If you have type 1 diabetes, your pancreas cannot make any insulin. You must take insulin to live. If you have type 2 diabetes and need insulin it is because all the other medicines are not working to keep your blood sugar where it needs to be to prevent problems. Keep in mind, insulin does not cause the problems. **High blood sugar** causes the damage to organs and your body.

## What do I need to know about insulin?

You take insulin as a shot. You inject the insulin just under the skin with a small, short needle.

## Can insulin be taken as a pill?

No. Insulin is a protein. If you took insulin as a pill, your body would break it down and digest it before it got into your blood to lower your blood glucose.

## How does insulin work?

Insulin lowers blood sugar levels by moving sugar (glucose) from the blood into the cells of your body. Once inside the cells, glucose provides energy. Insulin lowers your blood glucose whether you eat or not. This is why you must eat on time if you take insulin.

## How often should I take insulin?

Most people with diabetes need at least two insulin shots a day. Some people take three or four shots a day. Your doctor works with you to get good glucose control.

## When should I take insulin?

Take insulin 30 minutes before a meal if taking regular or long-acting insulin. If you take a fast-acting insulin, you should take your shot just before you eat.

# How many types of insulin are there?

There are six main types of insulin. Each one works at it's own speed - fast, medium, or slow. Many people take two types of insulin.

# Does insulin work the same all the time?

After a short time, you will get to know when your insulin starts to work, when it works its hardest to lower blood glucose, and when it finishes working. You will learn to match your mealtimes and exercise times to the time when each insulin dose you take works in your body.



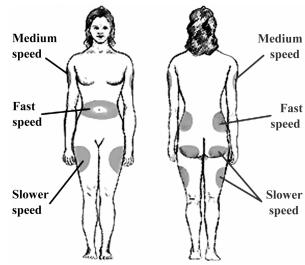


### How quickly or slowly insulin works in your body depends on many things.

- Your own body.
- The place on your body where you inject insulin.
- The type and amount of exercise you do.
- The length of time between your shot and exercise.

### Where on my body should I inject insulin?

You can inject insulin into many places on your body. Inject near the stomach and it works fastest. Inject into the thigh and it works slowest. Inject into the arm and it works at medium speed. Ask your doctor or diabetes teacher to show you the right way to take insulin and in which parts of the body to inject it.



## How should I store insulin?

- Keep the bottle you are using at room temperature.
- Once open, write the date 30 days away on your bottle. Do this every time you open a bottle. For example, if today's date were 11/14/03 then you would write 12/14/03 on the bottle.
- Throw away the bottle after the 30 days have passed.
- Do **not** keep the bottle in very cold places like the freezer.
- Do **not** keep the bottle in hot places such as the trunk of the car or by a window.

Heat and extreme cold breaks down insulin and it will not work. It is helpful to keep extra bottles of insulin in your house. Make sure to store all extra bottles in the refrigerator.

#### What are some side effects of insulin?

The most common side effects are weight gain and having low blood sugar (glucose). You need insulin to keep your blood sugar in good control. Your doctor will work with you to get the best treatment plan to keep you living well with diabetes.

## For more information

For classes and one on one support with diabetes care call Alliance Health

Programs at 510-747-4577. www.alamedaalliance.com