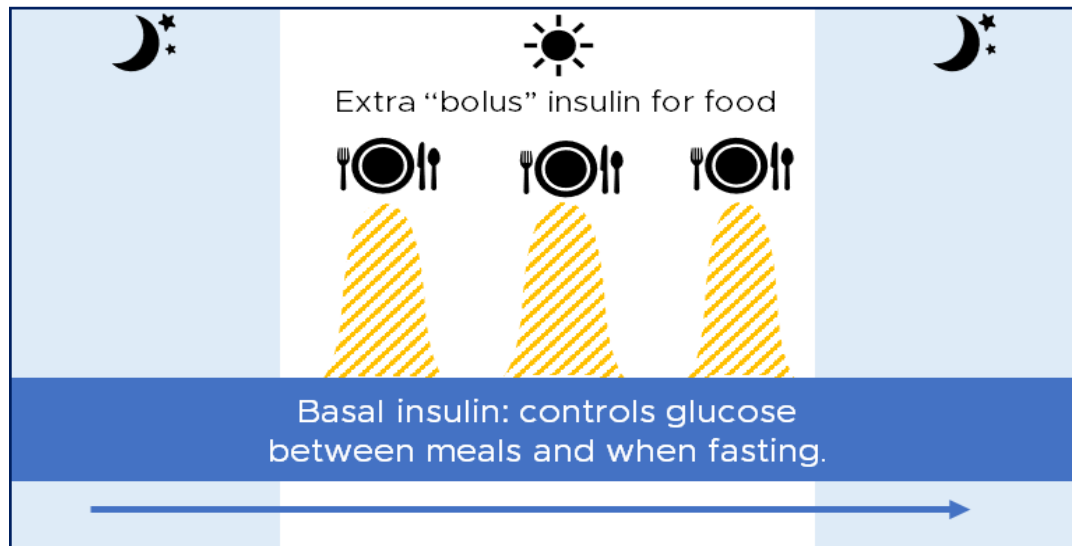


## Starting Basal (Long-acting) Insulin

### How Insulin Works

Your body always needs some insulin even when you are not eating. This is called “**basal**” insulin. You need extra when you eat and when blood sugars rise for other reasons. This is called “**bolus**” insulin. Insulin lowers your blood sugar.



### Types of Insulin

There are many types of insulin. Some work quickly and some are very long-lasting. Most types of insulin are shown below. Some types of insulin combine basal (long-acting) and bolus (rapid- or short-acting) insulins together.

### Insulin Plans

An insulin plan will be made based on your needs. Some people need one type of insulin; others need two types of insulin. Some need insulin multiple times a day to keep blood sugars in a healthy range; others need insulin only when blood sugars get too high (“correction” insulin). Some types of insulin require you to eat at certain times when the insulin is working well. For example, if you take NPH or a mixed insulin in the morning, you will need to eat lunch.

<b>Rapid Acting</b> Aspart (Novolog®, Fiasp®) Lispro (Humalog®, Lyumjev, Admelog®, Humalog® U-200) Glulisine (Apidra®)  Onset: 5-15 minutes Peak: 1-2 hours Lasts: 4-6 hours  <b>Bolus</b>	<b>Short Acting</b> Regular (Humulin R, Novolin R)  Onset: 30 minutes Peak: 2-4 hours Lasts: 6-10 hours  <b>Bolus</b>	<b>Long Acting</b>  NPH (Humulin N, Novolin N)  Onset: 1-2 hours Peak: 4-8 hours Lasts: 10-20 hours  <b>Basal</b>	<b>Longer Acting</b>  Glargine (Lantus®, Basaglar®, Semglee®) Onset: 1-2 hours Peak: none Lasts: 24 hours  Detemir (Levemir®) Onset: 1-2 hours Peak: 8-12 hours Lasts: 12-24 hours  <b>Basal</b>	<b>Longest Acting</b>  Glargine U-300 (Toujeo®) Onset: 6 hours Peak: none Lasts: 36 hours  Degludec (Tresiba® U-100/U-200) Onset: 1 hour Peak: 12 hours Lasts: 42+ hours  <b>Basal</b>
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### Starting Basal Insulin

If you are starting basal insulin, you will need to choose a time that is convenient and easy to remember.

### Disadvantages of basal insulin:

- Does not control the rise in blood sugars after meals
- Needs to be taken at about the same time daily

### Advantages of basal insulin:

- One injection per day
- Decrease in overall blood sugars
- Can take the injection at any time
- Need not be taken with meals

**Do not change the basal insulin dose** without talking with your diabetes nurse or doctor.

**Medicine Plan (Date: \_\_\_\_\_ Please update as changes are made.)**

Type of Insulin	Breakfast	Lunch	Dinner	Bedtime
Long-acting insulin (basal):				
Mixed insulin	_____ units at _____ (time)		_____ units at _____ (time)	
Other diabetes medicines				

### Storage of Insulin

- Keep your **unopened** insulin in the refrigerator (36°F-46°F).
- Keep your **opened** insulin at room temperature (56°F-80°F).
- Do not freeze your insulin or leave them in a hot car or in direct sunlight.

### Expiration

Mark your vial/pen with the date of first use. Expiration dates shown here are based on **date of first use**. Follow the manufacturer expiration date printed on the vial/pen if unopened/unused.

Insulin Pens	Insulin Vials
<ul style="list-style-type: none"><li>• <b>Humulin N Kwikpen:</b> 14 days</li><li>• <b>Levemir® and Toujeo®:</b> 42 days</li><li>• <b>Tresiba®:</b> 56 days</li><li>• <b>Humalog 75/25, 50/50:</b> 10 days</li><li>• <b>Novolog 70/30:</b> 14 days</li><li>• <b>All other insulin types:</b> 28 days</li></ul>	<ul style="list-style-type: none"><li>• <b>Humulin NPH:</b> 31 days</li><li>• <b>Novolin NPH:</b> 42 days</li><li>• <b>Levemir®:</b> 42 days</li><li>• <b>Tresiba®:</b> 56 days</li><li>• <b>Humulin U-500:</b> 40 days</li><li>• <b>All other insulin types:</b> 28 days</li></ul>

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 12/2022. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8264