

# Grape and Raisin Toxicosis in Dogs

Petra A. Volmer, DVM, MS, DABVT, DABT

## BASIC INFORMATION

### Description

A syndrome of kidney failure in dogs is associated with eating (ingestion of) commercially available grapes and raisins. Any type of grape or raisin, as well as pulp from wine pressings, can pose a hazard. Only dogs are affected.

### Causes and Toxicity

All breeds of dogs are susceptible. Ingestion of as few as 4-5 raisins can cause the disease.



### Clinical Signs

Dogs may develop vomiting, with or without diarrhea, within the first 6-8 hours following ingestion. Vomiting is closely followed by a decrease in activity and lack of appetite. Affected dogs may drink and urinate more. As the disease progresses, the kidneys may stop producing urine, and death can result.



### Diagnostic Tests

Diagnosis of grape or raisin poisoning is based on a history or evidence of ingestion and consistent clinical signs. There are no specific tests available to confirm grape or raisin poisoning. Laboratory tests reveal abnormal kidney function. Evidence of grapes or raisins may be found in the vomitus or stool. Other tests (laboratory tests, x-rays, ultrasound) may be needed to rule out other causes of kidney failure.

## TREATMENT AND FOLLOW-UP



### Treatment Options

Ingestion of grapes or raisins should be considered a medical emergency and treated immediately. Your veterinarian may

recommend that vomiting be induced if the ingestion was recent (within 4 hours). Activated charcoal may be given by mouth to bind with the material and prevent absorption into the body. Daily monitoring, with repeated laboratory testing, is done for 3-4 days to watch for any changes in kidney function that warrant further treatment. If needed, the dog may be hospitalized for intravenous fluid therapy and other supportive measures and to monitor urine output. In severe cases, your veterinarian may recommend referral to a specialty facility for dialysis treatment, if it is available.



### Follow-up Care

Laboratory tests are repeated periodically to monitor the recovery of kidney function. Monitoring may be required for days to weeks as kidney function returns to normal. If chronic kidney failure develops, then long-term monitoring is usually needed. All sources of grapes or raisins should be removed from the pet's environment.

### Prognosis

If treated early, dogs with no clinical signs have a good prognosis. If treatment is delayed or if evidence of kidney failure develops, then the prognosis is guarded (uncertain). Recovery of kidney function may take days to weeks, and in some dogs it never returns to normal.