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SYMPTOMS

- Frequent urination
- Lack of urination
- Cloudy urine or blood in urine
- Passing only small amounts
- Licking the genital area
- Inappropriate urination (outside the litterbox, on furniture) or incontinence
- Straining to urinate
- Crying out during urination

DEXTER

SUGGESTS

Ask our knowledgeable staff about trying a raw food diet for your pet.

Check out these books:

- *Dr. Pitcairn's Complete Guide to Natural Health For Dogs & Cats*
- *Your Cat*
- *Whole Health for Happy Cats*
- *The New Holistic Way For Dogs & Cats*



Urinary Tract Health

URINARY TRACT DISEASE (UTD)

UTD effects the urinary health of both dogs and cats, causing bladder stones and crystals, urethral blockage, urinary tract inflammation and infection, and combinations of these. **Left untreated they can lead to kidney damage.** Symptoms include frequent urination, lack of urination, passing only small amounts of urine, licking the genital area, urinating inappropriately (outside the litterbox for cats, indoors or on furniture for dogs), straining to urinate, and crying out during urination. You may only see one of these symptoms, or may not discern any at first; lack of symptoms is usually seen in animals on long-term corticosteroid therapy.

If these symptoms are observed take your pet to the vet immediately. Toxic buildup from a urinary blockage can be deadly!

Don't discount the effects of emotional stress on urinary issues, especially when symptoms are seen in young cats. Flower Essences, Reiki, and other methods of stress reduction are an important part of treating chronic bladder issues.

The right food is essential for reducing the incidence of Urinary Tract Disease.

- **Dry food is NOT an appropriate diet.** It contributes to low-grade dehydration, over-concentrated urine, and improper pH.
- Dogs, and cats are physiologically designed to eat diets that contain the moisture content of a carcass – about 70% water. A meat-based, low-carbohydrate diet that is raw, home-cooked, or canned will help the body maintain proper pH and hydration levels.
- A meat-based, low-carbohydrate diet that is raw, home-cooked (including premixes), or canned will ensure higher digestibility, proper hydration, and will contribute to proper pH.
- Premixes to which water and fresh meat are added are an excellent way to provide a highly digestible and enticing diet. Protein amounts can also be easily customized if advanced kidney disease is also present.

CYSTITIS

Cystitis is inflammation of the bladder and/or urethra. Causes vary and can include improper urinary pH, dehydration, stress, diabetes, old age, long-term corticosteroid use, and certain medications.

Often cystitis is referred to as an infection but inflammation can occur without there being a bacterial infection. Anti-inflammatory supplements usually used for joint pain can be effective for cystitis when there is no bacterial infection present.



PRODUCTS

* Not for oxalate crystals

- **Animal Essentials Tinkle Tonic** Our #1 supplement for all UTD issues, safe for any pH imbalance. For chronic recurring UTD you can use Tinkle Tonic for one week every month as a preventative.
- * NaturVet Cranberry Relief
- Vet's Best Urinary Support
- Vetriscience Urinary Support

- Liquid Health Glucosamine
- DGP
- Glacier Peak Holistics Inflation

- * My Perfect Pet Snuggles Formula

UROLITHS (CRYSTALS/STONES)

There are several different types of stones or crystals that can form anywhere in the urinary system, struvite and calcium oxalate are two of the most common, but you should always know what kind your pet has before making significant and work with a holistic/integrative vet to develop a program for your pet's specific needs. You should also know if your breed is genetically predisposed to uroliths. Changes should be made gradually to avoid stress on the system.

Dry food formulas are being designed that manipulate pH and magnesium levels in an attempt to prevent uroliths, but these are not dependable.

- It is impossible to predict exactly how each animal is absorbing synthetic nutrients. Manufacturers can do little more than guess when designing the food.
- Dry food is by necessity high in carbohydrates, which negatively effects the body's ability to maintain a proper pH level.
- Dry food creates low-level dehydration, especially in cats, which impacts the urinary system's balance.

STRUVITE CRYSTALS

These are formed when the urine is too alkaline (high pH). Factors that contribute to their formation are:

- Feeding dry food (which lacks the moisture that their bodies have evolved to get through their diet, concentrating the urine due to dehydration)
- Overfeeding foods high in Ash and Magnesium (fish-based foods), which are what form struvite crystals
- Bacterial infections in the urinary system (mainly in dogs)
- Stress

This type can usually be treated through diet and supplements. The first step should be to hydrate the animal properly through the feeding of canned, home-cooked, or raw diets. This will help normalize the animal's pH.

CALCIUM OXALATE CRYSTALS

These form when the urine is too acidic (low pH). Factors that contribute to their formation are:

- Feeding dry food (urine becomes concentrated and overly acidic due to lack of moisture in the diet)
- Feeding poor quality protein (increases methionine)
- Long-term or overuse of urine acidifiers (vitamin C, cranberry)
- Inappropriate use of calcium supplements (as these crystals are calcium based)
- Genetic predisposition
- Stress

There is no proven treatment to break down calcium oxalate crystals so surgery may be required. Maintaining proper pH and avoiding risk factors is the current advice.