

White Bear Animal Hospital

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Pet Nutrition 101

One of the most common questions we get as a small animal veterinary hospital is: “What is the best food to feed my pet?” With nearly 5,000 different pet food product labels on the market today, the answer to this question is not always easy to come by and it is impossible to be familiar with all of the product choices available to our clients. There are no shortage of opinions available (trainers, breeders, pet food retailers, magazines, internet, social media) as to pet nutrition. Unfortunately, many of these opinions are biased or based on misconceptions or incomplete knowledge rather than on sound nutritional analysis. The trick is to discern fact from opinion in formulating a nutritional plan for an individual pet.

As a veterinary hospital we have a responsibility to provide our clients with the most accurate information that is currently available regarding the care of their pets. Towards that end, please consider the following information regarding pet nutrition.

- A. **The best place to start in evaluating pet food is to read the label.** Reading a pet food label can be a daunting task, but it is well worth the effort as there is a great deal of valuable information available. All pet food labels must include the following items:
1. **Guaranteed analysis.** % nutrient content as fed, an AAFCO nutritional adequacy statement. According to their website “The Association of American Feed Control Officials (AAFCO) is a voluntary membership association of local, state and federal agencies charged by law to regulate the sale and distribution of animal feeds and animal drug remedies.”
 2. **List of ingredients.** See Ingredients below.
 3. **Food name and type.** See Life Stage below.
 4. **Feeding guidelines.** Start at the low end and learn how to assess your pet’s Body Condition Score or BCS as these guidelines must include all possible levels of activity.
 5. **Manufacturer’s contact information.**
- B. **In evaluating a particular pet food the following factors should be considered.** They are listed in roughly descending order of importance.
1. **Nutritional adequacy.** The diet should be AAFCO certified that it provides complete and balanced nutrition based on either animal feeding trials or formulation. Feeding trials are conducted with live animals to ensure that the nutrients in a given product are present in sufficient quantities to promote good health and are bio-available to the animal to ensure that the nutrients are properly digested. Formulation means that nutrient content has been confirmed by mathematical calculations or laboratory testing and involve no testing in live animals. Feeding trials are preferred over formulation because they allow for the evaluation of the product in live animals.
 2. **Life Stage.** Make sure the diet is appropriate for the life stage of the animal. The only two categories of pet diets that are officially defined by AAFCO are "growth and reproduction," which is intended to meet the needs of puppies and kittens as well as pregnant or lactating adults, and "maintenance," which is designed to meet the nutritional needs of dogs or cats. Any other category is determined by the manufacturers marketing department. "All life stages" must meet the nutritional standards of both and generally equals "growth and reproduction." "Senior/geriatric" life stage diets do not have a defined nutrient profile and can therefore vary widely.

3. **Caloric Content Disclosure.** Caloric disclosure and labeling is essential given the prevalence of obesity in dogs and cats. The inclusion of this information on pet food labels is officially required as of January 2013. However, full compliance is not required until 2015. Companies that include caloric information are preferred because they allow customers to select the most appropriate feeding portions for their pets.
4. **Ingredients.** Ingredients are simply vehicles to deliver palatability and essential nutrients (protein, carbohydrate, fat, minerals, vitamins and water). Unfortunately, it can be very difficult to determine the consistency and quality of the pet diet ingredients:
 - a. **Ingredient source.** Consider the problems associated with pet nutritional products from China, e.g. melamine adulteration of wheat gluten and contaminated rawhide chews.
 - b. **Processing methods.** How ingredients are processed can affect their nutritional value.
 - c. **Bioavailability.** Just because an ingredient is listed on the label doesn't mean that an individual pet's digestive tract will be able to utilize it.
 - d. Most of the "chemical sounding" ingredients are vitamins or minerals.
5. **Recalls.** Occasionally pet foods are recalled for a variety of reasons and you should make sure that the diet you are feeding has not been subject to a product recall. Just in case, it's a good idea to keep the labels from the foods you are currently feeding your pet, including contact information and lot number or bar code, in case of a recall. Current recall information from the U.S. Food and Drug Administration (FDA) can be found at: www.fda.gov/animalVeterinary/safetyhealth/recallswithdrawals/default.htm.

