Decoding AAFCO Guidelines

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You have asked... How do I explain the importance of AAFCO to my clients?

The expert says...

Understanding the role of the Association of American Feed Control Officials (AAFCO; aafco.org) in pet food regulation can help clients choose an appropriate diet for their pet.

AAFCO, a nongovernmental advisory body that includes representatives from all states, provides detailed model feed laws that have been adopted by many states in full or as part of individual state feed control laws. The organization does not regulate, test, approve, or certify pet foods.

Pet food manufacturers are responsible for labeling, marketing, and formulating their products in compliance with local, state, and federal laws. In addition, feed control officials in each state are responsible for regulating pet foods to ensure compliance.

MORE

AAFCO guidelines include requirements for 8 specific features...

- 1. Brand and product name
- 2. Species for which the product is intended
- 3. Feeding instructions
- 4. Manufacturer or distributor name and address
- 5. Net quantity statement
- 6. Guaranteed analysis
- 7. Ingredient list
- 8. Nutritional adequacy statement

...but pet owners may only read the guaranteed analysis, ingredient list, and nutritional adequacy statement.

Guaranteed Analysis

The guaranteed analysis (GA) provides minimum percentages for crude protein and fat and maximum percentages for moisture and crude fiber for dog and cat foods. In this context, *crude* refers to the laboratory method for determining the concentration (not quality) of the protein, fat, and fiber. Other nutrients are optional.

Of note, these numbers only represent minimum and maximum values, not the exact amounts of nutrients in the product.

- Crude protein is the estimate of the total protein and is obtained by measuring the amount of nitrogen and multiplying by an average proportion of nitrogen in amino acids.
- Crude fat is an estimate of the lipid content and is obtained through extraction of the food with ether. This procedure also isolates other compounds (eg, certain pigments, fat-soluble vitamins).
- Crude fiber is the organic residue that remains after plant material has been treated with dilute acid and alkali solvents and after the mineral component has been subtracted. This measurement does not reflect all insoluble fiber present, and the procedure does not capture any soluble fiber. Crude fiber is not the equivalent to *total dietary fiber*, as reported in foods for humans.

The GA presents nutrient levels on an "as fed" basis, without accounting for the proportion of water or energy density of the product. This makes comparison of diets using GA values difficult without converting to a dry matter or energy basis; comparisons between canned and dry foods are not possible without conversion to a dry matter basis.

However, dry matter basis comparisons do not account for differences in fiber content. To more accurately compare foods differing in both water and fiber content, expressing nutrient concentrations on an energy basis is suggested (eg, grams of calcium/100 kcal).

In addition, the GA does not contain information about the digestibility or quality of the listed nutrients.

Ingredient List

The ingredient list is arranged in decreasing order of majority by weight. Ingredients must be listed by their common or usual name, and most have a corresponding definition in the *AAFCO Official Publication*.

Although the ingredient list can provide general information about the type of ingredients used in a pet food, descriptors of quality and grade are not permitted. Similar to the GA, the ingredient

INGREDIENTS: Ocean Fish Broth, Tuna, Chicken, Chicken Liver, Salmon, Rice Flour, Oat Bran, Egg Product, Fish Protein Concentrate, Tricalcium Phosphate, Lecithin, Guar Gum, Minerals (Iron Amino Acid Chelate, Zinc Amino Acid Chelate, Cobart Amino Acid Chelate, Cooper Amino Acid Chelate, Manganese Amino Acid Chelate, Sodium Selenite, Potassium Iodice), Vitamins (Vitamin E, A, D3, B12 Supplements, Thiamin Mononitrate, Niacin, d-Calcium Pantothenate, Pridoxine Hydrochloride, Riboffavin Supplement, Folic Acid, Blotin), Choline Chloride, Carrageenan, Taurine.

Natural Value Tuna & Chicken Dinner is formulated to meet the nutritional levels established by the AAFCO Cat Food Nutrient Profiles for all life stages. **FEEDING INSTRUCTIONS:** Feed according to the age, size and activity of your cat. Feed at room temperature and refrigerate unused portion. Your cat should always have access to clean fresh water. Adult: Feed about one can pe 6-8 lbs. of body weight, per day. Kitten: Feed up to twice the adult amount to kittens. Gestation & lactation: Feed up to three times the normal adult amount **GUARNTEED ANALYSIS:** Crude Protein Min. 10.0%, Crude Fat Min. 5.0%, Crude Fiber Max. 0.5%, Moisture Max. 78.0%, Ash Max. 1.9%, Magnesium Max. 0.025% list is not presented on a dry matter or energy basis.

In addition, it is impossible to tell which proportions of nutrients are coming from each ingredient, as the nutritional composition of each ingredient can vary and exact amounts are not disclosed.

GA represents minimum and maximum values, not the exact amounts of nutrients in the product.



Ingredient lists may not be particularly useful for practical nutritional information, and they do not contain information about the digestibility or quality of the diet.

Nutritional Adequacy Statement

Unless expressly labeled as *snack* or *treat*, a pet food is required by AAFCO to have a statement and validation of nutritional adequacy.

The product label will state that the pet food meets the requirements (ie, provides complete and balanced nutrition) of 1 or more recognized categories of nutritional adequacy:

- Gestation and lactation
- Growth
- Maintenance
- All life stages

Pet foods can be considered *complete and balanced* in 1 of 2 ways:

- The manufacturer can prove by formulation (ie, calculations based on the composition of the ingredients and their inclusion levels in the product) that the product contains between the minimum and maximum required levels of all essential nutrients as established by the AAFCO dog or cat food nutrient profiles for specific life stages.
- The manufacturer can show by feeding trials (as specified by AAFCO) that the product supports the specific life stage claimed on the package.

Several states have adopted the model regulations of AAFCO as law.

If neither claim can be made and the product is not explicitly labeled as *snack* or *treat*, then the label must state that the product is intended for supplemental or intermittent feeding only.

There is value to both methods of nutritional adequacy substantiation, but feeding trials (preferred by many nutritionists) can account for digestibility and bioavailability of nutrients.

Closing Thoughts

Ideally, diets are formulated to satisfy nutritional profiles and are subjected to feeding trials. Clients should ensure they are using a food with a nutritional adequacy statement matching the life stage of their pet. **C**

See **Aids & Resources**, back page, for references & suggested reading.



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