3–6
NPH	2–4 hours	4–10	10–16
glargine	2–4 hours	peakless	20–24

Less Commonly Used Insulins

Generic Name	Brand Name	Form/Source	Manufacturer
regular	Humulin R, U-500	human	Eli Lilly and Company
regular	Iletin II R	pork	Eli Lilly and Company
NPH	Iletin II NPH	pork	Eli Lilly and Company
lente	Humulin L	human	Eli Lilly and Company
ultralente	Humulin U	human	Eli Lilly and Company
50% NPH/50% regular	Humulin 50/50	human	Eli Lilly and Company

Humulin R, U-500 is used in the rare patient who is extremely insulin resistant. Otherwise in the United States, insulin is standardized to U-100 (100 units per cc). U-40 insulin is used in some countries and requires syringes designed for that strength of insulin.

Pork insulins are rarely used. Some people who are doing well on pork insulin choose to stay with it. People new to insulin are started on human or analog insulin.

Lente is an intermediate-acting insulin. It is sometimes used in patients who are allergic to the protamine in NPH.

Ultralente was the longest-acting insulin until recently. Many people used it for many years. But it is not the perfect basal insulin, because it has a slight peak. Also, its action profile can vary quite a bit from day to day.