Chocolate Toxicity in Dogs and Cats

Drs. Foster & Smith Educational Staff

Toxin
Methylxanthines

Source
Chocolate, coffee, tea, theobromine, caffeine, and theophylline.

General Information
Theobromine is found in chocolate, cocoa beans, cocoa bean hulls (landscape bedding), cola, and tea. Milk chocolate contains 58 mg/oz. and unsweetened baking chocolate contains 390 mg/oz.

Caffeine is found in coffee, tea, chocolate, colas, and human stimulants.

Theophylline is found in tea and human and veterinary preparations.

Caffeine and theobromine have an effect on animals similar to that on people. They increase the breathing and heart rate, sometimes causing irregular beating of the heart. They cause restlessness because of the changes of calcium and energy sources at the cellular level. Caffeine also directly stimulates the myocardium and central nervous system.

Note: Some methylxanthines may be reabsorbed from the urinary bladder.

Toxic Dose
Mild symptoms occur with the ingestion of 9 mg per pound of body weight of either caffeine or theobromine. Severe signs occur around 20 mg/lb and seizures and possible death can occur after ingestion of 27 mg of theobromine or caffeine per pound of body weight. Since milk chocolate contains 58 mg/oz of theobromine, this means a dose of less than 1 oz of milk chocolate per pound of body weight could potentially cause death. Less that 0.1 oz of Baker's unsweetened chocolate per pound of body weight could be lethal. Usually the more bitter the chocolate, the higher the level of theobromine.

Signs
Common signs include vomiting, diarrhea, panting, bloating, increased drinking, hyperactivity, restlessness, ataxia, muscle tremors, increased or decreased heart rate, irregular heart rhythm, and increased body temperature. Signs usually occur 6-12 hours after ingestion. Seizures, coma, or death may occur. Less frequent symptoms include abdominal pain and blood in the urine.

Immediate Action
Induce vomiting and seek veterinary attention.

Veterinary Care
General treatment: The induction of vomiting may be continued, gastric lavage is performed, and activated charcoal is administered.

Supportive treatment: IV fluids are given to prevent dehydration and to induce urine production. The heart rate and rhythm are monitored, and medications are given if necessary. The animal is monitored and treated for hyperthermia. Seizures are treated. The urinary bladder may need to be catheterized to prevent reabsorption of the toxin.

Specific treatment: Unavailable.

Prognosis
Usually recover with hospitalization and aggressive therapy. May be fatal, if enough of the toxin is absorbed.

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.

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are*