

URINARY STONES

Since nearly losing my Weimeraner Scooby Doo to bladder stones I discovered that it is not uncommon for dogs (and cats) to suffer from painful and often life-threatening stones in their urinary systems. There are two different kind of stones which form in either the kidneys or the bladder: “struvite” stones are the most common and most-easily managed with diet, while “urate” stones are more difficult. As luck would have it, the latter were the kind of stones poor Scooby got, which in his case were undetected by x-ray because they had imbedded in the bladder wall. A third of his bladder had been destroyed by the time emergency surgery was performed. Ordinarily it is Dalmatians (especially males) who are known to develop urate stones, so the dietary advice that follows should be of especially great benefit to Dalmatian breeders and owners.

Increasing the amount of liquid the dog drinks is the first advice to managing either kind of stone. You want to keep the urine diluted and flowing frequently, so that crystals are less likely to form, which means lots of fluid intake. In my case this presents a real problem since Scooby is some sort of canine camel: he never seems to get thirsty and rarely takes a drink. The other dogs slurp and gulp throughout the day, while Scooby often takes no more than one tentative sip. The suggestion was made to make his food or water salty to promote thirst but this just sounded all wrong to me and in fact adding salt to a dog’s diet *creates* health risks, including formations of stones!).

The first thing you can do to increase water intake is to make water more accessible and appealing by putting water bowls in various locations and changing the water frequently (I always change the water in the bowls a couple of times a day anyway, which I

was “trained” to do by Lulu, my first rescued Weimeraner, a fussy female, who would not drink from any water bowl that the “boys” had already drunk from) (yes, I admit, I am a pathetic slave to my dogs’ pleasure and comfort!). Some other tips to increase water intake are to flavor the water with sodium-free chicken bouillon and to offer ice cubes as treats.

Something your vet will want to check periodically is whether the dog has a urinary tract infection (UTI) – which is treated aggressively with antibiotics because even a mild unchecked infection can also lead to stone formation.

I began to research dietary ways to prevent urinary stones. My own vet was diligent in combing the medical texts but unfortunately not much has been written about the role of food in managing the condition. This was not a big surprise, given the lack of general nutritional study in veterinary (or, for that matter, human) medical training. Much of the information about beneficial food for stone-sufferers is not readily found, so you may want to share what you learn here with your vet and her staff.

A fundamental fact about dogs who form either kind of urinary stone is that you need to stay away from dry food: kibble cannot be the basis of the dog’s diet (nor should it be for any dog, but you’d have to read that section of THE DOG BIBLE to learn why). Feed home-cooked meals that are low in purines (see below) and or canned foods rather than dry food, which absorbs water in the dog’s system which can result in concentrated (stone-prone) urine.

A great source of dietary information is www.dogfoodproject.com. Mordanna, whose site it is, has steeped herself in the nutrition field; she also has a kitty who had surgery for (struvite) stones so she has paid special attention to this issue. Some of what

she's learned about stone formation seems to contradict the commonly held belief that to guard against stones a dog should get the lowest possible amount of animal protein. Her research showed her that avoiding foods high in purines is what makes a difference.

One thing I can say is that the U/D (urinary diet) food made by Hill's Science Diet and sold exclusively by veterinarians was NOT the solution to my pet's long-term health or even his short-term wellness. Anyone out there who is prescribed this food by their vet should give it a good, long look before jumping in as I did. But don't take my word for it: just look at the bag and see for yourself what's in there. I am embarrassed to say that I never actually looked at the ingredients on the U/D bag, embracing it unquestioningly as "medicinal" dietary protection. After Scooby's brush with death I thought I was lucky to get U/D, blindly accepting that it would be his salvation.

I am embarrassed to say that I didn't read the bag until I'd been feeding this food for a full month – during which time Scooby Doo was always hungry yet at the same time gained unsightly weight that packed on in ripples of cellulite-like fat. He began shedding and his coat lost its luster. Only when I began to suspect the U/D food did I discover, to my horror, that there were basically two main ingredients in that food: pork fat and brewer's rice, hardly ingredients I would choose to fortify my dog. I already knew from my research that "brewer's rice" has no nutritional value except as filler – it is the leftover material discarded after rice is used to make liquor. And pork fat as a main source of nutrition??

