

Insulin Basics for T2D



Why is insulin used in T2D?

Insulin helps your body move glucose from the bloodstream into your cells for energy. In type 2 diabetes, the body may not make enough insulin or may not use it effectively. Adding insulin can improve glucose control, prevent complications, and help you feel better. Your plan will be individualized based on your health needs and lifestyle.

What types of insulin are there?

Insulin differs by how quickly it starts working and how long it lasts. You may use one type or a combination.

- Rapid-acting: starts within 10–20 minutes; used at meals
- Short-acting (regular): starts in 30 minutes; used before meals
- Intermediate-acting (NPH): lasts up to 12–16 hours
- Long-acting: steady coverage for about 24 hours (basal insulin)
- Ultra-long acting: lasts more than 24 hours
- Premixed insulin: combines two types in one injection

Your care team will choose the type for you.

When should I take my insulin?

Timing depends on the type:

- Rapid-acting: take at the start of meals
- Short-acting: take 30 minutes before eating
- Intermediate-acting (NPH): usually morning and/or bedtime
- Long-acting and ultra-long acting: once daily at the same time each day
- Premixed: typically twice daily before meals

Always follow the schedule given by your provider.

How do I use insulin safely?

A few simple habits can improve safety and comfort:

- Rotate injection sites (abdomen, thighs, buttocks, upper arms)
- Use a new pen needle or syringe each time
- Keep insulin at room temperature once opened
- Store unopened insulin in the refrigerator
- Check expiry dates and appearance
- Carry fast-acting glucose to treat lows

Where can I find reliable information?

- T2D Network
- Family doctor or endocrinologist
- Diabetes educator or nurse
- Dietitian
- Pharmacist