

# Understanding Pet Food Labels and AAFCO FAQs

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Information presented on pet food packaging can be very helpful in determining which food is best for your pet. When choosing a pet food, be sure to read the entire package, and carefully consider the guaranteed analysis, dry matter basis, and ingredients. Just a few minutes spent comparing, analyzing, and selecting a quality pet food can help to ensure a happy, healthy pet for many years to come.

Today's pet food labels are packed with valuable information to help you determine the quality of your pet's food - if you know how to read them. In addition to providing information about the amount and quality of protein, fat, carbohydrates, fiber, and other nutrients included in the food, the label also alerts you to any unwanted preservatives and provides general feeding guidelines.

The label can also help you when you're considering the price of the food. Using information on the label, you can calculate the price per pound or the price per day. And be sure to check the ingredients - they will tell the real story.

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## What is the guaranteed analysis?

The guaranteed analysis on the information panel of a pet food label lists the minimum levels of crude protein and fat and the maximum levels of fiber and moisture (water) that will be found in the food. The protein and fat are listed as crude sources and not as digestible sources. The digestibility of protein and fat can vary widely

depending on their sources. Digestibility, expressed as a percent, is a measure of the amount of food retained in the body after the food has been eaten. For example, if a dog eats 8 oz. of food, and produces 3 oz. of stool, the food's digestibility is 63% (the difference between the weight of food eaten and the weight of stool produced, divided by the weight of the food). The [digestibility of protein](#) and fat can vary widely depending on their sources. Digestibility, as a number, is not listed on the bag. The list of ingredients should be examined closely to determine how digestible the sources are. The other factor in determining actual protein and fat percentages is the amount of moisture present in the food.

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### What is dry matter basis, and how do I determine it?

"Dry matter basis" in a pet food refers to is the amount of nutrients included in the food when the moisture content is factored out. All pet foods have different levels of moisture - some canned foods can have up to 80% and some dry foods can have as little as 6%. Because the listings on the label are for the food as it is fed (with moisture included), calculating the nutrients in pet food on a dry matter basis can help you accurately compare crude protein, fat, and fiber between brands and between canned and dry.

Converting nutrient values from an "as fed" basis to a dry matter basis is not at all complicated. First, determine the amount of dry matter in the food by subtracting the percent moisture from 100 (for example, a dry pet food with 10% moisture will have 90% dry matter). Next, look at the guaranteed analysis of the food label and find the crude protein level (20%, for example). Then, divide the crude protein level by the dry matter (20 divided by 90 is 22%) to determine the amount of protein on a dry matter basis. You can also apply this formula to determine the amount of fat, fiber, etc. in your pet's food on a dry matter basis. This same formula can also be used on canned food.

Now let us compare this dry pet food to canned pet food with 80% moisture (and 20% dry matter). The canned food label shows 5% protein. Dividing the 5% protein by 20% dry matter results in 25% protein on a dry matter basis. This specific comparison shows that the canned food has more protein per pound on a dry matter basis than the dry food. You can perform similar comparisons for fat, fiber, and so on.

We have comparison charts on the protein, fiber, and fat content in Drs. Foster and Smith foods on an as-fed and dry matter basis for [dogs](#) and [cats](#).

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### How do I read the ingredient listing?

All pet foods must list their ingredients in descending order by weight. Those ingredients listed first are those that are present in the highest amount. The ingredient list is one of the best ways to determine a food's quality. Once you understand the ingredients, you can choose a food that is highly digestible and free of unwanted products. As a consumer, you should consider all the ingredients (even the ingredients at the end of the list) as well as the type of preservatives being used - natural or artificial. For definitions of the ingredients in Drs. Foster and Smith cat and dog foods, see our [ingredient glossary](#).

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### Should I follow the feeding instructions?

Feeding instructions or feeding guidelines are included on almost every pet food package, and provide the recommended amount to be fed based on growth level and weight. Feeding guidelines should be regarded as recommendations only, since every animal has unique daily requirements based on activity level, metabolism, breed, age, ambient environmental temperature, and stress factors. Start with these recommendations, then adjust the quantity fed based on your pet's weight and body condition. If your pet is gaining too much weight, you will need to reduce the amount being fed. If you're unsure about how much to feed your pet, contact your veterinarian for advice. For more information on feeding your pet, see our article [FAQs on Feeding Guidelines](#).  
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### What is AAFCO?

AAFCO stands for the Association of American Feed Control Officials. AAFCO includes officials from all States and the Federal government who are responsible for enforcing the laws regulating the production, labeling, distribution, and sale of animal feeds, including pet food. To promote uniform labeling requirements across all States and territories of the United States, AAFCO has developed a set of "Model Regulations for Pet Food and Specialty Pet Food" that are contained in AAFCO's Official Publication, published annually. An individual state can adopt the Model Regulations into state law, or have its own set of pet food regulations. Most states have elected to use the Model Regulations for Pet Food or have set up regulations similar to it.

AAFCO regulations for pet food include requirements regarding what must be included on a pet food label, product names, flavor designations, guaranteed analysis, nutritional adequacy statements, proper ingredient names, and other aspects of labeling. The organization also provides test requirements or protocols for manufacturers so that they can meet state requirements of proof of safety and nutritional quality before a pet food is marketed.

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### What's the difference between feeding trials and "meeting nutritional levels"?

Every pet food should have a statement on the label that states the pet food meets the AAFCO standards. Pet foods can meet the AAFCO requirements in one of two ways, either through chemical analysis and calculations, or through feeding trials in which the health status of animals consuming only that food over a period of time is monitored. If determined by calculations, the statement will read: "(Name of pet food) is formulated to meet the nutritional levels established by the AAFCO (Cat or Dog) Food Nutrient Profiles for maintenance of (ages and species of animal). If the requirements have been met through feeding trials, the statement will read: Animal feeding tests using AAFCO procedures substantiate that (name of pet food) provides complete and balanced nutrition for maintenance of (ages and species of animal).

Both methods have pros and cons. Feeding trials take into account the digestibility of the food as a whole, and can identify nutritional deficiencies. Because they are relatively short, however, they may not identify problems due to nutrient excesses, whereas chemical analysis may.

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## Why hasn't Drs. Foster and Smith performed feeding trials on all their foods?

We have conducted feeding trials on several formulas in each family of foods, and chemical analysis on others. As mentioned above, both methods have pros and cons. By using both methods, we have substantiated the adequacy of the foods by two different methods.

The trials that were performed were in compliance with the Animal Welfare Act.

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