



CHOCOLATE TOXICITY

ABOUT THE DISEASE

All variants of **chocolate** contain a class of intoxicants referred to as **methylxanthines**, which include caffeine and theobromine. These intoxicants are primarily stimulants of the digestive tract, cardiovascular system, and neurologic system.

Typical symptoms of **methylxanthine** intoxication develop within 24-72 hours and include:

- Increased thirst, with increased urination
- Bloating, vomiting, diarrhea
- Restlessness and agitation
- Tremors, rigidity, incoordination (ataxia), and seizures in severe cases
- Cardiac arrhythmias (typically fast rate)
- Collapse, and coma in extreme cases

The level of intoxication is often determined by the size of the patient, the amount ingested, and type of **chocolate** source. High concentration **chocolates** (bakers, etc.) typically cause more symptoms, whereas low concentration **chocolates** (milk, white) cause mild symptoms.

Prognosis is good in practically every case, and unchanged with prompt and thorough care. It becomes poor if severe or extreme symptoms develop.

OBTAINING A DIAGNOSIS

There are no specific tests for **methylxanthine** intoxication.

A thorough clinical history and physical examination with a veterinarian typically yield a presumptive diagnosis.

Other testing is often used to assess cardiac involvement, like electrocardiography (ECG), routine blood work, and sometimes blood pressure.

TREATMENT

As with most toxicities, if caught within the first two hours, vomiting can be induced to evacuate the stomach and then patients are administered activated charcoal to bind residual intoxicant in the digestive tract.

There are no specific antidotes for **methylxanthines**, but treatment is often focused on the symptoms each patient is exhibiting. These treatments may include medications to slow heart rate or reduce blood pressure, IV (intravenous) fluids to increase excretion, and sedation to reduce agitation or stimulation.

TIPS FOR SUCCESS

- Contact the ASPCA Animal Poison Control Center (888.426.4435) for immediate triage of toxicities.
- Seek immediate care for interventional therapies.