



Feline Lower Urinary Tract Disease

Feline Lower Urinary Tract Disease (FLUTD) is one of the major health concerns of cat owners. FLUTD is a condition, which indicates problems associated with the lower urinary tract. This disease affects both male and female cats and occurs most commonly in young adult cats between one and six years old. Cats prone to develop FLUTD usually experience their first episode by the age of three.

Symptoms:

- Straining in the litter box.
- Crying while trying to urinate.
- Frequent urination.
- Bloody urine.

If left untreated, the result can be a complete blockage of the urethra (the tube leading from the bladder to the outside). Blockage occurs more commonly in male cats because the urethra tends to be narrower than in the female. If your cat exhibits any of these symptoms, have him examined by your veterinarian immediately.

Causes:

Some factors affecting the occurrence and the severity of FLUTD include:

- stress
- genetics
- bacterial and viral infection
- factors which affect urinary pH, such as diet

Diet alone is not a cause or a prevention but diet can have an influence on the occurrence of this condition.

Is dietary ash content related to FLUTD?

Dietary ash content is not related to FLUTD. The plug, which causes urinary blockage, contains minerals. Since ash is an indication of a diet's mineral content, it was thought that the higher the ash content, the more likely it would be to cause FLUTD. Recent research studies have proven that the cause of the condition is far more complex and that ash content is in no way an indicator of the potential to cause FLUTD.

Is magnesium content related to FLUTD?

Struvite crystals are composed of three minerals: magnesium, ammonium, and phosphate. It was thought that the more of these minerals that were in the diet, the greater the chance for struvite formation and the higher the risk for FLUTD. Studies have shown that dietary magnesium may not play a significant role in the disease if an optimal urine pH level is achieved.

Magnesium is an important mineral required by cats. Removing magnesium from a cat's diet would create an imbalance, thus compromising the cat's well being. The role of magnesium in struvite formation is critical in FLUTD only when the cat's diet produces relatively alkaline urine.

Why is urine pH so important?

Researchers have shown that a slightly acidic urine is essential to maintain a healthy feline urinary tract. As a strict carnivore, the cat benefits from a diet which promotes a slightly acidic urine, with a pH between 6.0-6.4.

In slightly acidic urine, the elements which make up struvite remain in solution and crystals will be less likely to form. This is extremely important because feeding different diets can result in different levels of urine acidity. Even in diets with very high levels of magnesium, if the cat's urine is slightly acidic, struvite crystals may not form. On the other hand, over-acidification of the urine may result in a different kind of crystal known as calcium oxalate. This may cause your cat to show similar symptoms associated with FLUTD. Research has shown that the single most important factor to consider in the prevention of FLUTD is to achieve a slightly acidic urine pH in the cat.

Are fish-based cat foods acceptable?

Yes, fish provides an excellent source of many essential nutrients, including many important minerals.

Closing thoughts:

Not all cases of FLUTD are caused by the cat's food. Also, cats (like people) exhibit metabolic differences. As a result, a food that produces acidic urine in one cat may be less effective in doing so in another. Each cat has his own eating pattern and reacts differently to stress and other changes, all of which may also affect urine acidity. If your cat is exhibiting any symptoms of FLUTD, it is important that you bring your cat to your veterinarian as soon as possible.

Reference: Friskies PetCare Company brochure # 448-0001A (3/95)