

## Food and Feeding Management (2/2010)

### ***Introduction***

Food and Feeding Management may play multiple roles in the therapy of cats with idiopathic cystitis and related disorders. Food related issues include form (canned or dry) nutrient composition, and acceptability to the cat (smell, taste, mouth feel). These also may interact, since the moisture content of a food may affect its acceptability to the cat. Feeding management issues include who feeds the cat, when it is fed, where it is fed, and how it is fed. My interpretation of the evidence suggests that feeding management, as part of environmental enrichment therapy for the cat, is more important than the food-related issues, so these will be addressed first.

### ***Feeding management***

*Who feeds the cat* – Establishing “feeding relationships” increases opportunities for positive interactions with the cat. When the cat associates being fed with humans in the house, both may benefit from the positive association. This approach may be particularly useful in situations where a goal of therapy is to increase the strength of the bond between the cat and humans in the household. If the owner prefers to leave food out all the time, leaving only enough to require the bowl to be filled once or twice each day, in the presence of the cat, may be an option to consider. This approach also avoids the kind of “drive-by” method of topping up dry food bowls in the absence of the cat that reduces opportunities for interaction.

*What to feed the cat* – Whereas canned food is commonly recommended for cats with LUTS, the evidence supporting this recommendation is weak.<sup>1</sup> Although an evidence-based grade of “III” was suggested for this recommendation, it was based on a single study.<sup>2</sup> Careful reading of the paper suggests that a similar score for no effect may have been more appropriate. As stated in the results section, “...the proportion of cats in which clinical signs recurred was significantly lower ( $P = 0.04$ ) in the canned diet group than in the dry diet group.” One cat in the dry diet group in which clinical signs recurred had a urinary tract infection at re-evaluation however, and after exclusion of this cat, the  $P$  value was 0.11. Moreover, clinical signs of LUTS and comorbid disorders have been observed in the absence of diet change in other clinical studies,<sup>3</sup> and in laboratory studies of cats with FIC.<sup>4</sup> Despite the relative lack of evidence in favor of feeding canned food, it may be preferable for some cats with FIC (particularly if the patient is a male cat, because of the risk of urethral obstruction) due to the increased water content, or more appealing smell, taste or “mouth feel”. Some cats **and some owners** may prefer dry foods, and I've found that changing cats from dry to canned foods can be a problem for some owners. To facilitate the change, I prefer to be sure that the cat is feeling better and eating its usual food normally before attempting any food changes, and I only recommend diet changes when **both** the client **and** the cat agree to the alteration. If not, one risks exacerbation of perception of threat, and recurrence of clinical signs. The owner can be asked, and if they are agreeable, the diet change be offered in a way that permits the cat to express its like or dislike for the new food. I always offer new diets to cats in a separate container next to the usual food at feeding time, so the cat can express her preference (this is exactly how pet food manufacturers test food preferences). I do not recommend that the owner mix foods or withdraw the old food to avoid risking creating a threatening situation for the cat. If the cat eats the new diet readily, the old food can simply be removed over the next day or two. If the cat doesn't eat the new food after an hour, it should be removed until the next feeding and another attempt made at that time, always providing fresh food for each new feeding. Once the new diet becomes familiar to the cat, it should start eating it readily. At that time, a decrease in the amount (about 25%) of the old

diet offered can be done each day until the change is complete. If necessary, small quantities of the cat's favorite food(s) such as meat or fish juice can be added to the new food to increase her interest in the diet. Meal feeding generally eases the change, and also may provide more interaction between the owner and the cat, which could be beneficial as well.

*When to feed the cat* – Although cats have been classified as “crepuscular” feeders, and much of their prey are active near sunup and sundown, they generally act like “opportunistic” feeders in nature; taking what comes when it comes. Cats may be successfully fed on a variety of schedules; what seems more important is that once a schedule is chosen it becomes consistent enough that the cat can “count on it”. We have found that changes in feeding schedules can evoke a variety of “sickness behaviors” in our colony housed cats,<sup>4</sup> and have observed similar behaviors in client-owned cats. If a consistent time cannot be found, a foraging device may be helpful (see below).

*Where to feed the cat* – Behavioral and ethological research both suggest that cats prefer to eat individually in a quiet location where they will not be disturbed by other animals, sudden movement, or activity of an air duct or appliance that may begin operation unexpectedly.<sup>5</sup> In multiple cat households, food and water bowls should be placed out of view of each other to reduce conflict among cats for these essential resources.

