

# Mannitol

*Drs. Foster & Smith Educational Staff*

## Generic Name

Mannitol

## Brand Name

None

## Type of Drug

Osmotic diuretic

## Form and Storage

Injectable

Store at room temperature.

## Indications for Use

Used to promote diuresis (higher urine production) in acute oliguric kidney failure (no urine is being produced), to decrease pressure in the eyes (as in [glaucoma](#)), or on the brain, to increase the excretion of some toxins through the kidneys, or to rapidly reduce edema (swelling) or ascites.

## General Information

Not FDA approved for use in dogs and cats, but it is a common and accepted practice to use mannitol in veterinary medicine. Mannitol is available by prescription and is usually used in a hospital setting. Mannitol is excreted through the kidneys where it does not allow water or certain electrolytes (e.g., sodium, potassium, or calcium) to be resorbed as readily, causing the body to produce more urine.

## Usual Dose and Administration

Varies on condition. Please contact your veterinarian.

## Side Effects

Fluid loss (dehydration) and electrolyte imbalances (e.g., abnormally low or high levels of potassium, sodium, or calcium in the blood) are the most commonly seen adverse effects. Other less commonly seen effects are nausea, vomiting, pulmonary edema, dizziness, headache, and heart disorders.

## Contraindications/Warnings

Do not use in patients with anuria (inability to produce urine) due to kidney disease.

Do not use in patients who suffer from severe dehydration, bleeding in the brain, or certain lung diseases.

The patient must have some kidney function with urine output for this drug to work and to be used.

Close monitoring is essential.

## Drug or Food Interactions

Mannitol may increase the kidney excretion of lithium.

Use of mannitol concurrently with blood products requires certain precautions to prevent agglutination of the blood.

No known food interactions.

## Overdose/Toxicity

In an overdose, excessive excretion of sodium, potassium, and chloride in the urine may cause fluid buildup in the lungs.

## Summary

Mannitol is an injectable medication used in dogs, cats, and other pets to rid the body of excess fluid, especially in the brain and eyes.