

The Pet Food Primer

by Susan Wynn, DVM

The High Points

- Commercial Pet foods are convenient, but not best for every dog or cat.
- In all cases where nutritional disease is diagnosed in pets eating commercial diets, it was because the animal received just one brand long term.
- Commercial diets should be rotated.
- Fresh food, especially lean meat and veggies, can provide nutrition pets can't get from commercial processed foods.
- Homemade diets are great if you follow recipes carefully, give all recommended supplements and give your pet a lot of variety.
- Fresh foods can be supplied as **part** of the diet, along with commercial foods for a safe and complete diet.
- If your pet has special problems (weight problems, metabolic problems, etc.) you should consult your veterinarian before changing diets.

Introduction

How many times in recent years have you changed your diet to reflect new discoveries in preventative health care? Are you trying to avoid fat, sugar and preservatives like doctor's say? Most people recognize that proper diet can help us lead longer, healthier lives; why should we be different from our pets

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Let me tell you a couple of horror stories about pet foods to suggest to you what your dog or cat may be eating. The meat products contained in some commercial pet foods are

nothing like what we consider "good eating." Meat sources for pet foods are not usually of the same quality used for human consumption. The manufacturers denature this meat to make it safe for animal consumption (are you hungry yet?). Other ingredients such as grain products may be clean, but the quality is not what we would eat—soy grits, corn gluten, and wheat middlings, for instance, are not seen in human food labels nearly as often as on pet food labels. One 1985 scientific paper examined pentobarbital levels (an anesthetic agent used in euthanasia solutions) in pet food derived from dogs and cats that had been euthanized at shelters. This practice was still relatively common in the year 2000! A dog or cat on one of the very cheapest diets may be eating pet food that contains the remains of other pet dogs and cats, and the pentobarbital levels may be significant.¹ Slaughterhouse animals rejected for human use due to high antibiotic levels also make their way into pet foods. The *American Journal of Cardiology* has warned that children allergic to penicillin could die from accidentally eating pet food!²

The moral to this horror story is this: some pet food manufacturers have determined (supported by scientists, nutritionists and government representatives) that meat rejected for humans is fine for cats and dogs. Considering the things that some pets eat, given the choice (yuck!), this may be true. However, many owners prefer to feed human-grade meat. Some veterinarians even feel that this is more appropriate for animals with health problems. If you prefer human grade meat, you must find a company which uses it!

Ingredients matter

Take a look at how our pets' diets are usually chosen—the food that is the cheapest, and one that the dog or cat eats most readily, is the one we go back to most often. If children were fed similarly, they would be eating junk food every day (children and pets love sugar, salt, and addictive artificial flavors). How would their health stand up to this treatment?

Let's consider cost and taste, and how they influence what goes in your pet's body. Pet foods must "meet or exceed the minimum nutritional requirement levels established by the National Research Institute for all stages of life." This is the only guideline set in stone for pet food manufacturers.

A story came out years ago from one of the premium food companies that points out how little that rule matters. A veterinarian apparently was able to make just such a diet out of a pair of old work shoes, crankcase oil, water, and sawdust. A diet that contains minimum levels of protein, fat, fiber, and carbohydrates may allow a pet to survive, but most of us want our dog or cat to be in optimum health. Ingredients matter!

Cheap ingredients clearly make a cheap diet. What are the cheap ingredients? If you see lots of soybean products, corn gluten meal and wheat, not only are they cheap, they are fairly indigestible as well. Most of the diet goes out the other end. Ingredients such as chicken, poultry, beef, lamb, and their by-products, on the other hand, are more expensive and more digestible. Not only are they better for the pet, but s/he will need to

eat less of this concentrated nutrition.

So, how do you choose a pet food? Ideally, you would become a label reader. The information on labels is enough for an additional article, but I can make some sweeping generalizations, keeping in mind that generalizations are not 100% accurate.

Generally, more expensive diets contain better quality ingredients. Generally, premium diets are the best. Generally, it is difficult to find a great pet food in grocery stores. Ask pet professionals (breeders, veterinarians, groomers, trainers, etc) what their animals are fed. Their pets have to look and perform their best, and you will find that the overwhelming majority are feeding some sort of premium diet.

Look for a variety of quality meat sources, and as many meats as possible in the first three ingredients listed on the label. Organic ingredients are a plus. The quality (and healthiness) of most foods can be gauged by their relative expense—cheap foods usually don't produce healthy animals, whereas dogs and cats eating more expensive foods can usually be identified by their shiny coats and good general health. Generic and private label brands will often cause more health problems and dollars spent on veterinary problems than the money saved on food purchases.

As an exercise, below are ingredient labels from two different commercially available diets. See if you can figure out the recommended diet!

Formula 1

Ground yellow corn, soybean meal, meat and bone meal, animal fat (preserved with BHA), Corn gluten meal, ground wheat, brewers rice, brewers dried yeast, salt, dicalcium phosphate, calcium carbonate, L-lysine, choline chloride, dried whey, wheat germ meal, zinc oxide, ferrous sulfate, vitamin supplements (A, D-3, E, B12), manganese sulfate, niacin, calcium pantothenate, riboflavin supplement, biotin, garlic oil, pyridoxine hydrochloride, copper sulfate, thiamine mononitrate, folic acid, menadione sodium bisulfite complex (source of Vitamin K activity), calcium iodate, cobalt carbonate.