C. Other Definitions

1. **By product** – parts of animals not intended for human consumption, these products may be processed or rendered into foodstuffs called meat and bone meal (Wikipedia).
2. **Animal digest** – a liquid produced by the controlled enzymatic degradation of a variety of animal tissues, an important factor in increasing palatability of dry pet foods for cats, and to a lesser degree, dogs (Lewis, Morris and Hand).
3. **Organic** – food produced with the use of feed or fertilizer of plant or animal origin without employment of chemically formulated fertilizers, growth stimulants, antibiotics or pesticides (Merriam-Webster).
4. **Natural*** – existing in nature and not made or caused by people; coming from nature, not having any extra substances or chemicals added; not containing anything artificial (Merriam-Webster).
5. **Holistic*** – relating to or concerned with wholes or with complete systems rather than with the analysis of, treatment of, or dissection into parts (Merriam-Webster).
6. * = these terms are not legally or officially defined and can therefore be used by pet food manufacturers as they wish.

D. Controversial Pet Food Issues – see Table 1.

E. Helpful websites:

1. AAFCO: www.petfood.aafco.org/Home.aspx
2. Pet Nutrition Alliance: www.petnutritionalliance.org
3. FDA: www.fda.gov/animalveterinary/products/AnimalFoodFeeds/PetFood/default.htm

In the end, the best food for your pet is the one that results in healthy weight, coat, energy and stool quality. No single diet is best for all pets.

If you ever have questions regarding any of the above information, please do not hesitate to contact us. Visit us online at www.WhiteBearAnimalHospital.com

Table 1. Controversial Pet Food Issues

	Arguments For	Arguments Against
Cereal grains (corn, soy, wheat)	good sources of valuable nutrients, food allergies are uncommon in pets and are usually caused by proteins, research suggests dog and human co-evolution resulting in domesticated dogs being able to digest grains better than their wild relatives	considered by some to be potential causes of skin and gastrointestinal allergies, considered by some to be a low quality filler, may increase inflammation
Gluten	rarely causes gastrointestinal problems in pets, good source of protein, highly digestible	considered by some to be a potential cause of gastrointestinal problems in pets, may be a less bioavailable source of protein
Healthy grains (rice, barley, oats, no cereal grains)	may be more digestible, may be less likely to cause skin and gastrointestinal allergies	may not be necessary for all pets, especially dogs, may increase inflammation
Grain free	may be less likely to cause skin and gastrointestinal allergies, more nutritionally appropriate for cats, may decrease inflammation	may not be necessary for all pets, especially dogs
By products	good source of a variety of nutrients	considered by some to be a low quality nutritional source
Animal digest	good source of protein, increases pet food palatability	considered by some to be a low quality nutritional source
Raw diets	critical nutrients intact (not destroyed during processing), more easily and completely digestible, HPP ¹ reduces contamination risk, risk similar to handling raw meat for human consumption, pets are better adapted at resisting disease from food contamination, small portions may significantly improve overall pet health	risk of bacterial, parasitic and protozoal contamination for both pets and people, AVMA ² and AAHA ³ position statements against feeding raw diets to pets, bone fragments can cause injury, may be nutritionally inadequate especially if prepared at home
Home cooked diets	critical nutrients intact (not destroyed during processing), more control over individual ingredients, risk similar to handling raw meat for human consumption	must follow a strict recipe (developed by a veterinary nutritionist) to ensure proper nutrition, risk of bacterial, parasitic and protozoal contamination for both pets and people
Vegetarian or vegan diets for cats	human concerns regarding the use of animal products in pet food production for health or ethical reasons	<u>very</u> difficult to provide proper, consistent nutrition due to cats' unique nutritional requirements, not recommended

¹HPP = High Pressure Processing

²AVMA = American Veterinary Medical Association

³AAHA = American Animal Hospital Association