

# TYPES OF INSULIN AND HOW THEY WORK

There are many types of insulin. Some work slowly and some quickly. Slower or long-acting insulin is also called *basal insulin*. Basal insulins deliver a steady supply of insulin that helps control blood sugar levels over time.

Fast-acting insulin is also called *bolus insulin*. Bolus is a fancy word for “extra.” Times when your body may need some fast-acting (extra) insulin include when you are:

- Sick
- About to eat a meal
- Under stress
- Having a high blood sugar problem

The table below will help you understand how many commonly used insulins work.

Types of insulin	Common Insulin Names	When it's usually taken	How soon it starts working*	When it's working the most*	How long it lasts*
Fast-acting insulin	NovoLog Humalog Apidra	Right before a meal	15 minutes	30 to 90 minutes	3 to 5 hours
Long-acting insulin	Lantus Levemir	30 minutes before the evening meal or at bedtime	1 hour	Steady over time	Up to 24 hours
Short-acting insulin (also called regular insulin)	Novolin R Humulin R	30 minutes before a meal	30 to 60 minutes	2 to 4 hours	5 to 8 hours
Medium-acting (intermediate-acting) (NPH) insulin	Humulin N Novolin N	30 minutes before breakfast or at bedtime	1 to 3 hours	8 hours	10 to 16 hours
Premixed mixture of fast-acting and medium-acting (NPH) insulin	Humalog Mix 75/25 Humalog Mix 50/50 NovoLog 70/30	Before breakfast and/or before the evening meal	5 to 15 minutes	Varies	10 to 16 hours
Premixed mixture of short-acting (regular) and medium-acting (NPH) insulin	Humulin 70/30 Novolin 70/30 Humulin 50/50	30 minutes before breakfast and/or before the evening meal	30 to 60 minutes	Varies	10 to 16 hours
Ultra-long-acting insulin*	Toujeo Tresiba	Once-a-day at about the same time.	Over a number of hours.	Constant	32 to 42 hours

\*These insulins must only be taken using a pen device. Never a syringe.

\*Your doctor or diabetes educator will help you choose an insulin that's right for you. Insulin times may vary. Talk to your doctor for more information.