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Demystifying Pet Food Labels and Common Pet Food Myths

We all want to feed our pets well, but the pet food aisle these days can be very overwhelming. Pet food bags with bright colors and pictures of delicious looking vegetables and meats with buzzwords like "premium" and "holistic" attempt to draw us in as consumers. In reality, your pet doesn't care what the bag looks like and what matters is what is inside.

Common Pet Food Myths

Gluten free is best. False! There is an incredibly small percentage of dogs with celiac disease (inability to tolerate wheat gluten). They are primarily Irish Setters. The autoimmune problems caused by celiac disease are due to wheat gluten. Corn gluten does not cause these problems and it is considered by veterinary nutritionists to be a nutrient rich and an easily digested ingredient.

Grain Free diets are healthier. False! A survey of the dog genome shows that they are well adapted with the proper enzymes to digest carbohydrates thanks to evolution. They are not genetically the same as wolves and their diet should reflect that. Grains do not frequently cause allergies. Occasionally wheat proteins will cause a problem, but it is a very small percentage of all food allergies.

Raw diets are healthier. False! There is no scientific evidence to support this. Dogs are susceptible to all the same pathogens that we are by eating undercooked meat. Recent scientific studies have shown that nearly all raw meat diets (whether commercial or homemade) are contaminated with bacteria, with between 20-44% of commercial raw food diets contaminated with Salmonella. One study in a respected veterinary journal shows 2 cats died of a blood infection of the same bacteria that was found in their raw diet. Many raw diets have been scientifically proven to have nutritional imbalances. The argument that "it is healthier because its what animals in the wild eat" has no scientific basis. It has been genetically proven that dogs are different from wolves. Also for example, wolves in the wild only live a few years, we expect our animals to live for many years in a very different environment. What is optimal for a wild animal's lifespan is not optimal for the very different life/lifespan of our domestic pets.

It is easy to make your own pet food. False! A recent study showed that 95% of all homemade diets were lacking in at least 1 essential nutrient. If you choose to make your own pet food, you should only do so under the close supervision of a veterinary nutritionist.

Label Claims

Label Claims: Label claims such as "premium," "ultra premium," and "gourmet" are not necessarily meaningful. The FDA or AAFCO does not regulate these claims. These claims do not require the food to have any better quality of ingredients or higher nutritional standard than any other pet food. "Holistic" also has no legal definition, and its use on pet food labels is not regulated. The word "natural" or "all natural" are used on pet food labels often. According to the FDA, natural doesn't have an official definition. AAFCO (American Association of Feed Control Officials) has set some guidelines for "natural foods." For the most part, "natural" foods don't contain artificial colors, flavors, or preservatives. Most pet foods regardless of label claims do not contain artificial coloring, as its only purpose is to be pleasing to the pet owner's eye. Most pet foods don't contain artificial flavoring either since it is not necessary. Natural foods usually use tocopherols (a form of vitamin E) to preserve the fats in the food from becoming rancid, however natural preservatives may not be as effective. "Natural" and organic do not mean the same thing. Organic refers to the way the plants were grown or animals were raised. At this time there are no official rules governing the use of the word organic on pet food labels. The USDA is working on guidelines for organic pet food, but as previously stated these guidelines are not yet in effect. If a pet food uses the USDA organic seal it is at least 95% organic. Other labels claims of "made with organic ingredients" or similar statements mean it contains at least 70% organic ingredients.

Ingredients:

There are many ingredients that are the subject of many misconceptions.

Meat- Meat means clean flesh of slaughtered animals with or without overlying fat and skin structures. It is high in protein, but it may be lacking in certain vitamins and minerals compared to meat meal or byproduct.

Meat meal/byproduct- Meat meal or byproduct is rendered product from animal tissues. It contains things like liver, lungs, and spleen. Although these ingredients may seem unappetizing to people, they are really rich in nutrients and not a lesser quality ingredient. It **cannot** contain things like feathers, hooves, hair, hide, or intestinal contents. For example chicken byproduct meal contains 60-70% protein and is considered highly digestible.

Corn- It is a common misconception that this plant material is a filler and causes allergies. This is not true. Corn provides carbohydrates, proteins, essential fatty acids, and anti-oxidants. Corn gluten meal is 60-70% protein and is considered easily digestible. Corn is not a common allergen. The most common dog food allergens are beef, wheat, lamb, egg, chicken, and soy. The most common feline food allergens are beef, dairy, and fish. Another common misconception is that dogs

shouldn't be eating grains like corn because it does not mimic the diet of wild canines like wolves. Wolves and dogs are not genetically the same. Dogs are the product of hundreds of years of evolution. Their DNA is different. They have developed many duplications in genes for enzymes to digest starch. Meaning their genome is well adapted to a diet that includes carbohydrates.

Animal digest- This means muscle and soft tissue that has been broken down into smaller peptides by enzymes similar to our own natural digestive enzymes. This broken down tissue is then made into a powder or paste. It enhances flavor of pet foods and it is high in protein.

Ingredients listing

Ingredients are listed on the label by weight. What does this mean? Whole meat is mostly water so it weighs a lot. Meat meals are typically dried out so they are relatively lightweight. So if you compare these ingredients on a dry matter basis (remove the water) the meat meal may contain more animal protein even though it is further down on the ingredient list. As you go further down the ingredients list you may notice that the ingredients become less common names. The majority of these ingredients are chemical names for vitamins and antioxidants. Antioxidants prevent fats from oxidizing and spoiling the food. Antioxidant preservatives (natural or synthetic) are necessary to keep the nutrients in the food stable and are the same products used in human food. These are considered very safe.

