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Dextrose 5% in Water (D5W)

Generic name: dextrose 5% in water (intravenous injection) [*DEX-trose*]

Drug class: [Glucose elevating agents](#)

Medically reviewed by [Sanjai Sinha, MD](#). Last updated on Nov 11, 2024.

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What is dextrose 5% in water?

Dextrose is a form of glucose (sugar). Dextrose 5% in water is injected into a vein through an IV to replace lost fluids and provide carbohydrates to the body.

Dextrose 5% in water is used to treat low blood sugar (hypoglycemia), insulin shock, or dehydration (fluid loss). Dextrose 5% in water is also given for nutritional support to patients who are unable to eat because of illness, injury, or other medical condition.

Dextrose 5% in water is sometimes used as a diluent (liquid) for preparing injectable medication in an IV bag. A diluent provides a large amount of fluid in which to dilute a small amount of medicine. The diluent helps carry the medicine into your bloodstream through the IV. This helps your caregivers inject the medicine slowly and more safely into your body.

Dextrose 5% in water may also be used for purposes not listed in this medication guide.

Warnings

You should not use this medication if you are allergic to dextrose.

Before using dextrose 5% in water, tell your doctor if you have diabetes, breathing problems, an electrolyte imbalance, kidney or liver disease, a food or drug allergy, or if you receive regular blood transfusions.

Do not mix dextrose 5% in water with any medication that has not been prescribed by your doctor. If you are using the injections at home, be sure you understand how to properly mix and store your medicine.

Tell your caregivers if you feel any burning, pain, or swelling around the IV needle when dextrose 5% in water is injected.

Stop using dextrose 5% in water and call your doctor at once if you have a fever, cough, wheezing, increased thirst or urination, confusion, hallucinations, extreme thirst, muscle weakness, weak or shallow breathing, fainting, or severe irritation or signs of infection around the IV needle.

Before taking this medicine

You should not use this medication if you are allergic to dextrose.

To make sure you can safely use dextrose 5% in water, tell your doctor if you have any of these other conditions:

- diabetes;
- breathing problems;
- an electrolyte imbalance (such as low levels of potassium in your blood);
- kidney or liver disease;
- any allergy to foods or medicines; or
- if you receive regular blood transfusions.

FDA pregnancy category C. It is not known whether dextrose 5% in water will harm an unborn baby. Tell your doctor if you are pregnant or plan to become pregnant while using this medication.

It is not known whether dextrose 5% in water passes into breast milk or if it could harm a nursing baby. Do not use this medication without telling your doctor if you are breast-feeding a baby.

How is dextrose 5% in water given?

Dextrose 5% in water is injected into a vein through an IV. You may be shown how to use an IV at home. Do not self-inject this medicine if you do not fully understand how to give the injection and properly dispose of used needles, IV tubing, and other items used to inject the medicine.

Before using dextrose 5% in water, check the solution container to make sure there are no leaks in it. Use only the needle type and size recommended by your doctor or caregivers.

Dextrose 5% in water should be clear and colorless. Do not use the medication if it has changed colors or has particles in it, or if the seal on the IV bag is broken. Call your doctor for a new prescription.

You may need to mix dextrose 5% in water with another medication in an IV bag before using it. Do not mix dextrose 5% in water with any medication that has not been prescribed by your doctor. If you are using the injections at home, be sure you understand how to properly mix and store your medicine.

Call your doctor or tell your caregivers if your catheter, needle, or IV tubing becomes blocked or if the solution is not flowing normally.

If you receive this medication in a hospital or clinic setting your breathing, blood pressure, oxygen levels, and other vital signs will be watched closely. Your blood sugar may also need to be tested often during treatment. If you use the medicine at home, visit your doctor regularly. Do not miss any follow up visits to your doctor for blood or urine tests.

Tell your caregivers if you feel any burning, pain, or swelling around the IV needle when dextrose 5% in water is injected.

Use a disposable needle only once. Throw away used needles in a puncture-proof container (ask your pharmacist where you can get one and how to dispose of it). Keep this container out of the reach of children and pets.

Call your doctor if your symptoms do not improve, or if they get worse while using dextrose 5% in water.

Store at room temperature away from moisture and heat. Do not freeze.

What happens if I miss a dose?

Call your doctor for instructions if you miss a dose of dextrose 5% in water.

What happens if I overdose?

Seek emergency medical attention or call the Poison Help line at 1-800-222-1222.

Overdose symptoms may include severe forms of some of the side effects listed in this medication guide.

What should I avoid while using dextrose 5%in water?

Follow your doctor's instructions about any restrictions on food, beverages, or activity.

Dextrose 5%in water side effects

Get emergency medical help if you have any of these **signs of an allergic reaction**: hives; difficult breathing; swelling of your face, lips, tongue, or throat.

Stop using dextrose 5% in water and call your doctor at once if you have a serious side effect such as:

- severe burning, pain, or swelling around the IV needle;
- warmth, redness, oozing, or bleeding where the IV was placed;
- fever, ongoing cough;
- high blood sugar (increased thirst, increased urination, hunger, dry mouth, fruity breath odor, drowsiness, dry skin, blurred vision, weight loss);
- headache, trouble concentrating, memory problems, weakness, feeling unsteady, hallucinations, fainting, seizure, shallow breathing or breathing that stops;
- low potassium (confusion, uneven heart rate, extreme thirst, increased urination, leg discomfort, muscle weakness or limp feeling); or
- anxiety, sweating, pale skin, severe shortness of breath, wheezing, pain, fast or uneven heart rate.

Less serious side effects may include:

- mild irritation around the IV needle;
- upset stomach; or
- swelling in your hands or feet.

This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

 [Glucose side effects](#) (more detail)

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What other drugs will affect Dextrose 5% in water?

It is not likely that other drugs you take orally or inject will have an effect on Dextrose 5% in Water. But many drugs can interact with each other. Tell your doctor about all medications you use. This includes prescription, over-the-counter, vitamin, and herbal products. Do not start a new medication without telling your doctor.

 [Glucose drug interactions](#) (more detail)

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Further information

Remember, keep this and all other medicines out of the reach of children, never share your medicines with others, and use this medication only for the indication prescribed.

Always consult your healthcare provider to ensure the information displayed on this page applies to your personal circumstances.

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Availability	
<div><div>Rx</div><div>OTC</div></div>	Rx and/or OTC
CSA Schedule*	
N/A	Not a controlled drug



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