

# Diabetes Medicine:

## *Humulin-R® U-500 Insulin*

### What is insulin, and what does it do?

Insulin is a medicine used to treat diabetes. It is given by injection (shot). It moves glucose (sugar) out of your blood and into your body's cells.

Insulin helps lower your blood glucose and makes it less likely that your diabetes will cause serious problems.

### What is U-500 insulin?

U-500 helps control blood glucose for 8 to 24 hours. This type of insulin is only used if you need more than 200 units of insulin per day. U-500 insulin is 5 times stronger than standard U-100 insulin.

### When do I give U-500 insulin?

U-500 starts working about 30 minutes after it is given. You will likely need to give yourself a dose 2 or 3 times per day before meals. **To prevent low blood glucose (hypoglycemia), you should always eat within 30 minutes of giving U-500 insulin.**

### How do I give U-500 insulin?

U-500 can be injected with a syringe or a pen.

- Inject insulin into the fatty tissue just under the skin, NOT the muscle.
- The best areas to inject insulin are the **belly, the top and outside of your thighs, or the back of your upper arms.**
- **Change injection sites** within those areas each time you give a dose. **Do not inject in the same site every day.**

See the back of this sheet to learn how to give U-500 insulin with a syringe or a pen.

*In the United States, nearly half of adults with diabetes use insulin every day.*



### General guidelines for taking insulin

Here are some general rules to help you use insulin safely:

- **Try to eat your meals and snacks at the same time every day.** Stick to a regular schedule for breakfast, lunch, dinner, and bedtime snacks. This will help your insulin work better and keep your blood glucose at the right level.
- **Don't stop taking your insulin,** even if you feel good or your symptoms go away. You need insulin to stay well.
- **Don't change your insulin dose** unless your doctor tells you to.
- **If you're sick,** check your blood glucose more often. Sometimes you need more insulin when you're sick, and sometimes you need less. The only way to know if you should change your dose is by checking your blood glucose often.
- **If you throw up more than once or have a fever of 101°F or higher for more than 8 hours,** call your healthcare provider.

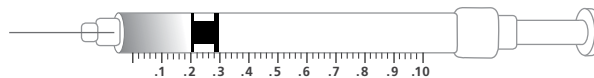
## How do I measure my U-500 insulin dose using a syringe?

U-500 insulin is 5 times stronger than standard insulin. This means you must be extremely careful when measuring out your insulin. **If you take too much insulin, you could get severe low blood glucose (hypoglycemia).**

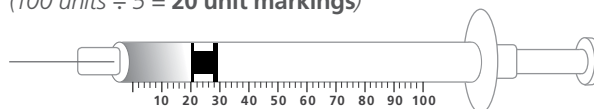
See the examples in the box on the right. Your healthcare provider or diabetes educator will show you how to figure your dose of U-500 insulin based on the type of syringe you are using.

You may use a volumetric (tuberculin or allergy) syringe or a U-100 insulin syringe to measure a U-500 dose. See examples of doses below:

**100 units of U-500 insulin in a volumetric syringe**  
(100 units ÷ 500 = **0.2 mL**)



**100 units of U-500 insulin in a U-100 insulin syringe**  
(100 units ÷ 5 = **20 unit markings**)



## How do I measure my U-500 insulin dose using a pen?

You will need to prime the pen before you use it. Then, turn the dial at the end of the pen to the number of units of U-500 to be injected. **The dose is figured automatically.**

**Do not use a syringe to take insulin from the U-500 pen.** The syringe does not measure insulin in the same way as the pen. You could get too much insulin, which could cause severe low blood glucose (hypoglycemia).



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## How do I store U-500 insulin?

- Keep unopened insulin vials and pens in the refrigerator.
- When you start to use a vial, mark it with the date. Keep it in the refrigerator or at room temperature, and throw it away 40 days after opening it — even if you haven't finished it.
- When you start using an insulin pen, mark it with the date. Keep it at room temperature, and throw it away 28 days after opening it — even if you haven't finished it.

### My U-500 insulin regimen

Insulin name: \_\_\_\_\_ When to take: \_\_\_\_\_ Dose: \_\_\_\_\_

Insulin name: \_\_\_\_\_ When to take: \_\_\_\_\_ Dose: \_\_\_\_\_

If I accidentally miss a dose, I should: \_\_\_\_\_

Correction dose, other instructions: \_\_\_\_\_

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