

CONSULT THE EXPERT

ADVISING PET OWNERS ON NUTRITIONAL ADEQUACY

Deborah E. Linder, DVM, MS, DACVN

Cummings School of Veterinary Medicine at Tufts University

Addressing questions from owners regarding whether a food is safe and meets their pet's needs can be challenging and time-consuming, as there is a significant amount of misinformation available. Although pet food labels and manufacturer websites can contain useful information, providing owners specific guidance on terms and regulations, such as Association of American Feed Control Officials (AAFCO) guidelines and what they mean when placed on pet food labels, may be essential to patient care.



Beyond the basics of pet food regulation, owners should be educated on obtaining information from manufacturers to determine the ideal food for their pet, such as quality control, level of testing, and expertise behind food formulations. Gathering as much information as possible about the food and manufacturer can help guide conversations.

Criteria for Determining Nutritional Adequacy

The WSAVA Global Nutrition Committee's nutrition toolkit provides a stepwise approach to selecting high-quality food through a series of questions for owners to ask manufacturers.¹ Examples of the criteria and questions used to determine high-quality pet food are explained below.

Identifying a Responsible Company

Many manufacturers offer a wide spectrum of nutritional expertise; some companies market based on the perception that cost equals quality. However, the manufacturers that follow the WSAVA Global Nutrition Guidelines are not necessarily those with the most expensive food.

A few example questions from the WSAVA guidelines that pet owners should ask include¹:

- **Does the manufacturer employ at least one full-time, qualified nutritionist (ie, has a PhD in animal nutrition and/or is a veterinarian and certified by the American College of Veterinary Nutrition)?** Asking about full-time employment is important, as companies need the continued expertise of a nutritionist to ensure ongoing quality throughout production.
- **What are the qualifications of the person who formulates the food (if not the nutritionist)?** Although the qualifications noted above are ideal, there is a wide range of experience and expertise between someone with a PhD and someone with no prior formal training, and asking this question can help clarify the level of expertise of the person formulating the pet food.

Assessing the Quality of Food Testing

Clinicians should remind owners that their pet needs nutrients—not ingredients—and the effects of processing (or not processing) the food, interactions between ingredients, and the extent of testing for bioavailability and digestibility should be considered. Not every manufacturer can perform extensive testing, but those that do can provide more information on nutritional adequacy. Larger manufacturers may have more resources to provide stringent quality-control protocols and employ expert nutritionists and food scientists. For example, a study evaluating thiamine deficiency in commercially available foods showed that foods from smaller companies are more likely to have lower thiamine levels as compared with foods from larger companies.² However, this information should not be assumed, and there is no official definition of a large company, so owners should contact manufacturers to ask about their quality-control methods and testing. Suggested questions include¹:

- **What quality control measures are in place?** Strict quality-control measures are critical to ensuring safe, consistent, and nutritious food. These measures can vary widely among manufacturers but should include certification of their procedures by the Global Food Safety Initiative, Hazard Analysis and Critical Control Points, and/or American Feed Industry Association; testing of ingredients and end products for nutrient content, pathogens, and toxins; and supplier audits.
- **What kind of product research has been conducted, and have the results been published in peer-reviewed journals?** Feeding trials or further evaluation of a food after being fed to the intended species provide the most information about the food's bioavailability and digestibility. Foods may be on the market without having undergone more than a computer formulation or analysis, neither of which assesses bioavailability.

Evaluating the Label

Every food, excluding treats, should have an accompanying AAFCO statement that describes whether the food is complete and balanced and the life stage for which it is appropriate. Only foods that are labeled as complete and balanced by AAFCO feeding trials have been evaluated in live animals (vs laboratory analysis). Three important things can be determined by these statements³:

1 **Is the food complete and balanced?** If not, the food label will state (often in small print) that the product is only intended for intermittent or supplemental feeding. This means the food does not have all essential nutrients; owners should not feed this to their pet unless otherwise instructed by a clinician (eg, therapeutic diets).

2 **How did the company determine the food is complete and balanced?** Companies can either perform noninvasive feeding trials (AAFCO feeding trials last 6 months) or an analysis of their product to determine the food is complete and balanced. Foods that have undergone feeding trials will carry a statement confirming that feeding tests or trials using AAFCO procedures substantiate the food provides complete and balanced nutrition; foods that have undergone nutritional analysis only will carry a statement that the food is formulated to meet AAFCO nutrient profiles. Ideally, companies should test food using both methods to ensure it is safe and perform longer trials to ensure long-term safety and adequacy.