Guaranteed Analysis

You have probably seen the chart on the back of the food that looks something like this:

Food A:

Guaranteed Analysis

Crude Protein	26.0% min
Crude Fat	15.0% min
Crude Fiber	4.0% max
Moisture	10.0% max
Calcium	1.2% min
Phosphorus	0.9% min
Omega 3 Fatty Acids*	0.25% min
Omega 6 Fatty Acids*	3.5% min
Glucosamine*	400 mg/kg min

^{*}Not recognized as an essential nutrient by AAFCO Dog Food Nutrient Profiles.

This table is required by law to be on pet food labels. Most veterinary nutritionists consider this method of analyzing food antiquated and of little value. These charts give you a guaranteed minimum, but pet foods can contain more than this amount and so these charts don't really give you an accurate picture of how much of certain nutrients you are actually feeding. More detailed nutrient profiles are usually available by request from pet food manufacturers. A more useful nutrient analysis looks something like this:

Food B:

Nutrient	As Fed (%)	DM Basis (%)	per 100 kcal ME
Protein	31.2	33.5	7.50 g
Fat	18.6	20.0	4.47 g
Carbohydrate	34.0	36.5	8.17 g
Fiber	2.50	2.70	0.59 g
Calcium	1.35	1.45	324 mg
Phosphorus	0.99	1.06	238 mg
Potassium	0.75	0.81	180 mg
Sodium	0.41	0.44	98 mg
Magnesium	0.11	0.12	26 mg

Metabolizable Energy - As Fed (approximate)

4163 kcal/kg

1888 kcal/lb

465 kcal/cup

Nutritional Adequacy Statement

AAFCO approved foods must display the claim "complete and balanced." What does this mean? There are three ways that a pet food manufacturer can meet the minimum nutrient requirements set by AAFCO. The first is by calculation. This means that the pet food manufacturer calculates the nutrient content and compares it to the nutrient minimums determined by AAFCO. If it "meets or exceeds" AAFCO standards, the food is approved as "complete and balanced." The second is by chemical analysis. If chemical analysis shows that the food "meets or exceeds" minimum AAFCO standards, it is approved as "complete and balanced." The third way to meet AAFCO standards is by feeding trials. This means the food must meet nutritional standards and is put through a real life trial. As part of this process animals are fed the pet food as their *sole* nutritional source for a period of time. The trial animals' performance and health during the trial is monitored. This method ensures palatability of the food and its efficacy in nourishing real life animals. This method is considered the gold standard in food testing by veterinary nutritionists. Many pet food companies use nutrient calculations and chemical analyses instead because this is a much cheaper method of testing the food. A company that uses more expensive method of feeding trials shows the company's commitment to creating satisfactory foods. So how do you know if a food was approved by nutrient calculations/chemical analysis or by feeding trial? It's as easy as checking the label. We'll use the same 2 pet food labels as above:

Food A:

Nutrition Statement

is formulated to meet the nutritional levels established by the AAFCO Dog Food Nutrient Profiles for maintenance.

Food A has used nutrient analysis/chemical analysis to test their food.

Food B:

Food B has used feeding trials to test their food.

All foods must meet minimum nutrient profiles. These two foods state that they are adequate for maintenance of adult dogs. "For maintenance of adult dogs" means the food is appropriate for an adult dog doing normal work. "For all life stages" indicates it is appropriate for all life stages of the animal, and usually contains a higher amount of nutrients, which is not always necessary. "For growth" indicates that it is appropriate for growing puppies and kittens. Young animals have different nutrient requirements and it is important that they are fed a food formulated for puppies or kittens. There are other claims such as "senior" or breed specific formulas, these standards are not regulated or well defined. A "senior" or "toy breed" pet food may be a slightly different formulation, but the only standards it must meet are those that all adult pet foods are required to meet. A product that does not meet either of the standards of nutritional adequacy must state that "this product is intended for intermittent or supplemental feeding only" or be labeled as snack, treat, or supplement. Other nutritional claims such as "light" and "low calorie" are required to be under a certain number of calories per kilogram. Also "low fat" foods must be under a certain percentage of fat. Please know that the problem with pet obesity is not the diet itself, but overfeeding. Measure your pet's food! It can make a huge difference. If you're concerned about your pet being over weight, talk to your veterinarian. They can help determine an appropriate amount of food and a healthy weight to aim for.

Feeding Directions

Bags of food may say "Feed ___ cups per day per pound of body weight." This is a great place to start when determining how much to feed. However pets are individuals so this amount may need to be adjusted for your pet's individual needs. Frequent weight checks and consultation with your veterinarian can help determine a feeding plan that works best for your pet.

In summary, you have the right to know what exactly you are feeding your pet. Never hesitate to call a manufacturer and ask them any questions you may have. A good pet food manufacturer should be able to answer them. Don't pick your pet food based on marketing gimmicks, be an informed consumer. If you have any diet

related health concerns, talk to your veterinarian. They can help you come up with a plan for weight loss or whatever other dietary needs your pet has.

Also check out this article "10 Questions Every Pet Food Manufacturer Should Answer":

 $http://www.petmd.com/dog/centers/nutrition/evr_multi_10_questions_for_pet_food_manufacturers$

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