

Diet and Urinary Tract Health

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Maintaining a healthy urinary tract is important for the overall well-being and longevity of your pet. Animals with poor urinary tract health can suffer from stones that form in the urinary tract (uroliths) and urinary tract infections (UTIs). Often uroliths are not actually caused by the diet being fed, but diet can play an important role in their treatment and prevention.

The two most common types of uroliths are calcium oxalate and magnesium ammonium phosphate or what is commonly referred to as struvite. These two types of uroliths consistently represent the greatest proportion of urolith types in dogs and cats.^{1,2} Uroliths can be found almost anywhere in the urinary tract, but are generally found in the bladder. Any outward symptoms that the pet displays may depend upon the number of stones present or their location within the urinary tract, while some pets may not display any symptoms at all. The three most common symptoms are difficult or frequent urination, urinating in inappropriate locations, and having bloody urine. If you notice that your pet is experiencing one or more of these symptoms, it is important to consult and likely visit your veterinarian for a diagnosis and advice. Your veterinarian will typically run a few diagnostic tests that may include testing a urine sample, abdominal imaging (such as x-rays or ultrasound), and blood testing. If a UTI is present (very common in dogs, rare in cats), the infection will be treated with antibiotics. Your vet may diagnose a newly and commonly identified syndrome in cats that is called feline interstitial cystitis (IC). IC is currently thought to be the most common cause for difficult, frequent, inappropriate, and/or bloody urination in cats.

Although some uroliths are difficult to prevent, you can help by providing your pet with frequent opportunities to urinate and an ample supply of fresh water. Increasing dietary moisture is the most important nutritional strategy that should be implemented for all stone types. Canned diets are a good option due to their higher moisture, but stew products (which have more moisture than the typical canned food) can be an even better choice. Recent data have shown that feeding stews to cats causes a significant decrease in their urine specific gravity.³ This decrease correlates to more dilute urine, thus decreasing the concentration of stone precursors in the bladder.

If you suspect that your pet may be suffering from stones in their urinary tract, a UTI, or IC, please consult your veterinarian. With the appropriate diagnosis, you and your veterinarian can use the following chart to help select the best nutritional strategy for your pet going forward.

Table summarizing conditions and potential solutions:

	Condition	Potential Nutritional Solution†	Explanation/Rationale
CAT	Calcium Oxalate	Stews	Increase water intake
	Struvite	A therapeutic/prescription food may be needed	Necessary nutrient levels could be too low for healthy adult cats
	Urinary Tract Infection (UTI)	Antibiotics and any product	Antibiotics to treat underlying infection
	Interstitial Cystitis (IC)	Any product, canned may be preferred	IC is not a dietary problem, although canned food may be recommended
	Condition	Potential Nutritional Solution†	Explanation/Rationale
DOG	Calcium Oxalate	Stews	Increase water intake
	Struvite with UTI	Antibiotics and any product	Antibiotics to treat underlying infection
	Struvite without UTI	A therapeutic/prescription food may be needed	Necessary nutrient levels could be too low for healthy adult dogs

†Before making any dietary change, please consult your veterinarian to ensure the solution is appropriate for your particular pet. Frequent urinalysis may be needed to monitor the individual response to any dietary change.

References:

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