Applied Veterinary Clinical Nutrition

Integration of Nutrition into Clinical Practice

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INTRODUCTION

A vast majority of veterinarians are forced by necessity to concurrently be businesspeople. This reality, which for many is undesirable, causes many clinical approaches to be at least partially viewed through a "fiscal filter." Although this filter should not be fine enough to strain out appropriate medical decisions, it certainly requires that the economics associated with certain medical practices be considered. Therefore, this introductory chapter will discuss the "business" of nutrition in clinical practice, as to not do so may prevent the reader from being able to afford to implement the knowledge contained in the rest of this textbook.

AVERAGE REVENUE FROM FOOD SALES AND THE POTENTIAL

In 2003, the average food revenue was 4% of total veterinary practice revenue in the United States (Landeck 2006). At the same time, average total revenue earned by practices in 2005 was U.S. \$1,078,087. Assuming that the vast majority of food sales were for therapeutic foods that typically have a markup of 40–45%, food sales represent U.S. \$43,123, in revenue or gross profits ranging from \$17,249 to \$19,405. Since net income (before any owner compensation) averaged 25.5% of revenues in 2005, food sales roughly represent between 6.3% and 7.1% of an average practice's gross profits. This value, while relatively significant, can be higher as practices that focus more on the large compliance gap with therapeutic food recommendations (this gap includes both veterinarians who do not actively recommend medically needed foods and clients

who do not choose to feed them) can easily double gross profits from food sales with minimal additional effort or expenditures. Theoretically, revenues and profits could be increased more than fivefold based on the low compliance found in a study by the American Animal Hospital Association (AAHA 2003). Thus, many practices could earn up to \$100,000 in gross profits from therapeutic pet food sales if they engaged in full compliance.

STRATEGIES TO INCREASE PRODUCT SALES

Recommending an Effective Therapeutic Food

The surest way to increase compliance and therapeutic pet food sales is to recommend an effective one. This sounds simple enough but can be quite challenging in practice. To start, one must make the correct diagnosis and select a food that can be measurably shown to, or perceived to, improve the pet's condition or disease management. For example, clients feeding a "weight loss" food that does not result in weight loss and/or a reduction of or relief in any comorbidity are likely to stop feeding the ineffectual food. Similarly, trying to sell a food that a pet will not eat is unlikely to be successful. Therefore, establishing expectations, monitoring the patient response, and providing a variety of options is vital for client compliance.

Establishing Expectations

Many clients choose not to start feeding a recommended therapeutic food, or choose to stop feeding one, because they do not clearly understand what is expected from the food. Creating expectations requires going over the mechanism by which the food is to prove helpful. For example,

BOX 1.1

Few recommendations hold as much weight with clients about what to feed their pet as a veterinarian's recommendation. Many pet food companies are aware of this and invest heavily in the veterinary community, vying for the veterinarian's awareness of their products and, ideally, their recommendation. Unfortunately, the resulting influx of generous support is increasingly viewed by some as creating a conflict of interest for veterinarians and resulting in a bias with dietary recommendations. This perception is increased by veterinarians who have limited recommendations beyond the products, brands, and/or companies they stock. Therefore, the goal of this chapter is not to increase the perception among some that veterinarians sell food just to make more money. Instead this chapter's goal is to assist the veterinarian in methods to ensure they can afford to provide the best medical care for their patients and clients by fully integrating nutrition into their clinical practice.

clients who understand that higher dietary phosphorus can cause progression of renal damage in kidney insufficiency, and that most dietary phosphorus comes from protein-rich ingredients, are less likely to feed a higher protein- or phosphorus-containing over-the-counter food. Not surprisingly, clients (in the form of human patients) have better retention of medical information when verbal information is accompanied with written information (Langdon 2002). Therefore, client handouts can be a very useful adjunct to verbal client education. Equally helpful can be reinforcement with repetition of key points by veterinary staff at checkout or discharge, assuming that the staff has already become familiar with all standard client handouts. In some practices, veterinary staff can play an instrumental role in drafting these client handouts as they often can relate to the lay audience and are also aware of the common questions and issues that should be addressed.

