U-500 HUMULIN R INSULIN
Patient Education

What is U500 Insulin?

U 500 Humulin R insulin is a stronger form of Humulin R insulin. It is available by prescription to people with diabetes that require high amounts of insulin. Most people that are switched to U500 Humulin R insulin require greater than 200 units a day of Humulin R U100 insulin. Because U500 Humulin R insulin is a stronger concentration of insulin it can provide better blood glucose control to those people that need large doses.

- The insulin syringes available on the market are not designed for use with the higher concentrated U500 Humulin R. To avoid confusion and prevent medication errors, Hendricks Regional Health uses a different kind of syringe than an insulin syringe. The syringe used is called a TB syringe and is a type of syringe that measures the insulin dose in milliliters instead of units.
- A “conversion chart” is available for both nurses and patients to help understand the dosing measurement. You can request a conversion chart from your nurse at any time. Here is an example:

<table>
<thead>
<tr>
<th>Volume (ml of insulin)</th>
<th>Actual Units of U500 Insulin</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 ml</td>
<td>50 units</td>
</tr>
<tr>
<td>0.11 ml</td>
<td>55 units</td>
</tr>
<tr>
<td>0.12 ml</td>
<td>60 units</td>
</tr>
</tbody>
</table>

See below for additional key points:

- U500 Humulin R insulin is a type of regular insulin, but it is 5 times stronger than Humulin R U100 insulin.
- U500 Humulin R insulin is only available in a vial of insulin.
- U500 Humulin R insulin onset (when the insulin starts working) is about 30-45 minutes.
- U500 Humulin R peak of action (when the insulin is at its strongest) varies from 2-4 hours.
- U500 Humulin R duration of action is varied and depends on the amount that is injected. For example, the duration can be as short as 8 hours or as long as 24 hours.