Formula 2

Turkey, chicken, chicken meal, whole ground barley, whole ground brown rice, whole steamed potatoes, ground white rice, chicken fat (preserved with natural vitamin E and Vitamin C), herring meal, whole raw apples, whole steamed carrots, cottage cheese, sunflower oil, alfalfa sprouts, whole eggs, whole clove garlic, vitamin C (calcium ascorbate), Vitamin E supplement, probiotics (freeze dried streptococcus faecium fermentation product, freeze dried lactobacillus acidophilus fermentation product, freeze dried lactobacillus casei fermentation product, freeze dried lactobacillus planturum fermentation product), Vitamin A supplement, Vitamin D3 supplement, niacin, calcium pantothenate, manganous oxide, Vitamin B1 (thiamine mononitrate), Vitamin B2 (riboflavin), Vitamin B12, Vitamin B6 (pyridoxine hydrochloride), Vitamin K

(menadione sodium bisulfite), folic acid, cobalt carbonate, sodium selenite, biotin.

Rotating your diet purchases

Unless a veterinarian has recommended a hypoallergenic diet for your pet, it is best to vary the diet. Years ago, cats died from heart failure caused by a taurine deficiency—and the cats whose owners were dedicated to feeding one particular premium food had the worst problems. It was felt that rotating the diet might have helped prevent this problem. More recently, some veterinarians specializing in feline medicine have stated that inflammatory bowel syndromes may develop, in part, because of food sensitivities caused by feeding one diet for over a year or two at a time.

Making the switch

How do you know if your pet's diet is a problem, or which of the "good" diets is best for him or her? Look at the coat, skin, weight and what goes on inside. Dandruff (seborrhea), itchiness, "doggy smell," etc, can usually be corrected with a diet change alone (the same goes for cats). Skin problems are not just skin problems—the skin should be viewed as a window to hidden physiologic processes and their health. We often see epileptic dogs reduce their seizure frequency on natural and hypoallergenic diets. In cats, inflammatory bowel syndromes and asthma may respond to changes in diet. Certainly, obese animals need adjustments, but don't do anything drastic without talking to your veterinarian—an abrupt change could cause major problems, especially in cats.

If you switched your pet's diet from a commercial brand with lots of sugar, salt, artificial flavors, etc, to a "health food," s/he will probably react the same way a child would to having sweets and sodas removed in favor of salads and bran muffins. Don't be alarmed if s/he doesn't like the new food at first—gradual changes and persistence will see you through.

A word about vegetarian diets for our carnivorous pets. Most people who eat vegetarian diets have ethical concerns about eating animals, in addition to wishing a more natural way of life. It is simply not fair to impose human ethical concerns on animals for whom evolution has created a gastrointestinal tract and physiologic processes that require meat. We have already experienced widespread tragedy over the taurine issue in cat foods (commercial diets caused heart failure in many pet cats simply because nutritional science was not aware of the taurine requirements, an amino acid contained in animal protein). What other secrets exist in the natural diet that we cannot recreate artificially?

What about 'people food'?

Finally, many veterinarians have recommended that we NEVER feed fresh food (or table scraps) to our pets. That position needs to be re-evaluated now. The field of nutrition is constantly evolving, with new discoveries published weekly. It is pure folly to assume that anyone, even companies with billions of dollars invested in research, can create a

perfect diet for every animal—most diets are designed to provide optimal nutrition for the average animal. Some veterinarians now recommend supplementing the diet with meat and vegetables, for carnivores. This practice may provide the pet with "phytochemicals" and other vital nutrients that have yet to be discovered by nutritional science. The National Cancer Institute has promoted their "Five a Day" program to encourage people to eat five servings of fruits and vegetables a day—this is because studies examining individual nutrients such as Vitamin A or E simply haven't prevented cancer as well as real fruits and vegetables in the diet³—and we don't know what is in real foods that works so well!. A recent paper examining risk factors for "bloat" in large breed dogs indicates that fresh food reduces the incidence of this dread problem.⁴

Even 100% home-prepared diets are getting a more serious look by veterinarians and others—these can be very good for your pet IF they are properly balanced, and it is always recommended that you follow published recipes if your pet eats all home prepared food. It is a simple thing to start by adding fresh food to the normal diet, providing a variety of meats and vegetables, especially if your animal eats primarily dry diets. These changes may be rough on some pets, and if yours has a history of gastrointestinal sensitivity, diabetes, obesity, pancreatitis, or other problems that may be exacerbated by certain foods, consult with a veterinarian before making this change.

Just remember: if the entire diet is home-cooked, follow the recipes in books on this subject!

Educate yourself on comparative pet food shopping. Try out some on your pets (for at least a month or two per food), and see if it doesn't make a difference. I won't recommend one food to everyone, but your pet is an individual and his/her condition will tell you which diet is best. There are probably breed differences, as well as individual differences, which will determine the right diet for your pet. Start adding some meats and vegetables to the usual diet. And yes, it will usually cost you more. I think you will agree, after a time, that it's worth it.

Select references

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