

Ettinger & Feldman – Textbook of Veterinary Internal Medicine

Client Information Sheet

Nutritional Management of Gastrointestinal Disease

Andrea J. Fascetti and Sean J. Delaney

Why is nutritional management important?

Nutrition is important in the management of gastrointestinal disease because the job of the intestines is to digest and absorb nutrients. The therapeutic approach to most gastrointestinal problems involves a combination of medication and nutritional therapy.

Gastrointestinal disease can be broadly characterized as acute or chronic:

- **Acute** gastrointestinal conditions are most commonly caused by dietary indiscretion (i.e., eating garbage), or the exacerbation of a chronic gastrointestinal disease.
- **Chronic** gastrointestinal disease is frequently associated with a diagnosis of inflammatory bowel disease, an adverse food reaction or colitis.

The nutritional approach to managing acute versus chronic gastrointestinal conditions is different.

How is “acute disease” managed?

In most cases, if your pet has an acute (sudden) onset of gastrointestinal symptoms, whether it is vomiting or diarrhea, your veterinarian will recommend withholding food (and often water) for 12 to 24 hours and in some cases 48 hours. This practice is often referred to as “resting the bowel”, and it serves to reduce the quantity of unabsorbed nutrients in the bowel that may result in continued vomiting or diarrhea. Once the symptoms have subsided, water is usually the first thing offered to your pet.

Providing that your animal does not have an adverse reaction to water consumption, food is offered 12 to 24 hours later. You will hear many people refer to the food served for this meal as a “bland diet.” No universally accepted definition exists of a bland diet, but it generally means a diet that is low in fat and is easily digested. For dogs, this usually means cottage cheese and rice. Some cats will accept cottage cheese and rice; however, many cats will not. In this case they can be fed some chicken (or other low-fat protein source such as tuna).

If your pet is willing and able to eat what is initially offered, then he or she is generally placed on a veterinary therapeutic diet designed for the treatment of gastrointestinal problems. These diets contain moderate to restricted fat concentrations and are highly digestible. Depending on the severity of your animal’s condition, some practitioners will simply feed one of these commercially prepared products as the first diet offered following the onset of gastrointestinal disease.

In instances in which diarrhea is the only presenting complaint, your doctor may place your pet on an oral rehydration solution, or select semi-solid foods. This is referred to as “feeding through diarrhea” and is thought to maintain the integrity of the gastrointestinal tract and reduce malnutrition. Oral rehydration solutions have been used for years in children and are beginning to gather favor for use in dogs and cats.

These solutions contain the following:

- Some carbohydrates (a form of sugar)
- Amino acids (the smaller, easier to absorb building blocks of proteins)
- Some electrolytes (such as sodium and potassium)

It is important to only use products recommended by your veterinarian and designed for dogs and cats. Humans have different nutritional needs and products designed for children and adults may make your pet ill. One other side effect to be aware of is that the use of either oral rehydration solutions or semi-solid foods may result in an increase in your animal’s diarrhea before you see improvement. This can be an undesirable side effect in some situations. Please contact your veterinarian should this occur to obtain appropriate advice.

Your pet may or may not be sent home with a special diet when he or she is released from the hospital. Your veterinarian will provide feeding instructions regarding the recommended product. Providing that your animal’s illness is not the result of a chronic condition, you will most likely be instructed to return your pet to his or her normal diet within days to a week of leaving the hospital. This transition is best completed over several days by increasing the amount of your animal’s normal diet, while gradually reducing the amount of the therapeutic diet that was sent home from the hospital.

How is “chronic disease” managed?

Unlike acute problems, chronic gastrointestinal disease often necessitates a permanent dietary change in addition to long-term medication. A multitude of approaches exists to managing chronic gastrointestinal problems.