After tossing out the U/D I experimented with a series of diets to manipulate the kind and amount of protein in Scooby's diet. For two months I fed a commercially made soy-protein based food that seemed to neither satisfy his hunger nor alleviate the extra

pounds he was packing – and then I learned that soy is apparently a poor food source for dogs, who cannot metabolize well it because of its amino-acid make-up. With continued seeking and experimentation I believe I have now come to a nice balanced solution – it is individual to my dog, his body type and exercise habits. I recommend that anyone whose dog has had urinary stones should experiment with different food combinations from the chart that follows, after discussing it with your vet. You'll know you've found the right mix when your dog's coat is looking good and his weight is within acceptable limits –and it will probably satisfy your dog's hunger as well.

The dietary suggestions that follow are ONLY for dogs already forming stones and should be undertaken only in partnership with your vet. Please note that the advice for the two kinds of stones is markedly different so be sure you understand clearly what kind of stones your dog has a tendency to form so that you are helping the condition, not aggravating it.

STRUVITE STONE DIETARY ADVICE: You need the dog's urine to be acidic so you need to include an "acidifier" like vitamin C or cranberry. You can put liquid vitamin C or open capsules into the food; see if he'll drink cranberry juice or eat dried sweetened cranberries as a treat.

Reduce carbohydrates generally, beginning by reducing or eliminating dry food completely (it is dehydrating when what you want is to increase the fluid balance in the dog's body). You want to give lots of protein of every and any kind. Along with high quality protein, you can offer raw or cooked vegetables. One way to do this is to boil up a big batch - chopped or shredded carrots, leafy green vegetables, peas, string beans, any

greenery – adding some rice and/or potatoes and/or sweet potatoes. You can then freeze it in containers or bags. And always add as much water to the food as your dog will tolerate.

URATE STONE DIETARY ADVICE: You want to lower the concentration of uric acid in the urine by lowering purines, which occur primarily in meat proteins. Despite what was once believed about protein, you want to avoid proteins (and other foods) with high purine content (see below) but give the dog proteins that are good for him.

GOOD PROTEINS: eggs (raw or cooked), any cheese (cottage cheese or ricotta are easy to use), milk, yogurt and poultry (chicken, turkey etc.).

PROTEINS TO AVOID: all fish and shellfish, red meats (even meat broth) and especially organ meats like liver, heart or kidneys.

OTHER PURINE-RICH FOODS TO AVOID: oatmeal, spinach, mushrooms, asparagus, lentils, peas, beans, cauliflower all have a lower purine content than the proteins but still should be avoided as possible.

USE LOW PURINE FOODS: nuts (including peanut butter), butter and other fats, bread, fruits and juices, all vegetables (except those above).

To reduce the chance of urate stones in dogs who tend to form them is to keep their urine diluted and with a high urinary pH of about 7.0 - but no higher than that. (In Scooby's case, his urinary pH was so low on the scale that I tried to acidify it with a spoonful of cranberries in his food – and he began to consistently measure between 6.0 and 7.0. Your goal is to maintain a consistently non-acidic environment in the urinary tract. You'll need to use pH strips periodically to test whether your dog's urine stays in that range. I had trouble finding a pH test kit (my pharmacist sold me strips that test urinary

ketones for diabetics!) but Mordanna hooked me up with a company in Florida called Vaxa International (800-248-8292) (or on the internet at www.vaxa.com) that has a handy little kit, which works like testing the chlorine and Ph balance in a swimming pool. You hold a test strip under the dog's stream of urine and compare the color to a chart on the test kit. Do not freak out (as I admit to doing!) when your dog's urine tests at one extreme or the other. To get an accurate picture of what's going on you should preferably check the urine several times a day. There's a chance you will see wide variations, as I did, with either very low or high acidity, but some of the time his urine will be in the desirable neutral zone.

Please please please do not just go off and do this on your own: you have to manage your dog's condition in partnership with your vet. She needs to support your independent efforts to manage the stone formation with diet – and if she won't, you need to find a doctor who will. Your dog's health and even his life depend on your being actively involved.

Then, when you've done all of the above, you can resort to keeping your fingers crossed: there is some just plain luck in whether dogs with stones keep forming them!