Monitoring Patient Response

Although many therapeutic foods can be quite effective, not all foods work for every patient. A food's failure may be defined as simply as a patient being unwilling to eat the food. Therefore, monitoring the response to a newly recommended food is crucial to improving compliance. Initially, the greatest risk to compliance is food refusal. Often this can be managed with appropriate recommendations for transitioning to the new food, as well as planned and

periodic follow-up in the form of an email, phone call, or in-person office visit to address any issues that arise. Follow-up is equally important to reinforce the importance of the dietary recommendation. Recommendations that have no follow-up are likely to be perceived as not being as crucial or important. Finally, checking on progress provides an opportunity to discuss and select an alternative but still appropriate food if the first recommendation does not work. At times there can be a reluctance to perform follow-up since it often is "unbillable" time; however, follow-up can be tiered and veterinary support staff can be leveraged to assist with follow-up. Many of the outbound calls can be conducted by reception staff with elevation to licensed veterinary technicians and the attending veterinarian as needed. This "triaging" of sorts can increase efficiency, and often is welcomed by staff members who feel both entrusted and empowered.

Providing a Variety of Options

Since no food will work in every situation, it is important to have additional options for the client. A ready and specific alternative recommendation should reduce the likelihood that the client may select a food by themselves, resulting in the potential for an inappropriate food to be selected and the potential loss of a medically justified sale. The tendency to stock only one "house brand"—while convenient from an inventory management perspectivedecreases the ability to readily offer alternatives and can lead to a perception that there is only one option, or worse yet, that the recommendation is made solely on the basis that that particular brand is all the veterinarian sells. Certainly, carrying every therapeutic food available (which now number in the hundreds) is not feasible in all but a few referral settings; therefore, a selection of foods used for the management of diseases seen frequently at the practice along with a willingness to special order, or even identify direct delivery options for clients, is probably the best approach. Additionally, the stocking of more smallersized bags can help increase the variety of foods offered without substantially increasing the "carrying cost of inventory." Small bags also can be useful for a trial, and once an acceptable option has been found a standing order for that patient in larger sizes can be created. Such standing orders then help to increase the number of inventory turns, thereby improving cash management. This "small bag" approach might also assist with reducing the labor involved in stocking larger bags as well as increasing the storage capacity of a facility by increasing the height at which food can be stored. Most therapeutic food manufacturers will accept return of inventory that has expired. For

those manufacturers where such is not the case, this approach can minimize "perishable shrink" by reducing the cost of any expired bag that cannot be returned.

From the veterinary practitioner's viewpoint, the greatest value of carrying and recommending a variety of products for the same condition can be increasing one's familiarity with different products. Clinical experience with each product increases the likelihood of making the best initial recommendation, as well as increasing one's comfort with changing to an alternative product if the initial recommendation proves unsuccessful.

Recommending Therapeutic Treats

A growing category within veterinary product offerings is therapeutic treats. These treats often pair with a "matching" therapeutic food to give the client a nutritionally appropriate option when treating is desired. These treats often take the form of a biscuit-shaped version of the corresponding dry kibble. Therefore, treats generally do not offer anything novel to the nutritional management of the condition or disease, but rather assist with compliance by encouraging the pet's interest in the new dietary approach while preventing some other treat, which might be inappropriate, from being given. The same process outlined above should be used when recommending an effective therapeutic food.

Recommending Nutraceuticals and Dietary Supplements

For a full discussion on this subject please see Chapter 5 on nutraceuticals and dietary supplements.

From a financial perspective, stocking certain dietary supplements should be considered. Although the margin on such products can vary greatly, they generally take up much less shelf space than food and treats. Typically, products that are only sold through veterinarians should be considered unless carrying nonexclusive products adds overall "value" for the client due to convenience. Caution should be taken when recommending or offering products for sale at a premium when comparable human supplements of equal or even greater quality or potency are available for a similar or lower price. If such products are available from other retailers, whether "brick and mortar" or online, it is in the best interest of solid client relations to refer clients to that retailer, while being sure to give a specific product and retailer recommendation for clarity and convenience. If a product is widely available only online, then clients are generally willing to purchase such products directly from the veterinarian who can compete on the basis of reduced delivery time and cost.