*How to feed the cat* – Although many cats are successfully fed from bowls, feeding behavior also includes predatory activities. These may be simulated by hiding small amounts of food around the house, or by putting dry food in a “foraging device” container from which the cat has to extract individual pieces or move to release the food pieces, if such interventions appeal to the cat. Some examples of foraging devices include the “Ball of the wild” from OurPets, the “Egg-cersizer” from Premier Pet Products, and the “Slimcat ball” by Multivet.

## **Foods**

In addition to the issues of form (canned or dry), and acceptability to the cat (smell, taste, mouth feel) discussed above, modification of the nutrient content of diets has been suggested to play a role in the treatment of cats with FIC. Older literature related to “Feline Urological Syndrome” suggested reduction of “ash”. Later studies suggested reduction of magnesium and modification of the nutrient composition of foods to create a more acidic urine. No evidence supports the use of these modifications for cats with FIC.<sup>1</sup> Increasing the renal solute load of the diet using either salt(s) or protein also has been suggested, but not yet adequately tested in clinical trials in cats with FIC. The weak evidence for modification of intake of any particular nutrient modifications, and the stronger evidence for environmental enrichment (of which food certainly is a part, as described above), suggest that such modifications may not be first line treatment for cats with FIC.

Cats also seem to have preferences for water. Differences in response to changes in freshness, taste, movement (water fountains, dripping faucets or aquarium pump-bubbled air into a bowl), and shape of container (some cats seem to resent having their vibrissae touch the sides of the container when drinking) all can be investigated. Food and water bowls should be cleaned regularly unless individual preference suggests otherwise.

### ***Advice for Owners - Tips to Help You Help Your Pet Change Its Diet***

Changing a pet to a new food may not seem easy or convenient at first, but it can often improve your pet's health and quality of life. To help you and your pet through this process, we offer the following suggestions collected from clients and pets that have successfully made the change. If you find another way that works for you, tell us and we'll add it to the list!

#### **Advice for your pet:**

Before starting to change diets, be sure that your pet is at home, feeling better and eating its usual diet normally. If your pet has food available all the time, and refuses the new diet, it may be easier to start by changing its feeding schedule to meal feeding by only leaving food out for 1 hour at each feeding time.

A simple way to start is to offer the new food in your pet's usual feeding bowl next to the old diet, using another bowl for its old food. If you can put both foods in similar bowls it will make the change somewhat easier. If your pet eats the new diet readily, the old food can be removed. If your pet doesn't eat the new diet after an hour, take it up until the next feeding. At the next feeding, repeat the process, always providing fresh new food. Once the new diet becomes familiar to your pet (usually in a day or two), she should start eating it readily. When this occurs, start to decrease the amount of the old diet offered by a small amount (about 25%) each day until the change is complete. Using this strategy, the change should be completed over a period of 1 to 2 weeks.

If necessary, small quantities (less than a tablespoon per cup or can of food) of your pet's favorite food, or meat or fish juices can be mixed with the new food initially to make it more appealing. If you want to try other flavors, please check with your veterinarian first.

We will provide you with advice on the minimum amount of food your pet should eat each day. If your pet doesn't eat all its food every day, this may be normal. As long as no more than 10% of weight is lost, you should not be too concerned during the period of transition.

Feed your pet in a quiet environment where it won't be distracted.

There are a variety of foods that may help your pet. Don't hesitate to ask us to try a different food if your pet doesn't like the first one you try.

#### **For you, the client:**

Start the change process during a time when you have fewer "outside distractions", if possible, so you can monitor the change process.

Before you start, plan where to buy the new food (as convenient as possible helps the change process), where you will store it in your house, and how you will discard used cans. A few minutes of thoughtful planning may save hours of frustration trying to "get into" the new routine.

If feeding is a time when you enjoy interacting with your pet (and we hope you do!), some additional activities that you can try, such as play, teaching tricks, walking, etc. are listed here: <http://www.vet.ohio-state.edu/747.htm>. These other activities also can be used to distract your cat if she seems to beg for food. Pets often beg when what they really want is more attention, and often are just as satisfied with other forms of interaction. Explain the importance of the diet change to other members of your household; we can help you with this!

## References

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