

How Medications Work: Insulin Introduction

Narrator

Your medicine is insulin. By now you've heard of insulin, right? That chemical in the body that's in charge of blood sugar. Insulin has three main jobs in the belly, with the muscles and with the liver.

1. First, insulin decides how much food to turn into sugar for energy. If you are active, you need a lot of sugar. If you're not so active, insulin slows down the sugar-making.
2. Then the sugar travels through the blood to the muscles. Muscles use the sugar for energy to move. But insulin has to open up the muscles. If insulin guessed wrong, and the muscles really don't need that much energy right now,
3. Then insulin stores it in the liver until you need it.

Your insulin isn't working or isn't working well enough. Too much sugar gets made. The muscles can't open up to use it, and the storage vault's been left unlocked.

Taking insulin is like hiring a new boss at a factory to replace the one who isn't up to the task. Like all workers, different kinds of insulin have different work schedules. It's worth knowing about all four kinds, because you may have some choices. Like real human beings, insulin workers who work a long shift take longer to get up to full speed.

1. Long-acting insulin works a long shift: A full 24-hour day. It takes a while; after you inject it, to start working. About an hour. After 10 hours, it's working the hardest. In 20 hours, it slows down. Four hours later, its day is over.
2. Another kind of insulin is medium acting. Some people call it intermediate. It works an 18 hour shift. After you inject, it takes an hour and a half to get up to speed. In 6 hours it's working its hardest. Twelve hours later, it slows down. In 18 hours, its shift is done.
3. Then there's regular insulin. It works a regular shift, eight hours. It takes a half hour to start working. In 3 hours it works hardest. After 6 hours it slows down. At 8 hours, it calls it a day.
4. Quick-acting insulin starts to work in 15 minutes. It's working hard in 1 hour. After 3 hours it slows down and at 5 hours, it punches out.

There they are, four kinds of insulin.

Now here's the GREAT TRADEOFF: What's more important to you? If you want fewer shots, then you have to keep a tighter schedule.

For example, if you eat and exercise in the same amounts at the same time every day, you might need just one or two shots a day, or maybe a premix of medium and regular. If you want a looser schedule, then you have to take more shots. For example, you might take one long-acting in the morning and a quick three times a day before meals. That's four shots, but you could eat and exercise whenever.

Fewer shots, tighter schedule. Looser schedule, more shots. Which way fits your life better? Talk to your doctor. You might have a choice.