CREATING OR INCREASING REVENUE FROM NUTRITIONAL ADVICE

Veterinarians' time is limited for both their own continuing education and client education. Therefore, there is an "opportunity cost" associated with spending time on nutrition. If a veterinarian earns more income from learning about and performing surgery, for example, than learning about and advising on nutrition, there is a financial incentive to focus on surgery and a disincentive to focus on nutrition. Certainly the generalist cannot pick and choose only the aspects of veterinary medicine that are most profitable but recognizing the potential for fiscal disparity provides context for a discussion on nutritional advice revenue.

Not only is veterinarians' time limited, the value of nutritional advice can be diluted by the perception that they lack the expertise to make nutritional recommendations. This perception can be increased by the appearance of bias for a particular brand or company's food in one's recommendation(s) as discussed above or by a variety of compounding factors. One of these factors is the belief that nutrition is a pseudoscience. This belief can largely be dispelled by ensuring that the application of nutrition is testable. If a veterinarian forgoes "testing" a nutritional recommendation by neglecting to monitor patient response, then one can hardly blame clients for feeling that their own beliefs about feeding are equally correct. This can be especially true when inappropriate feeding regimens may not manifest as problems immediately. Unfortunately, clients are not aware that veterinarians who recommend a particular therapeutic food often choose to do so because such recommendations are based on scientifically proven strategies or have, in fact, actually been tested for the condition or disease in question. Certainly many therapeutic veterinary foods are in need of additional clinical study (Roudebush et al. 2004); however, they are largely based on very sound science. Clients may also believe that nutrition is simple, after all, as they likely have successfully fed themselves for most of their lives. While providing adequate calories to meet (and often exceed) caloric requirements is thankfully relatively simple in the developed world, ensuring that the nutrients delivered with these calories are optimal is not always straightforward. The field of nutrition is also beset by self-proclaimed "nutritionists" who have little, if any, medical or nutritional training. At the same time, many veterinarians received an abridged veterinary nutrition education in veterinary school or college, and subsequently little additional education postgraduation. This has led to a level of discomfort for many on the subject, rather than the expertise or mastery many feel on other veterinary medical topics. Thus, a climate exists where veterinarians acquiesce in the nutritional management of their patient, or at least fail to take a very active role unless intervention is absolutely necessary, such as in the cases of hepatic lipidosis or food allergy. Therefore, the following recommendations are for practitioners who take, or wish to take, an active role in the management of all their patients' diets.

Nutritional Advice for Healthy Patients

The number one obligation of the veterinarian when advising clients about an appropriate diet for a healthy pet is to ensure that it maintains an ideal body condition (please see Chapter 9 on the nutritional management of body weight for further discussion on this topic). Keeping dogs lean is the only proven intervention to increase both the quantity and quality of life (Kealy 2002). Although unproven in cats, caloric restriction has repeatedly been shown to extend lifespan in mammals (Sohal 1996; Barja 2004) and would thus be expected to do so in cats as well. Therefore, avoidance of overweight and obesity should be a goal for the feeding of every patient a practitioner sees.

In addition to weight management, an appropriate food should have an appropriate nutritional adequacy statement for the patient. This means that the food is appropriate for the patient's species, age, and reproductive status if the patient is a reproducing female. As would be expected, many foods meet these criteria, and further discrimination should be based on both client and patient preference. For a client, convenience, cost, and personal nutritional philosophy may be important in deciding which foods they select. For patients, ingredients and their associated impact on palatability along with texture (i.e., dry, wet, semimoist) and macronutrient distribution (e.g., protein, fat, and carbohydrate percentages) play key roles in the foods they choose to consume when given a choice. Recognizing that no one food can meet all of these preferences and needs helps to give a perspective on why so many brands and varieties exist and what needs to be considered when advising clients about food options.

It can often be useful to have the client select a few foods they like and review these products with them during wellness visits. This method helps to narrow down the field of foods to consider and often provides an opportune time to exhibit some expertise, as well as an openness to discuss nutrition. If the client has no preconceived notions, then it should be suggested that companies be recommended that actually make their own food and employ nutritionists. Such companies are more likely to have the technical expertise to address any issues that

might arise, as well as the knowledge to make nutritionally sound and safe products.

