

# Cat Food Labels

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**Q.** What do cat food labels mean?

**A.** Reading your pet food label is one of the best ways to determine the quality of the food you are feeding. The ingredients and the guaranteed analysis (amounts of **protein, fat, carbohydrates, fiber**, and other *nutrients*) are included on the food label. In addition to providing information about the amount and quality of protein and fat, the label will also alert you of any unwanted preservatives and give general feeding guidelines.

A few other things to consider are the price. Calculate out the price per pound or the price per day. Almost always, dry food is more economical, and the larger the bag the lower the price per pound. Many times, a 40-pound bag is less than half as much per pound than an equivalent 5-pound bag. Remember that with lower quality foods you feed more and it may not always be cheaper. On the other hand, some of the higher priced foods, especially foods sold only through veterinarians, may not be as good as the less expensive more easily obtainable food. Check the ingredients, they will tell the real story. Most pets do not need specialty foods, just quality food. By understanding this article and looking at a few pet food labels you will be able to find the best food for your pet.

## Converting dry matter basis

This can be the hard part. All pet foods have different levels of moisture. Canned foods can have up to 80% moisture whereas, some dry foods can have as little as 6%. This is important for 2 reasons. The first is that the food is priced by the pound, and when you buy cat food that is 80% water you get 20% food and the rest is water. So the amount of food your pet consumes is small and expensive. The other reason for understanding percent moisture is to help you compare crude protein and fat between brands and between canned and dry. The listings on the label are for the food as it is, not as it would be on a dry matter basis. So without converting both brands of food to a dry matter basis you will not be able to compare them accurately. Fortunately, the conversion is not that complicated.

If a dry cat food has 10% moisture we know that it has 90% dry matter. So we look at the label and check the protein level that reads 20%. Next, we divide the 20 percent protein by the 90% dry matter and we get 22%, which is the amount of protein on a dry matter basis. Does this make sense so far? Good. Now let us compare this to canned food that has 80% moisture. We know that with 80% moisture we have 20% dry matter. The label shows 5% protein. So we take the 5% and divide it by 20% and we get 25% protein on a dry matter basis. So the canned food has more protein per pound on a dry matter basis after all the water is taken out. We can do the same for fat, fiber, etc.



## Guaranteed analysis

The guaranteed analysis on the information panel of the cat food label lists the minimum levels of crude protein and fat and the maximum levels of fiber and water. 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. The list of ingredients should be examined closely to determine how digestible the sources are (see articles on protein and fat for more explanation). The other factor in determining actual protein and fat percentages is the amount of moisture present in the food as discussed earlier. While the guaranteed analysis is a start in understanding the quality of the food, be very careful about relying on it too much. A pet food manufacturer made a mock product that had a guaranteed analysis of 10% protein, 6.5% fat, 2.4% fiber, and 68% moisture, similar to what you see on many canned pet food labels. The only problem, was that the ingredients were old leather work boots, used motor oil, crushed coal, and water!

## Ingredient list

All pet foods must list the ingredients present in the food. The ingredients must be listed in order of weight. This is one of the best ways to determine the quality of the food. With a little knowledge of the ingredients, you can choose a food that is highly digestible and free of unwanted products. Be careful of one tactic used by manufacturers to disguise less desirable ingredients. Breaking an ingredient into several different smaller ingredients and listing them individually is used to lower these undesirable ingredients farther down the ingredient list. For example, a product list could contain chicken, ground corn, corn gluten, ground wheat, corn bran, wheat flour, wheat middling, etc. If we were to group all of the corn ingredients as one, they would probably far out-weigh the amount of chicken, and wheat. As a consumer, you must read all of the ingredients carefully including the ingredients at the end, to know the type of preservatives and colorings that are used. I have listed a few of the more common ingredients and their definitions.

**Meat:** Meat is the clean flesh of slaughtered animals (chicken, cattle, lamb, turkey, etc.). The flesh can include striated skeletal muscle, tongue, diaphragm, heart, *esophagus*, overlying fat and the skin, sinew, nerves and blood vessels normally found with that flesh.

**Meat By-products:** Meat by-products are clean parts of slaughtered animals, not including meat. These include lungs, *spleen*, kidneys, brain, liver, blood, bone, and stomach and intestines freed of their contents. It does not include hair, horns, teeth, or hooves.

