# How To Take Insulin

#### **GENERAL INFORMATION**

Insulin helps glucose (sugar) go from the blood into the body cells. The body uses glucose for energy. Insulin cannot be taken by mouth. It must be injected.

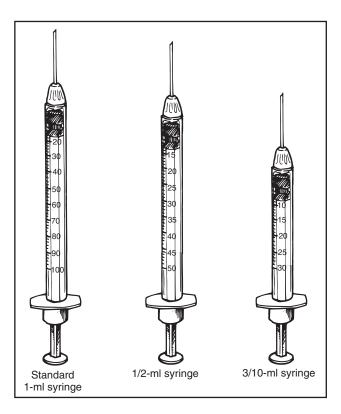
Insulin is made

- In different types: immediate-acting (lispro), shortacting (regular), intermediate-acting (NPH or Lente), long-acting (Ultralente or Protamine zinc), and pre-mixed (70/30, 50/50)
- In different strengths: U100 is common. The dose is measured in units.
- From different sources: human, beef, or pork.

## **GUIDELINES**

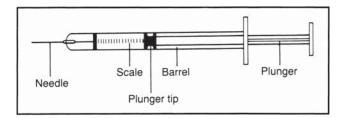
It is very important to take *only* the type, strength, dose, and source your doctor has prescribed.





# Learning about Syringes

- Insulin syringes are made in 1-ml, 1/2-ml, and 3/10-ml sizes. The markings on each syringe scale are different. Use the syringe size your nurse or doctor has instructed you to use. Your syringe size is \_\_\_\_\_\_.
- **2.** To measure the insulin dose, look at the ring closest to the needle on the plunger tip. Your nurse will show you how to measure your dose.



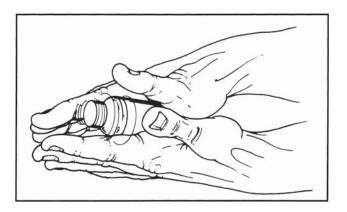
# Preparing the Insulin

Gather your equipment. You need

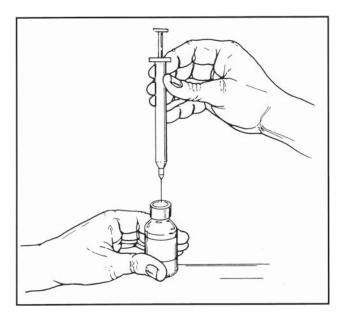
- Insulin,
- Needle and syringe,
- Alcohol wipe (or cotton ball moistened with isopropyl alcohol),
- Record of injection sites.
- 1. Wash your hands.
- **2**. Check the insulin bottle for
  - **a.** The right strength and type of insulin on the label,
  - **b.** The expiration date on the label,
  - **c.** Any floating objects or cracks in the bottle.
- **3**. For an unopened bottle, flip off the plastic cap.

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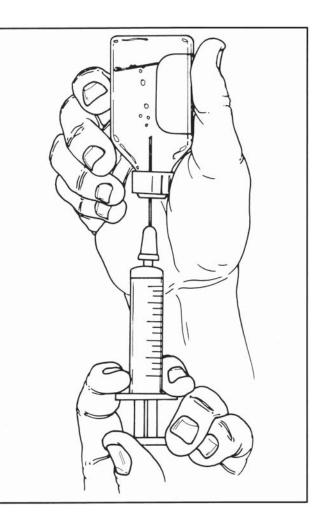
**4.** Roll the insulin bottle back and forth between your palms to mix the insulin. Do not shake the bottle.



- **5.** Clean the top of the insulin bottle with an alcohol wipe.
- **6.** Draw air into the syringe by pulling back on the plunger. The amount of air should be the same as your insulin dose.
- **7.** Take off the needle cap. Do not allow the needle or insulin bottle top to touch anything. Push the needle through the center of the rubber top of the insulin bottle. Push the plunger in.



- **8.** Turn the syringe and bottle upside down.
  - **a.** Keep the needle tip covered by insulin. This prevents air bubbles from entering the syringe.
  - **b.** Hold the syringe and bottle in one hand.
- **9.** With your other hand, pull back slowly on the plunger until the right dose of insulin is in the syringe.



- **10.** Check for air bubbles in the syringe.
  - **a**. To remove air bubbles, lightly tap the syringe and then push in the plunger until the bubbles are gone.
  - **b.** If you need to, pull the plunger down until you have the right dose of insulin in the syringe again.
- **11.** Double check the insulin dose in the syringe.
- **12.** Pull the needle and syringe out of the bottle. Put on the needle cover.

# Sites for Injection

- 1. Use the areas marked on the body drawing (pp. 117 and 118). Follow your nurse's or doctor's directions for other areas and for rotation patterns.
- **2.** Change (rotate) the site according to the instructions your nurse or doctor gives you. Don't stay in one area for more than a week.
- **3.** Keep a record of your injection sites (include the date and time). You may use the body drawing to keep a record of injection sites by filling in the date in the appropriate box.

- **4.** Use as many sites as possible.
  - **a.** Avoid skin that is raised, thickened, very thin, or infected.
  - **b.** Use the stomach sites on days when you will be doing activities that involve exercising the legs and arms.
  - **c.** Remember that hot packs or hot baths can increase the rate insulin is absorbed.

## **Injecting Insulin**

- 1. Check your injection site record to choose a new site.
- **2.** Clean the injection site with an alcohol wipe and allow it to air dry. Keep the alcohol wipe within reach.
- **3.** Hold the syringe like a pencil. Remove the needle cap without touching the needle.
- **4.** With the other hand, pinch up about a 2- to 3inch area of cleaned skin. Do not touch the skin where the needle will go.
- **5.** Quickly push the needle into the skin (45–90 degree angle).



- **6.** With one free finger, push the plunger all the way down.
- **7.** Pull out the needle and press lightly on the site for a few seconds with the alcohol wipe.
- 8. Put on the needle cap or use the needle clippers.
- **9.** Put used needles/syringes into a sturdy container such as a coffee can or laundry detergent bottle with a tight lid. Keep this container away from children.
- **10.** Dispose of full container according to your local requirements.
- **11.** Write the date, time, and site used in your record book.

# **Other Insulin Delivery Systems**

1. Devices such as the insulin pen and insulin pump require specific training according to the individual manufacturer's recommendations.

## Special Note: Reusing Syringes

Some patients are able to use the needle and syringe more than once to save money. Talk to your doctor or nurse about syringe reuse *before* you try it. Do not reuse bent needles or syringes that have fallen on the floor.

# **Safety Precautions**

- **1.** The insulin bottle you are now using should be kept at stable room temperature.
- 2. Keep your extra insulin bottle(s) refrigerated.
- **3.** Keep insulin out of heat, sunlight, or freezing cold. Throw away insulin if it freezes.
- **4.** When you are traveling, keep your insulin and syringes with you. Ask your physician for a prescription for syringes and your type and dose of insulin (in case you lose your supplies).
- **5.** Never switch insulin without consulting your doctor.
- **6.** Always carry some form of medical identification with you.

# **OTHER INSTRUCTIONS**

