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Types of Insulin

KEY POINTS

- Many types of insulin are used to treat diabetes.
- Insulin is classified by how fast and how long it works in your body.
- Your doctor will prescribe the best insulin treatment for you.



Terms to know

- Onset: How quickly insulin lowers your blood sugar.
- Peak time: When insulin is at maximum strength.
- Duration: How long insulin works to lower your blood sugar.

Fast facts

If you have type 1 diabetes, you'll likely take a combination of insulins. Some people with type 2 diabetes will also need to take insulin.

Your doctor will prescribe the best insulin or combination of insulins for you based on several factors:

- How active you are.
- The food you eat.
- How well you're able to manage your blood sugar levels.
- Your age.
- How long it takes your body to absorb insulin and how long it stays active. (This is different for different people.)

Different brands of insulin vary in onset, peak time, and duration, even if they're the same type, such as rapid acting. Be sure to check the dosing information that comes with your insulin and follow your doctor's instructions.

Insulin types

For more information about types of insulin and when to take them, talk to your doctor or diabetes educator.

Insulin Type	Onset	Peak Time	Duration	Method
Rapid acting	15 minutes	1 hour	2 to 4 hours	Usually taken right before a meal. Often used with longer-acting insulin.
Rapid-acting inhaled	10 to 15 minutes	30 minutes	3 hours	Usually taken right before a meal. Often used with injectable long-acting insulin.
Regular/short acting	30 minutes	2 to 3 hours	3 to 6 hours	Usually taken 30 to 60 minutes before a meal.
Intermediate acting	2 to 4 hours	4 to 12 hours	12 to 18 hours	Covers insulin needs for half a day or overnight. Often used with rapid- or short-acting insulin.

Insulin Type	Onset	Peak Time	Duration	Method
Long acting	2 hours	Does not peak	Up to 24 hours	Covers insulin needs for about a full day. Often used, when needed, with rapid- or short-acting insulin.
Ultra-long acting	6 hours	Does not peak	36 hours or longer	Provides steady insulin for long periods.
Premixed	5 to 60 minutes	Peaks vary	10 to 16 hours	Combines intermediate- and short-acting insulin. Usually taken 10 to 30 minutes before breakfast and dinner.

SOURCES

CONTENT SOURCE:

National Center for Chronic Disease Prevention and Health Promotion; Diabetes