Dietary strategies to managing chronic gastrointestinal disease may include the following:

- A diet with a higher digestibility than your pet’s current diet
- A reduced fat diet
- A food containing one or several novel antigen sources
- A fiber-enhanced food

The diet prescribed for your pet may include one, or several of these options. The optimal approach varies from patient to patient, and identifying the best combination of medication and diet is often accomplished by trial and error. It is important that you understand that it may take some time before the best combination is determined for your pet.

Many diets designed to treat pets with long-term gastrointestinal problems have an increased digestibility compared with other dog and cat diets. This simply means that the animal will digest, and presumably absorb, more of this type of food compared with a normal diet. This can be an advantage in treating many gastrointestinal problems in which the ability of the intestinal tract is often compromised. An additional advantage is that by absorbing more of the ingested food, less undigested food is available to move further down the gastrointestinal tract where it can exacerbate conditions such as flatulence and diarrhea.

In some cases your veterinarian may choose to place your pet on a diet that contains a lower fat content compared with the current food you are feeding. Fat delays the passage of food from the stomach into the intestinal tract. In some cases, this delay may cause discomfort or worsen your pet's symptoms. In animals with a reduced ability to digest their food, additional fat in the diet can exacerbate diarrhea.

The use of a novel antigen diet is a frequent first choice to treat some chronic gastrointestinal diseases where an adverse response to the current diet is suspected. An adverse food response includes a food allergy (a true immune-mediated reaction to some component of the diet) and other non-immune-mediated reactions to food. This approach involves selecting a diet that contains major ingredients (primarily protein and carbohydrate sources) to which your animal has never been exposed and thus are new and novel to your pet.

To prescribe an appropriate food, your veterinarian will need a thorough and extensive diet history on your animal. This information will be vital to assist them in selecting your pet's new diet, so your report must be as accurate as possible. Many diets on the market advertise themselves as "hypoallergenic." No diet is inherently hypoallergenic; it depends upon an individual's dietary history to determine which antigen sources will be novel to that animal.

Historically, fiber has been prescribed primarily for the management of colitis and other large bowel problems. However, recent knowledge about fiber's other potential benefits has resulted in its successful use in the management of some small bowel problems. Soluble fiber has a large capacity to hold water and is easily digested by gastrointestinal microflora. Pectin, mucilages, gums, and some hemicelluloses are considered soluble fiber. Insoluble fiber has minimal ability to hold water and is not completely degraded by the microflora of the gastrointestinal tract. Cellulose and some hemicelluloses are classified as insoluble fiber sources.

Response to fiber supplementation is extremely variable from one animal to another. Some clinicians prefer to supplement a diet with fiber, whereas others will recommend a diet that already contains added fiber. If your veterinarian recommends adding fiber to the diet, it is important to understand that it may take a period of time to identify an amount and fiber type that is appropriate for your animal's needs. Although fiber may appear to be innocuous, it is not and should only be administered under the supervision of a veterinarian. Too much may result in adverse gastrointestinal side effects such as constipation or diarrhea, or diminish the digestibility of your pet's diet to the point where a nutritional deficiency may result.

Conclusion

Depending on your animal's condition, your veterinarian may choose a commercially prepared diet or instruct you to home-cook for your pet until compatible ingredients are identified. Using either approach, it may take several attempts to find a food or a set of ingredients that do not cause an adverse response in your animal. If you do begin by home-preparing your pet's diet, it is crucial to follow up with your veterinarian regarding the long-term use of the foods you are feeding. More often than not, home-prepared diets intended to identify feed ingredients that are well tolerated are not designed to be fed over the long term. Quite often your pet can be transitioned to a commercial diet containing those same ingredients. In instances where an animal needs to be fed a home-prepared diet long term, the diet must be evaluated and balanced to meet all of your animal's needs by a veterinary nutritionist. Failure to do so may result in additional health problems.

Contacts for Further Information



**Animal Health
Care Center**
of Hershey

**948 E. Chocolate Ave
Hershey, PA 17033
(717) 533-6745**