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Popular Article

Common Domestic Food Items: Might Be Fatal to Our Furry Pets

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Abstract

Although dogs are considered as family members, giving them the same food as us, can harm them. Dogs can show adverse effects from eating these food items since they are not accustomed to doing so like humans. It's critical to understand which foods are poisonous to dogs and steer clear of them. As a result, it's important to educate pet owners about foods that they should avoid giving their dogs.

Introduction

There are several foods that, while entirely safe for humans to eat, can be poisonous to dogs and cats. In the past ten years, there have been reports of food-related poisoning cases involving the accidental consumption of chocolate and chocolate-based products, Allium spp. (onion, garlic, leek, and chives), macadamia nuts, Vitis vinifera fruits (grapes, raisins, sultanas and currants), products sweetened with xylitol, alcoholic beverages and unbaked bread dough all over the world. The poisoning incidents are typically brought on by a lack of awareness among people in general regarding the considerable health risk that these items can cause to dogs and cats. The current review attempts to summarise the current understanding of popular food products frequently involved in the poisoning of small animals, particularly dogs.

Food items:

Methylxanthines (caffeine and chocolate)

The fact that chocolate is bad for dogs is fairly well recognized. The symptoms and degree of poisoning are dependent on the quantity and type of chocolate consumed. Methylxanthines

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antagonise cellular phosphodiesterases and inhibit the cellular adenosine receptors, resulting in a rise in cyclic adenosine monophosphate (cAMP). Furthermore, methylxanthines increase cellular calcium entry while inhibiting intracellular calcium sequestration by the sarcoplasmic reticulum, resulting in increased muscular contractility. These combined actions cause CNS and cardiac muscle stimulation, smooth muscle relaxation, most notably bronchial muscle relaxation and diuresis. Symptoms can include nausea, vomiting, diarrhoea, increased thirst, abdominal pain, lethargy, muscle tremors, abnormal heartbeats, high body temperatures, seizures and even death. Keep your dog away from coffee and other caffeinated drinks as well.

Raisins and Grapes

Some dogs are unaffected by grapes and raisins, but in others, kidney failure has been linked to them. The toxic principle(s) and the exact mechanism of grape-induced nephrotoxicity are still unrecognised. The latter appears to involve a nephrotoxic agent leading to hypovolemic shock and renal ischemia. Vomiting after ingestion is the typical clinical sign observed. Diarrhoea, anorexia, lethargy and abdominal pain are also seen. If the symptoms are left untreated, they may result in dehydration, decreased appetite, and increased followed by decreased urination. Within three or four days, a dog could develop chronic kidney disease or even pass away from kidney failure.

Alcohol and uncooked bread dough

Dogs can be poisoned by little levels of alcohol contained in drinks, syrups, and raw bread dough. These products contain ethanol and beer also contains hops, which can result in alcohol intoxication. Vomiting, confusion, rising body temperature, restlessness, heavy panting, muscle tremors and seizures are all symptoms of intoxication. Alcohol intoxication in dogs can cause organ failure and even death. The yeast in raw bread dough can also promote stomach distention, which can cause tissue damage and breathing difficulties.

Xylitol

A synthetic sweetener called xylitol can be found in foods like sugar-free gum, candies and baked goods. Additionally, it is present in mouthwash, chewable vitamins, toothpaste and cough drops. Ingestion can result in liver damage and a reduction in blood sugar which could be fatal. Vomiting, convulsions and loss of coordination are among the symptoms, which might appear minutes to hours after consumption. Large xylitol intake in dogs can potentially result in liver failure. The mechanisms responsible for hepatic injury are unknown yet. It is thought to be associated to

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either adenosine triphosphate (ATP) depletion due to xylitol metabolism, leading to hepatic necrosis or the generation of hepatocyte-damaging reactive oxygen species or both.

Onion and garlic

Garlic, shallots, scallions and chives are all harmful to dogs, as are other members of the *Allium* species. Organosulfoxides are the components responsible for their toxicity. Chewing the plant causes organo-sulfoxides to be converted into a complicated combination of sulphur compounds. The principal toxicological mechanism of Allium-derived sulphur compounds is oxidative haemolysis, which results in methemoglobinemia and the production of Heinz bodies in erythrocytes resulting in anaemia. In comparison to onions, garlic is thought to be five times more potent. Lethargy, weakness and urine with an orange to dark red tint are some symptoms of onion or garlic poisoning, which may take several days to manifest. Shiba Inus and other Japanese dog breeds like the Akita are known to be particularly susceptible to the effects of garlic and onions.

Some Other Products

Dairy products can disturb dog's digestive tract, resulting in diarrhoea as well as food allergies. Even a small amount of macadamia nuts might result in weakness, paralysis, and lack of coordination. Avocados contain a substance called persin that might give dogs a moderate stomach ache. Dogs might potentially be seriously injured by the bones in meat, chicken and fish. They have the potential to break teeth, slash the intestines or splinter and stick in the neck.

Conclusion

The issue of exposing small animals, in particular dogs, to potentially dangerous foods included in typical household items is highlighted in the current review. The prognosis of instances of food poisoning can be significantly improved by obtaining a precise history of exposure, early detection of clinical signs and swift initiation of appropriate medication. To decrease the frequency of these poisoning events, exposure must be avoided. As a result, it's crucial to educate pet owners about foods that they should avoid giving their dogs. Always consult with your veterinarian before feeding your dog any food if not unsure. It is recommended to follow a formulated diet, especially to fulfil nutritional needs in order to keep them safe.

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