3 **For what life stage does the food provide complete and balanced nutrition?** AAFCO provides nutrient profiles and feeding trial requirements for growth (differentiated by breeds expected to weigh more or less than 70 lb [32 kg] at adult weight), reproduction, and adult maintenance. There are no guidelines for senior animals. Foods labeled for

all life stages must meet minimum levels for both growth and adult maintenance.

Evaluating for Cautions

Owners should be instructed to look for companies that produce high-quality products and use evidence from peer-reviewed studies as opposed to companies that focus on negative traits of other pet food companies. Owners should also watch for a lack of nutritional knowledge, including promulgating assumptions that human nutrition applies to cats and dogs. An example might be adding ingredients that are potentially toxic to animals (eg, onion, garlic). Another caution to advise pet owners against might be a nutritionally incomplete food (ie, with an AAFCO statement denoting supplemental or intermittent feeding only) marketed in way that implies it provides a pet the nutrition it needs.

Communication Tips

There is more to understand about optimal nutrition for companion animals, and owners may easily become frustrated and confused by contradictory information. Using a follow-the-evidence communication style allows recommendations to change as more information becomes available

Not every manufacturer can perform extensive testing, but those that do can provide more information on nutritional adequacy.

AAFCO = Association of American Feed Control Officials

and promotes a team-based approach between clinicians and owners to determine what is best for a pet. The author suggests conveying the following communication points:

- There are no good or bad foods—just foods with more available information.
- Food without testing is not “bad,” but its adequacy is unknown.
- An informed consumer is one who is familiar with all the testing a company conducts on a food.

For owners who may feel overwhelmed, the Pet Nutrition Alliance’s Dare to Ask project provides many manufacturers’ answers to the WSAVA Global Nutrition Committee’s guideline questions⁴; this resource can provide a quick comparison of information among pet food brands. This may be helpful for owners who are confused or trying to decide between multiple foods.

Conclusion

Providing expert assistance can be helpful to owners who may be overwhelmed by the available pet food information. This can also help focus information gathering on adequacy and evidence (eg, feeding trials or peer-reviewed clinical trials on various pet foods) as opposed to unfounded information in the form of marketing (eg, health claims

on food that have not been tested on animals). Providing vetted resources and specific guidelines to help owners make improved food choices can strengthen the clinician–owner relationship and avoid well-intentioned but ill-informed—and possibly inadequate—food choices for pets. ■

KEY TAKEAWAYS

- AAFCO statements on pet food labels provide information on whether a food is complete and balanced and for which life stage it is appropriate (ie, adult, growth, lactation/gestation).
 - The WSAVA Global Nutrition Guidelines provide additional questions pet owners can ask to further determine adequacy through safety and expertise.
- Dare to Ask is an initiative that provides an easy-to-compare database of information based on manufacturer’s answers to the WSAVA Global Nutrition Guidelines questions.⁴
- Key questions to ask manufacturers include expertise on staff, level of testing, safety, and quality control.
- Manufacturers should be asked for their studies and/or evidence to substantiate any health claims present on food labels.
- Communication with owners should focus on information gathering as a team approach instead of applying terms like “good” or “bad” to different food choices.

References

1. Freeman L, Becvarova I, Cave N, et al. WSAVA nutritional assessment guidelines. *Compend Contin Educ Vet*. 2011;33(8):E1-E9.
2. Markovich JE, Freeman LM, Heinze CR. Analysis of thiamine concentrations in commercial canned foods formulated for cats. *J Am Vet Med Assoc*. 2014;244(2):175-179.
3. Association of American Feed Control Officials. *Association of American Feed Control Officials 2020 Official Publication*. Oxford, IN: Association of American Feed Control Officials; 2019.
4. Pet Nutrition Alliance. Dare to ask ... we did. Pet Nutrition Alliance website. <https://petnutritionalliance.org/site/pnatool/dare-to-ask-we-did>. Published 2019. Accessed April 11, 2020.

Suggested Reading

- American College of Veterinary Nutrition. ACVN website. <https://acvn.org>. Accessed May 5, 2020.
- Tufts Clinical Nutrition Service. Petfoodology. Tufts Clinical Nutrition Service website. <https://vetnutrition.tufts.edu>. Accessed May 5, 2020.
- World Small Animal Veterinary Association. WSAVA nutrition toolkit. WSAVA website. <https://wsava.org/wp-content/uploads/2020/05/WSAVA-Global-Nutrition-Toolkit-English.pdf>. Accessed May 5, 2020.

AAFCO = Association of American Feed Control Officials