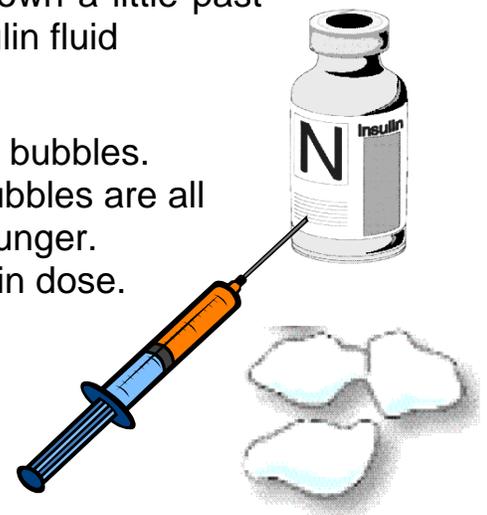


How Do I Prepare My Insulin Injection?

If you are using insulin, you should know that insulin helps to change food you eat to fuel for energy, and helps to store glucose in the liver as glycogen

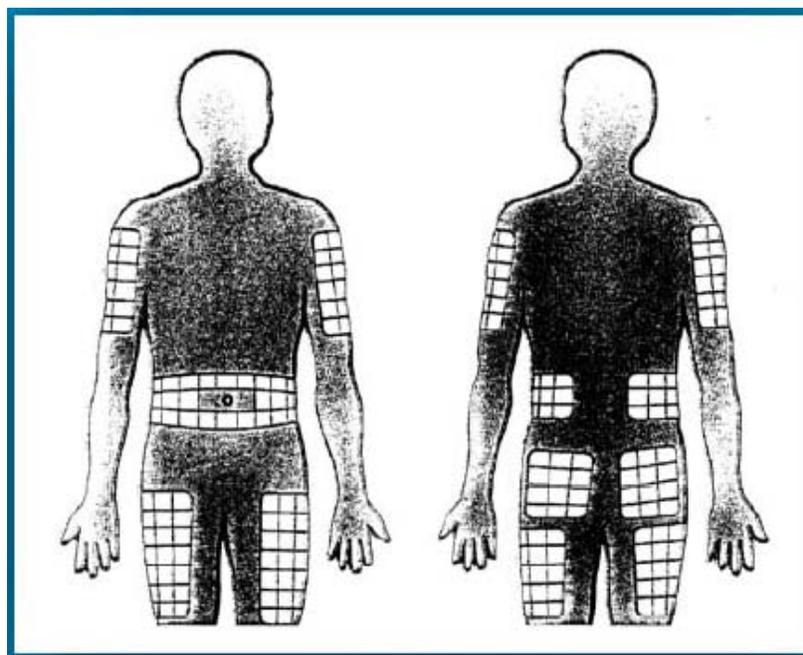
How To Draw-Up Insulin

1. Gather your needed equipment: insulin, syringe, alcohol pad (optional).
2. Wash your hands and the injection site or use alcohol and allow to dry.
3. Check bottle label to make sure it is the correct insulin.
4. Check expiration date and if expired do not use. A bottle of insulin is good for 28-30 days at room temperature. Keep track of the date you opened the bottle of insulin. You can write the date on the insulin bottle, a calendar or your log book. Unopened bottles should be kept in the refrigerator.
5. For new bottles of insulin flip off the protective cap. Wipe the rubber top of insulin bottle with an alcohol pad.
6. Roll cloudy insulin between hands to mix well; usually 20 times. Clear insulin does not have to be mixed. Never shake the insulin bottle. Shaking causes bubbles which can cause an incorrect dose.
7. If you mix insulin, always draw up the clear insulin then the cloudy.
8. Remove cap from needle. Keep hands away from needle. Draw air into the syringe to equal the number of units of insulin needed.
9. Place needle into rubber top of insulin bottle while the bottle is on the table. Push plunger down to inject air into the bottle.
10. Turn bottle and syringe upside down. Pull plunger down a little past your insulin dose. Make sure the needle is in the insulin fluid to avoid drawing up air. Remove syringe from bottle.
11. Hold syringe upright while checking the syringe for air bubbles. If any air bubbles are present, tap the syringe until bubbles are all at the top. Push bubbles out by gently pushing the plunger. The plunger should now be at the mark for your insulin dose. If there is too much insulin, push it out (into the air).

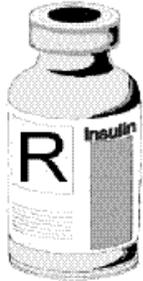


How Do I Inject Insulin?

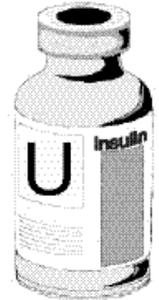
1. Your injection site should be clean. Cleaning the area with an alcohol pad is optional. Allow the area to dry before you inject your insulin.
2. Hold syringe like a pencil. Push the needle straight in the skin (fat area) at a 90-degree angle. If you are thin, push in at a 45-degree angle to avoid your muscle.
3. Push plunger all the way down to inject the insulin. When insulin is injected, remove the needle from skin and apply pressure to the injection site. Avoid rubbing the site.
4. Dispose of syringe in a sharp's container or a hard plastic container such as an empty laundry soap container.
5. If rotating sites, rotate injections within the chosen site for at least a week before another site is used. Areas to use include abdomen (absorbed the fastest), arms, thighs, and buttocks.



Insulin Types

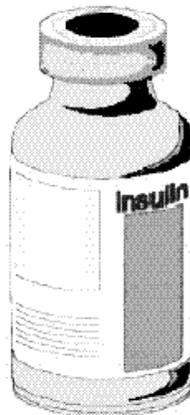


Short Acting, Regular (R)
Starts working: **30 minutes - 1 hour**
Works best: **2 – 5 hours**
Ends: **6 – 10 hours**



Long Acting, Ultralente (U)
Starts working: **4 – 6 hours**
Works best: **8 – 20 hours**
Ends: **24 – 28 hours**

Rapid Acting, Aspart (Novolog®)
Starts working: **10 – 20 minutes**
Works best: **1 - 3 hours**
Ends: **3 – 5 hours**



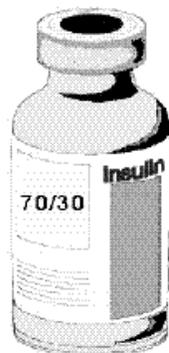
Rapid Acting, Lispro (Humalog®)
Starts working: **15 – 30 minutes**
Works best: **30 min – 2 ½ hours**
Ends: **3 – 6 ½ hours**



Intermediate Acting, NPH (N) or Lente (L)
Starts working: **1 ½ hour – 1 hour**
Works best: **4 – 15 hours**
Ends: **16 – 24 hours**

Long Acting, Glargine (Lantus)
Starts working: **1 hour**
Works best: **2 – 20 hours**
Ends: **Up to 24 hours**

Not to be mixed with other insulins



NPH and Regular Mixture (70/30)
Starts working: **0 - 1 hour**
Works best: **3 – 13 hours**
Ends: **12 - 24 hours**