From a fiscal perspective, such a review of potential foods or nutritional recommendations should not result in a unique charge for the client but rather should be captured in the office visit fee. This assumes that any requested review does not require additional research and analysis outside the office visit. In cases where it does, time should be charged either on an agreed upon flat rate or on a perunit of time basis up to some pre-established maximum. Clients who do not wish to pay for the veterinarian's time should be advised that the evaluation is accordingly limited. Some veterinarians find it difficult to charge for researching an issue but if the research is specific for a patient, most clients will accept that it is appropriate when it is raised with confidence and the resolve that one's professional time is of value. It should be noted that a veterinarian's review often involves dietary supplements, as the variety of novel and often unconventional supplements greatly exceeds the number of pet foods, which are, in practice, more closely regulated.

At times, veterinarians have difficulty distinguishing the continuing self-study required as a veterinary medicine professional and the work involved in researching unique supplements or foods. The best way to distinguish this in one's own mind is that the veterinarian is not charging for the knowledge on how to interpret and find information, but rather the act of applying their critical thinking and scientific knowledge to the patient's and/or client's specific products and/or needs. An analogy might be that one does not charge for the time it takes to learn a surgical procedure but rather charges for using the resulting skills and knowledge to perform the surgery on particular patients.

Nutritional Advice for Unhealthy Patients

Most, if not all, diseases and conditions can be affected by diet. For some conditions and diseases this may simply be related to the adverse effects of inadequate caloric intake associated with hyporexia or anorexia of illness. For many other conditions and diseases, there are specific nutritional management interventions that are the subject for most of the rest of this textbook. For these sick patients, it is generally easier to generate revenue through veterinary therapeutic foods, treats, and/or parenteral solution sales, or through procedures (such as feeding tube placement) to provide compensation for the specific nutritional guidance and/or advice involved in their selection. However, it should be noted that for board-certified veterinary nutritionists who consult on cases, but who may not share in

or receive credit for such sales or procedures, one should expect to compensate them specifically for their time for such advice. The veterinarian should be able to realize adequate revenue through product sales, nutrition-related procedures, and nutritional counseling to justify the full integration of nutrition into clinical practice to the benefit of healthy and unhealthy patients.

BOX 1.2 WHAT IS A BOARD-CERTIFIED VETERINARY NUTRITIONIST?

A board-certified veterinary nutritionist is a licensed veterinarian who has undergone additional education and training in the field of veterinary nutrition. This typically involves additional graduate coursework and/ or graduate degrees in nutrition along with residency training at the secondary or tertiary referral level under the supervision of a board-certified veterinary nutritionist. Following completion of residency training and publication of animal nutrition related research in peerreviewed scientific journals, candidates for certification often submit case reports along with their credentials to indicate their mastery of the discipline. Upon acceptance of these materials, candidates are allowed to sit for a multipart multiday intensive examination on veterinary nutrition. Candidates who pass all parts of the examination and are voted into the specialty can refer to themselves as board-certified veterinary nutritionists or "diplomates." There are currently two veterinary nutrition specialty colleges in the world, the American College of Veterinary Nutrition (ACVNTM; www.acvn.org; also the basis for most of the summary above) and the European College of Veterinary Comparative Nutrition (ECVCN). Members of the ACVN can be found in North America, the Carribean, the United Kingdom, Europe, and Australasia, while most ECVCN diplomates are found in Europe. The majority of diplomates are employed in academia, with the remainder in industry, private practice, or the government. Attending veterinarians and specialists in other disciplines typically refer cases to diplomates of the ACVN or ECVCN in academia or at large referral hospitals.

It is expected that the reader of the rest of this textbook should be able to better advise clients about the nutritional management of unhealthy patients and recognize when referral to a board-certified veterinary nutritionist is indicated. It is recommended that when a board-certified veterinary nutritionist needs to be consulted, the referring veterinarian charges for their time specifically if they act as the "conduit" for the consultation, similar to how clinical pathology reports may be handled. Accordingly, many veterinary nutritionists and veterinary nutrition consulting services will bill the referring veterinarian directly rather than the client so that the referring veterinarian can apply the necessary charges for their time to the client's final invoice. Occasionally, product sales and consulting fees will not be available as methods to compensate the generalist or referring veterinarian. In those cases, a veterinarian should charge for their time or set up an office visit specifically to address an unhealthy patient's nutritional needs and educate the client accordingly.

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