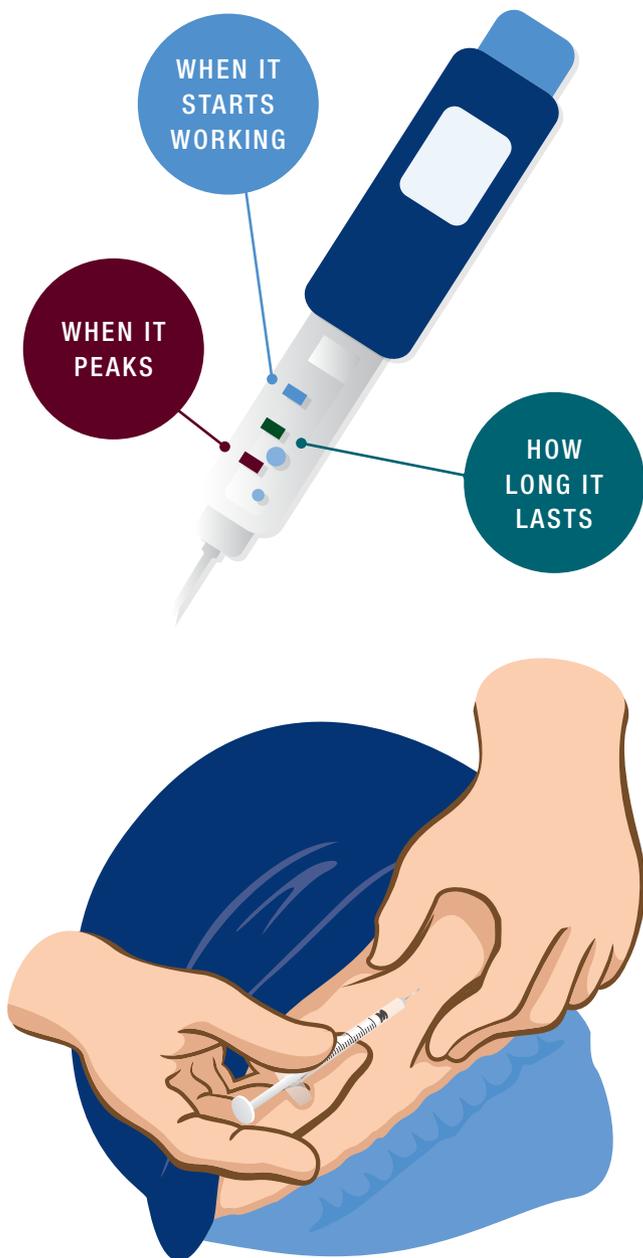


MEALTIME INSULIN: TAMING THE SPIKES



THERE ARE THREE THINGS TO CONSIDER WITH EACH TYPE OF INSULIN:



MEALTIME INSULIN:

Insulin that you take just before you eat a meal. It is a rapid-acting (bolus, or mealtime) type of insulin and is usually taken in addition to a long-acting (basal, or background) insulin.

BASAL/BACKGROUND INSULIN COMES IN TWO FORMS:

Long-acting insulin and intermediate-acting insulin.

BOLUS/MEALTIME INSULIN COMES IN TWO FORMS, AS WELL:

Rapid-acting insulin and short-acting insulin.

Also, some types of insulin come premixed, as a combination of two types of insulin—either rapid-acting insulin or short-acting insulin mixed with intermediate insulin.

RAPID-ACTING INSULIN:

-  **Starts working** about 15 minutes after injection
-  **Peaks** about 1 hour after injection
-  **Duration** 2 to 4 hours after injection

SHORT-ACTING INSULIN:

-  **Starts working** about 30 minutes after injection
-  **Peaks** about 2 to 3 hours after injection
-  **Duration** 3 to 6 hours after injection

Visit endocrine.org for more information.

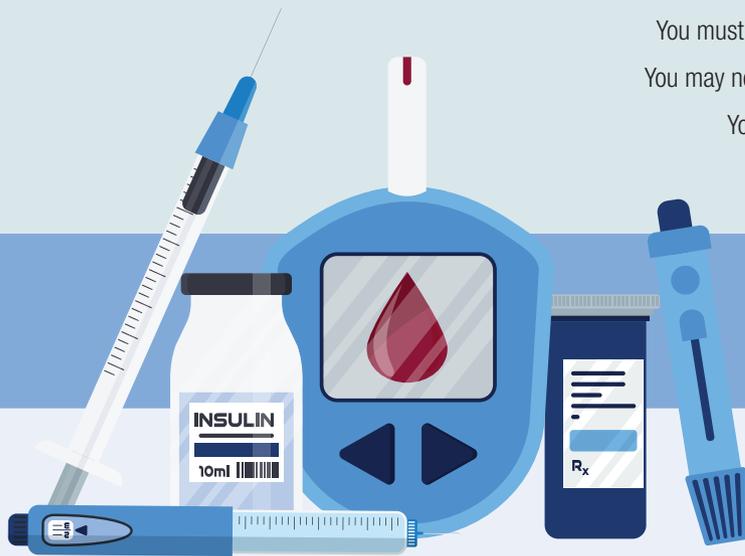
Editor: Christine Burt Solorzano, MD

TWO APPROACHES TO COMBINING BACKGROUND INSULIN AND MEALTIME INSULIN

Often, a doctor will add a mealtime insulin to a background insulin in order to better control after-meal blood glucose (sugar) spikes and give better control of blood sugar throughout the day. Or, a premixed insulin will be prescribed to achieve the same result. There are pros and cons to either approach. Your doctor will decide which one makes the most sense for you.

ADD RAPID-ACTING INSULIN TO BACKGROUND INSULIN

2-5 INJECTIONS PER DAY



PROS

- Works well with less regular eating schedules—don't have to eat at certain times
- Easier transition for people already taking background insulin
- Can be used alone or with oral medicines
- Can vary the types and quantities of food you eat

CONS

- You must take your mealtime insulin with you, so you can take it before you eat
- You may need to take 2-5 injections per day, depending on your eating schedule
- You pay for two types of insulin—one for background, one for mealtime

PROS

- Only one copay
- Fewer shots (typically 1-2 per day)
- Can be used alone or with oral medicines
- May need to eat extra food/snacks to avoid hypoglycemia (low blood sugar)

CONS

- You must eat regular meals or you will get hypoglycemia (low blood sugar)
- You are more likely to get hypoglycemia at night
- Both types of insulin are in one bottle, so you can't adjust one without adjusting the other

PREMIXED INSULIN

1-2 INJECTIONS PER DAY

Patients have questions. We have answers.

Endocrine Society is your trusted source for endocrine patient education.

Our free, online resources are available at endocrine.org/patient-engagement