Pet Food Labels: Reading the Fine Print & Between the Lines
Martha G. Cline, DVM DACVN
Red Bank Veterinary Hospital, Tinton Falls, NJ

Pet Food Labeling Requirements
The Association of American Feed Control Officials (AAFCO) is the organization that develops the standards, regulations, policies, and definitions for pet food. Each year AAFCO publishes their Model Pet Food Regulations in their Official Publication. AAFCO itself does not have any regulatory authority over pet food. This is left to the individual state feed control officials and the Food and Drug Administration (FDA). With regards to pet food, the United States Department of Agriculture (USDA) regulates the National Organic Program and the processing of animals for slaughter and meat until it enters the pet food supply chain.

The labeling requirements of pet food started in the 1960s, the majority of which are unchanged. In August of 2016, AAFCO formed the Pet Food Labeling Modernization Working Group to make pet food label format more similar to the nutrition facts on human food labels. Changes to pet food labels are expected to take several years. Current labeling requirements of pet food are as follows:

- **Product name and brand name**
- **Species** the food is intended on the principal display panel (PDP)
- **Quantity statement** on the PDP; This should be in English and metric units (e.g. ounces and grams)
- **Guaranteed Analysis** including minimum percentage of crude protein, minimum percentage of crude fat, maximum percentage of crude fiber, and maximum percentage of moisture
- **Ingredient statement** with ingredients listed in descending order by weight
- **Nutritional adequacy statement**
- **Feeding directions**
- **Statement of caloric content** in terms of metabolizable energy or as fed basis as kcal/kg and kcal per familiar household measure (e.g. cup, can, treat, piece)
- **Name and address of the manufacturer or distributor**

The nutritional adequacy of a pet food product is determined in one of 3 ways:
1) The product is formulated to meet the nutrient requirements for the intended life stage established by the AAFCO nutrient profile
2) The product completes and AAFCO feeding protocol for the intended life stage
3) The product is nutritionally similar to a lead product that completes an AAFCO feeding protocol for the intended life stage

The final method for determining nutrition adequacy will use the same nutritional adequacy statement as a product that has completed an AAFCO feeding protocol.

Some pet food labels may fail to meet these requirements. Interesting, a recent study evaluating vegetarian diets formulated for dogs and cats found that only 11 out of 24 diets evaluated met the current labeling requirements. Eight of the 11 diets meeting the current labeling requirements did not have a statement of caloric content as this was not required at this time.

Commercial treats must state that the product is a treat or snack on the PDP. Some chews and bones including hooves, ears, pizzle sticks, ligaments, etc. are exempt from AAFCO label requirements unless the manufacturer makes a claim of nutritional value on the label. These treats are not however exempt from FDA label requirements which include proper product identification,
the name and place of business of the manufacturer or distributor, and the listing of the ingredients by weight.3

Therapeutic veterinary diets are required to have a nutritional adequacy statement, however some will be labeled as “intermittent or supplemental feeding only” as various nutrients will not meet the established levels for a normal cat or dog (e.g. therapeutic renal diets with phosphorus levels below the AAFCO minimum for cats and dogs). Recently the FDA released a Compliance Policy Guide for veterinary diets intended to treat or prevent diseases.4 These guidelines are not legally enforceable, but are recommendations to help the FDA decide if a therapeutic diet should meet animal drug approval requirements. The FDA considers these diets drugs, however will practice enforcement discretion if these diets meet various recommendations. These recommendations include but are not limited to sale through a licensed veterinarian, the label does not claim to treat or prevent disease nor is marketed to the general public as such, the diet is not marketed as an alternative to an approved new animal drug, and the ingredients are generally recognized as safe, as an approved additive, or is an ingredient as defined by AAFCO.

Recent changes to AAFCO Requirements and Pet Food Labeling

AAFCO has made several changes to labeling requirements, nutrition profiles, and terminology definitions over the last several years. Most notably are the adoption of revised AAFCO nutrient profiles for cats and dogs that appears in the 2016 Official Publication.2 Other notable recent changes include but are not limited to including a statement of caloric content, defining the terminology “human grade”, revising the calcium content requirements for large breed puppy diets, and changing the nutritional and labeling requirements for omega-3 fatty acids.

Under the Model Bill and Regulations PF9 in the AAFCO Official Publication, dog and cat food labels for complete and balanced diets, treats, snacks, and non-exempt chews are required to have a statement of calorie content.2 This first appeared in the 2014 Official Publication. Products marked prior to January 2014 have a grace period until January 2017 to comply. The grace period for products marketed after January 2014 has ended.

