

Antacids/Phosphate Binders (Maalox, Milk of Magnesia)

Drs. Foster & Smith Educational Staff

Generic and Brand Names

Aluminum Hydroxide: AlternaGEL, Amphojel
Aluminum Magnesium Hydroxide: Maalox
Calcium Acetate: Phos-Ex, PhosLo
Magnesium Hydroxide: Milk of Magnesia
Calcium Carbonate: Tums

Type of Drug

Antacid

Form and Storage

Powders, suspensions, and capsules
Store at room temperature unless otherwise specified by the manufacturer.

Indications for Use

Prevention and treatment of stomach ulcers and esophageal reflux (heartburn), reduction of hyperphosphatemia (increased amount of phosphorus in the blood) in patients with kidney failure.

General Information

FDA approved for use in large animals in veterinary medicine. It is an accepted practice to use these medications in small animal medicine. Available over the counter, but should always be used under the direction of a veterinarian. Because of the newer, easier to dose medications available such as cimetidine, aluminum magnesium hydroxide is not used as frequently for stomach ulcers and esophageal reflux. It is still used to reduce phosphorous levels in the blood in patients with kidney failure. Before use, consult with your veterinarian and carefully check over-the-counter (nonprescription) medications for ingredients that may be deadly to pets.

Usual Dose and Administration

Consult your veterinarian. Duration of treatment depends on reason for treatment and response to treatment. Pets generally do not like the taste making it difficult to get the pet to take the products.

Side Effects

Depending upon the product, may see lack of appetite, constipation, or diarrhea. May see electrolyte imbalances in some patients due to the levels of magnesium, aluminum, sodium, and potassium in the products.

Contraindications/Warnings

Do not use magnesium containing products in animals with kidney failure.

Use with caution in patients who need restricted amounts of sodium or potassium in their diets.

Use aluminum containing products with caution in patients with an obstruction in the stomach emptying disorders or obstruction.

Use calcium or aluminum containing products with caution in patients with kidney disease.

Do not use in pregnant or nursing animals.

Long-term use can damage the kidneys; aluminum-containing products can cause muscle weakness and thinning of the bones.

Drug or Food Interactions

Due to changes in the acidity of the stomach, emptying time of the stomach, or by chelation of the drugs, all oral medications may be affected. If must give multiple medications, separate dosages by at least 2 hours.

Tetracycline antibiotics may not be absorbed if given with antacids.

Antacids may decrease the absorption or effects of chlordiazepoxide, captopril, chloroquine, cimetidine, corticosteroids, digoxin, iron salts, indomethicin, isoniazid, ketoconazole, nitrofurantoin, pancreatic enzymes, penicillamine, phenothiazines, phenytoin, ranitidine, and valproic acid.

Antacids may increase the absorption or effects of aspirin, dicumarol, flecainide, quinidine, and sympathomimetics like ephedrine.

Do not use calcium containing products in patients using digoxin/digitalis as abnormal heart rhythms may result.

If using to decrease high blood phosphorus levels, give with meals.

Overdose/Toxicity

Summary

Antacids should be used under the direction of a veterinarian for the treatment and prevention of stomach disorders and to lower high phosphorous levels in animals with kidney failure. Consult with your veterinarian if your pet experiences muscle weakness, constipation, diarrhea, or lack of appetite while taking antacids.

over-the-counter (nonprescription) medications

May see electrolyte imbalances which can cause weakness and heart arrhythmias. Long-term use of aluminum-containing products can cause muscle weakness, thinning of the bones, and aluminum toxicity. Long term use of other products can damage the kidneys.

Keep this and all other medications out of the reach of children and pets.

If you think your pet has been poisoned...

Contact your veterinarian or one of the Animal Poison Hotlines (listed below) if you think your pet may have accidentally received or been given an overdose of the medication.

**ASPCA National Animal Poison Control Center

1-888-4ANI-HELP (1-888-426-4435). \$65.00 per case, billed to caller's credit card.

Follow-up calls can be made for no additional charge by dialing 888-299-2973.

There is no charge when the call involves a product covered by the Animal Product Safety Service.

**Pet Poison Helpline - 24-hour service available throughout North America for pet owners and veterinary professionals who require assistance with treating a potentially poisoned pet.

1-800-213-6680 (\$35.00 per incident). Staffed 24-hours a day.