Patient Information
Humulin® (HU-mu-lin) R
insulin human injection
(100 units per mL)

Do not share your syringes with other people, even if the needle has been changed. You may give other people a serious infection or get a serious infection from them.

What is Humulin R?
- Humulin R is a man-made insulin that is used to control high blood sugar in adults and children with diabetes mellitus.

Who should not use Humulin R?
Do not use Humulin R if you:
- are having an episode of low blood sugar (hypoglycemia).
- have an allergy to human insulin or any of the ingredients in Humulin R. See the end of this Patient Information leaflet for a complete list of ingredients in Humulin R.

What should I tell my healthcare provider before using Humulin R?
Before using Humulin R, tell your healthcare provider about all your medical conditions including, if you:
- have liver or kidney problems.
- take other medicines, especially ones called TZDs (thiazolidinediones).
- have heart failure or other heart problems. If you have heart failure, it may get worse while you take TZDs with Humulin R.
- are pregnant, planning to become pregnant. Talk with your healthcare provider about the best way to control your blood sugar if you plan to become pregnant or while you are pregnant.
- are breast-feeding or plan to breastfeed. HUMULIN R may pass into your breast milk. Talk with your healthcare provider about the best way to feed your baby while using HUMULIN R.
Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, or herbal supplements.

Before you start using Humulin R, talk to your healthcare provider about low blood sugar and how to manage it.

How should I use Humulin R?
- Read the detailed Instructions for Use that comes with your Humulin R.
- Use Humulin R exactly as your healthcare provider tells you to. Your healthcare provider should tell you how much Humulin R to use and when to use it.
- Use Humulin R 30 minutes before eating a meal.
- Know the type, strength, and amount of insulin you use. Do not change the type, or amount of insulin you use unless your healthcare provider tells you to. The amount of insulin and the best time for you to take your insulin may need to change if you use different types of insulin.
- Check your insulin label each time you give your injection to make sure you are using the correct insulin.
- Inject Humulin R under the skin (subcutaneously) of your upper legs (thighs), upper arms, buttocks or stomach area (abdomen). Do not inject Humulin R into your vein (intravenously) or muscle (intramuscularly).
  - Do not mix Humulin R with any other insulin except Humulin® N. If Humulin R is mixed with Humulin N, Humulin R should be drawn into the syringe first. Inject immediately after mixing.
- Change (rotate) your injection sites within the area you choose with each dose to reduce your risk of getting lipodystrophy (pits in skin or thickened skin) and localized cutaneous amyloidosis (skin with lumps) at the injection sites.
  - Do not use the exact same spot for each injection.
  - Do not inject where the skin has pits, is thickened, or has lumps.
  - Do not inject where the skin is tender, bruised, scaly or hard, or into scars or damaged skin.
- Check your blood sugar levels. Ask your healthcare provider what your blood sugars should be and when you should check your blood sugar levels.

Keep Humulin R and all medicines out of reach of children.
Your dose of Humulin R may need to change because of:

- change in level of physical activity or exercise, weight gain or loss, increased stress, illness, change in diet, or because of other medicines you take

What should I avoid while using Humulin R?

While using Humulin R do not:

- drive or operate heavy machinery, until you know how Humulin R affects you.
- drink alcohol or use prescription or over-the-counter medicines that contain alcohol.

What are the possible side effects of Humulin R?

**Humulin R may cause serious side effects that can lead to death, including:**

- **low blood sugar (hypoglycemia).** Signs and symptoms of low blood sugar may include:
  - dizziness or lightheadedness, sweating, confusion, headache, blurred vision, slurred speech, shakiness, fast heartbeat, anxiety, irritability or mood changes, hunger.
  - Your healthcare provider may prescribe a glucagon emergency kit so that others can give you an injection if your blood sugar becomes too low (hypoglycemic) and you are unable to take sugar by mouth.
- **severe allergic reaction (whole body reaction).** Get medical help right away, if you have any of these signs or symptoms of a severe allergic reaction:
  - a rash over your whole body, have trouble breathing, a fast heartbeat, or sweating.
- **low potassium in your blood (hypokalemia).**
- **heart failure.** Taking certain diabetes pills called thiazolidinediones or “TZDs” with Humulin R may cause heart failure in some people. This can happen even if you have never had heart failure or heart problems before. If you already have heart failure, it may get worse while you take TZDs with Humulin R. Your healthcare provider should monitor you closely while you are taking TZDs with Humulin R. Tell your healthcare provider if you have any new or worse symptoms of heart failure including:
  - shortness of breath, swelling of your ankles or feet, sudden weight gain

Treatment with TZDs and Humulin R may need to be adjusted or stopped by your healthcare provider if you have new or worse heart failure.

**Get emergency medical help if you have:**

- severe hypoglycemia needing hospitalization or emergency room care, and be sure to tell the hospital staff the units of Humulin R that your healthcare provider has prescribed for you.
- trouble breathing, shortness of breath, fast heartbeat, swelling of your face, tongue, or throat, sweating, extreme drowsiness, dizziness, confusion.

**The most common side effects of Humulin R include:**

- low blood sugar (hypoglycemia), allergic reactions including reactions at your injection site, skin thickening or pits at the injection site (lipodystrophy), weight gain, swelling (edema) in hands or feet, itching and rash.

These are not all of the possible side effects of Humulin R. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.
General Information about the safe and effective use of Humulin R
Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. **Do not** use Humulin R for a condition for which it was not prescribed. **Do not** give Humulin R to other people, even if they have the same symptoms you have. It may harm them.

This Patient Information leaflet summarizes the most important information about Humulin R. If you would like more information, talk with your healthcare provider. You can ask your pharmacist or healthcare provider for information about Humulin R that is written for healthcare providers. For more information go to www.humulin.com or call 1-800-LillyRx (1-800-545-5979).

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<tr>
<th>What are the ingredients in Humulin R?</th>
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<tr>
<td><strong>Active Ingredient:</strong> human insulin</td>
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<tr>
<td><strong>Inactive ingredients:</strong> glycerin, metacresol, water for injection, sodium hydroxide and hydrochloric acid.</td>
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**Marketed by:** Lilly USA, LLC, Indianapolis, IN 46285, USA

For more information about Humulin R go to www.humulin.com.

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