The terminology “human grade” was accepted as an official feed term by AAFCO in January 2016.5 Under this definition, the whole pet food product must meet all FDA requirements for the production of human foods. The guidelines for these requirements are still being developed by AAFCO prior to appearing in their Official Publication. Prior to January 2016, AAFCO considered this terminology was considered false and misleading. The FDA was previously offering pre-market review of pet food labels with a “human grade” claim, but discontinued this in August 2015.

The minimum amounts for calcium and phosphorus for canine growth and reproduction diets was increased in the AAFCO 2016 Official Publication. There has previously been and continues to be a maximum nutrient allowance for calcium and phosphorus for growth and reproduction and adult maintenance canine diets. The 2016 nutrient requirements however establish a maximum calcium allowance for large size puppies (those weighing ≥ 70lbs as mature lean adults). This change will impact many dog foods made for puppies or all life stages formulated to meet nutrient requirements unless there is a further designation for smaller dogs only.

In the AAFCO 2016 Official Publication, alpha-linolenic acid (ALA), Eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA) are recognized as essential nutrients for dogs and cats. ALA & EPA+DHA have minimum values for growth and reproduction. Minimum amounts for adult maintenance are not defined. Previously these fatty acids were collectively listed in the guaranteed analysis as omega-3 fatty acids with the notation they were not recognized as an essential nutrient by AAFCO nutrient profiles. DHA has been shown to be an important particularly
for growing animals. Puppies after weaning had improved cognitive, memory, psychomotor, immunologic (as measured by rabies titers post vaccination), and retinal function compared to puppies fed a moderate or low DHA diet until 1 year of age.\textsuperscript{6}

**Assessing the Quality of Pet Food**

Assessing the quality of pet food by simply reviewing the label can be challenging. The World Small Animal Veterinary Association (WSAVA) and American Animal Hospital Association has released a list of questions/guidelines to help consumers and veterinarians select commercial pet food.\textsuperscript{7,8} These questions to pet food companies include:

1. Does the company employ a full time qualified nutritionists?
2. Who formulated the company’s foods and what are his/her credentials?
3. Are the diets tested using AAFCO feeding trials or by formulation to meet AAFCO nutrient profiles? If the latter, do the diets meet AAFCO nutrient profiles by formulation or by analysis of the finish product?
4. Where are the diets produced and manufactured?
5. What specific quality control measures does the company use to assure the consistency and quality of the ingredients and the end product?
6. Can the company provide an average/typical nutrient analysis for the dog or cat food in question or their lead product? This is different from the guaranteed analysis which is only minimums and maximums.
7. Can the company provide the calorie content of their diet by gram, can, or cup?
8. What kind of product research is conducted and are these results published in peer-reviewed journals?

The above questions go beyond the pet food label to give consumers and veterinary professionals additional insight into the company and the particular products in questions. The information gained from question 5 will likely be limited as the full scope of a company’s quality control measures can be quite extensive. Additional recommendations for assessing a company’s quality control standards have been mentioned in a recent article on raw-meat based diets for dogs and cats.\textsuperscript{9} These include manufacturer testing of ingredients and end-products for nutrient content, pathogens (e.g. salmonella), and aflatoxins, materials risk assessments, and supplier audits. Additionally the quality control procedures, such as Hazard Analysis Critical Control Points (HACCP) to identify hazards during production, should be certified by an organization such as the Global Food Safety Initiative or American Feeding Industry Association. As another resource to pet owners, AAFCO has a comprehensive consumer friendly website to address pet owner questions related to pet food (talkspetfood.aafco.org).\textsuperscript{10}

The FDA Food Safety Modernization Act (FSMA) was signed into law January 2011. The primary aim of this law is preventing foodborne illness in the United States. The FDA maintains an extensive webpage with information regarding FSMA.\textsuperscript{11} This law also applies to pet food manufacturers. While the law itself is quite extensive, for animal food it ensures that manufactures establish current good manufacturing practices (cGMPs) and preventive controls. The time frame for compliance starts for some business in September 2016. A regular company must comply with cGMPs by September 2016 and preventive controls September 2017. Small (<500 full time employees) and very small (< US$2,500,000 in sales including the market value of food produced but held without sale) businesses have a longer time to comply with all companies complying by September 2020. Additionally, the law will also bring improvements to product tracing to aid investigators in the event of an outbreak of food borne illness or contamination. Hopefully this new law and its regulations will improve the quality and safety of pet food manufacturing in the United States.
References