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.
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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**

**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

**PREMIXED INSULIN**

**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