**Poultry By-products:** Poultry by-products are clean parts of slaughtered poultry such as heads, feet, and internal organs (like heart, lungs, liver, kidneys, abdomen, and intestines). It does not contain feathers.

**Fish Meal:** Fish meal is the clean ground tissue of undecomposed whole fish or fish

cuttings, with or without the oil extracted.

**Beef Tallow:** Beef tallow is fat derived from beef.

**Ground Corn:** Ground corn is the entire corn kernel ground or chopped.

**Corn Gluten Meal:** Corn gluten meal is the by-product after the manufacture of corn syrup or starch, and is the dried residue after the removal of the bran, germ, and starch.

**Brewers Rice:** Brewers rice is the small fragments of rice kernels that have been separated from larger kernels of milled rice.

**Brown Rice:** Brown rice is the unpolished rice left over after the kernels have been removed.

**Soybean Meal:** Soybean meal is a by-product of the production of soybean oil.

**BHA:** BHA is butylated hydroxyanisole, a fat preservative.

**Ethoxyquin:** Ethoxyquin is a chemical preservative that is used to prevent spoilage in dog food.

**Tocopherols:** Tocopherols (e.g., vitamin E) are naturally occurring compounds used as natural preservatives.

## The AAFCO standards

'AAFCO' stands for the Association of American Feed Control Officials. The AAFCO develops guidelines for the production, labeling, and sale of animal foods. These are called the *AAFCO standards*. AAFCO has developed two standards which pet foods should meet. Pet foods which meet the AAFCO's requirements will include one of two statements on their label.

The first and lower standard states 'formulated to meet AAFCO's nutrient requirement.' This means the food was tested in the laboratory and was found to have the recommended amounts of protein, fat, etc. But as mentioned above, the combination of shoe leather, used motor oil, and coal would meet this standard.

The second standard states something like 'animal-feeding tests using AAFCO's procedures substantiate that this product provides complete and balanced nutrition.' For a pet food to be able to carry this label, it had to be tested on a population of animals for six months and shown to provide adequate nutrition. But even with this statement, there are problems with its interpretation. If one particular product in a manufacturer's line was tested and found to meet this

standard, the company is allowed to include this same statement on other products in the same 'family' which provide equal or greater concentrations of all the nutrients. So even if the pet food carries this AAFCO food trial statement on its label, you can not be sure that specific product was actually tested in a food trial. In addition, testing a food for six months is not an adequate amount of time to determine if deficiencies or other long term effects may occur after feeding the product a year or more. Despite these problems with the interpretation of this AAFCO food trial statement, having the statement on a pet food label at least shows the company has made some attempt to develop a good food.

## Feeding instructions

Feeding instructions or guidelines are included on most every bag and most cans of pet foods. These guidelines give the recommended amount to be fed based on growth level and weight. I would remind owners that these are very rough guidelines. Every animal has a different level of activity, metabolism, and ambient environmental temperature. In addition, breed, age, and other environmental stresses all impact daily requirements. I encourage you to use these guidelines as rough starting points. If your animal is thin or hungry, feed it more often and in greater quantity. If your pet is obese, feed it less. I cannot begin to count the number of clients that have complained of a hungry, thin, or obese pet and after being questioned about it found that they were feeding the recommended amount on the bag and were afraid to deviate from it. This is an area where common sense is much more important than science.

## Summary

One of the most common questions that I get is what is the best pet food on the market? I can honestly say that there isn't one. The very fact that there are so many types and brands on the market shows that there are hundreds of options and opinions. Feed what is appropriate for your pet: cats need cat food and dogs need dog food. Don't switch brands every month, but don't be afraid to switch brands and find one that your pet does well on. I have seen medical problems from pets fed the cheaper generic foods, and some farm store and department store brands. If you are feeding a pet food that can only be purchased from a veterinarian, read the label closely and then compare it to some of the premium brands on the market. Then check the price. You may be in for a big surprise! You don't always get what you pay for.

The other question I get is, 'what do I feed my pets?' I can tell you that I feed my dog a premium national brand that is chicken and rice and sells for around 73 cents a pound. I feed my cats a premium brand that is formulated to help reduce *cystitis* and urinary problems, which sells for twice of what my dog food costs, but my cats eat very little and do great on it. I always feed dry food and free choice. Feeding table scraps and treats have to be considered in the overall diet and are discussed more thoroughly in their separate articles.

## References

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