Although veterinary practitioners know that nutrition can make a difference in the health and recovery from disease or illness in dogs and cats, they may feel poorly equipped to provide unbiased information on nutrition. This article provides information about evaluating and recommending diets and interpreting a pet food label to allow for comparisons among pet foods and discussion about how to do a nutritional assessment. It provides an example of how nutritional assessment and recommendation were successfully introduced into a busy private practice. Finally, some of the myths and misperceptions about nutrition are discussed with information provided from evidence-based research.

The goal of this article was to provide veterinary practitioners with an overview of the types of alternative dietary options available to pet owners and a practical method by which to evaluate the nutritional adequacy of these various options. Our approach to categorizing the alternative dietary options is based on the nutritional adequacy of these dietary options, because patients will be at risk for nutrition-related diseases if fed a nutritionally incomplete or improperly balanced diet long term.

Information and misinformation about pet nutrition and pet foods, including ingredients used in pet foods, is widely available through various sources. Often, this “information” raises questions or concerns among pet owners. Many pet owners will turn to their veterinarian for answers to these questions. One of the challenges that veterinarians have is keeping up with the volume of misinformation about pet foods and sorting out fact from fiction. The goal of this article is to provide facts regarding some common myths about ingredients used in commercial pet foods so as to better prepare veterinarians to address their client’s questions.

Dietary macronutrients include protein, fat, and carbohydrates. Current nutritional recommendations establish minimums but not maximums for protein and fat but not for carbohydrates; thus, commercial feline
maintenance diets have a wide range of macronutrient distribution depending on manufacturer, ingredients, and processing. There is growing interest and discussion, however, in defining the ideal macronutrient composition of feline diets to maximize longevity and health. Current recommendations should be tailored to each patient based on age, body condition, presence of muscle mass atrophy, and the presence of disease.

**Nutrition for Working and Service Dogs** 719

Joseph Wakshlag and Justin Shmalberg

Conformation, genetics, and behavioral drive are the major determinants of success in canine athletes, although controllable variables, such as training and nutrition, play an important role. The scope and breadth of canine athletic events has expanded dramatically in the past 30 years, but with limited research on performance nutrition. There are considerable data examining nutritional physiology in endurance dogs and in sprinting dogs; however, nutritional studies for agility, field trial, and detection are rare. This article highlights basic nutritional physiology and interventions for exercise, and reviews newer investigations regarding aging working and service dogs, and canine detection activities.

**Nutrition of Aging Dogs** 741

Jennifer A. Larsen and Amy Farcas

Aging is a normal process characterized by a variety of physiologic changes. Geriatric dogs are also more likely to be afflicted with certain disease conditions. Both normal and abnormal physiologic changes associated with aging in the dog may be amenable to nutritional intervention. Specific alterations in nutrients or in dietary characteristics can be beneficial; however, these are best done in the context of an individualized nutritional assessment and monitoring paradigm.

**Nutrition of Aging Cats** 761

Dottie Laflamme and Danièle Gunn-Moore

At least one-third of cats seen by veterinarians are mature, defined as 7 years of age or older, and approximately 13% of cats are geriatric, defined as 12 years of age or older. The article reviews physiologic differences between these life stages and relates the changes to nutritional needs. Geriatric cats have increased requirements for dietary energy and protein. Feeding management addresses what, when, how, and where food is provided. This article provides an update on diet-sensitive conditions, including cognitive dysfunction, diabetes mellitus, chronic kidney disease, osteoarthritis, and hyperthyroidism. Although guidelines are provided, patients must be evaluated and fed according to their individual needs.

**Dietary Management of Feline Endocrine Disease** 775

Mark E. Peterson and Laura Eirmann

When treating cats with endocrine disease, most veterinarians concentrate on medical or surgical treatments that can be used to manage or cure the disease. Dietary issues are frequently ignored or not properly
addressed. However, nutritional support can play an integral role in the successful management of feline endocrine diseases. Furthermore, because most cats with endocrine disease are senior or geriatric, they may also have concurrent health conditions that warrant dietary intervention. This article discusses recommendations for nutritional support of the 2 most common endocrine problems of cats seen in clinical practice: hyperthyroidism and diabetes mellitus.

Pet Obesity Management: Beyond Nutrition 789
Deborah Linder and Megan Mueller

Video of successful weight management strategy in an 8-year-old dog accompanies this article

Excess weight has been associated with many clinical and subclinical conditions that put a pet’s health at risk. Successful weight management programs extend beyond standard nutritional management and incorporate an understanding of human-animal interaction. Understanding the processes and dynamics of human-animal relationships can be a useful tool for practitioners in developing successful treatment plans for their clients. Obesity is a nutritional disorder requiring lifelong management; however, when veterinarians go beyond standard treatment to include an understanding of human-animal interaction, it is also one of the few conditions in veterinary medicine that is completely preventable and curable.