

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.