## **Updates on Pet Food List**

By Dr. Karen Becker

Hi, this is Dr. Karen Becker. Five years ago I published a list of 13 types of pet foods ranked best to worst. That video remains one of the most popular here at Mercola Healthy Pets as well as on YouTube. There have been a few updates I wanted to relay to you so I thought it was time to release a sequel or a new revised list.

First and foremost, when you're deciding what to feed your dog or cat, it's important to remember that your pet is a carnivore. His genetic makeup and internal workings remain essentially the same as his wild, carnivorous ancestors. Your dog or cat can't move his jaw side to side, which is called lateral mandibular swing, and they can't do that. Dogs' and cats' mouths only work up and down. Carnivores grab their prey, tear them into chunks with their sharp, interlocking teeth, and gulp it down. They do not chew.

Omnivorous mammals, like humans, have wide and flat molars designed for chewing. Vegetarian animals have lots of wide, flat molars designed for excessive mastication or a lot chewing. In fact, some animals like ruminants or cows actually chew their food twice.

All carnivores including dogs and cats also have very short digestive tracts compared to vegetarian animals. This is because the wild carnivores eat foods, of course, that are heavily contaminated with pathogens. They're not removing the colon or they're not removing any parts of the prey's body that could have bacteria laden in their system. So, their digestive tracts are designed to get foods in and out very quickly. They're not designed to ferment foods like vegetarians.

The ancestral diet of a carnivore includes lots of variety and seasonal variability because certain prey was more available at certain times of year than the other so there was actually a lot of variety in the diet. They thrived on consuming fresh, living, and whole foods but not clean foods. But their diet was, in fact, moisture-dense, which means a lot of water. The prey was primarily water, about 70 percent. It was high in protein and minerals, and moderate in fat.

In the wild, you won't see any obese bunnies out there. So, when we think about feeding a dog or cat, it's usually moderate to low fat but great quality fats and very low carbohydrate. The only carbohydrates wild cats consumed was what was naturally found in their prey's gastrointestinal (GI) tracts, and the occasional nibbling of grasses for added fiber and enzymes.

Wild dogs and wolves, being scavenging carnivores, don't have nearly the perfectionistic food standards of cats. They do catch, kill, and consume whole prey but they also consume carrion, which are dead animals. You'd never catch a cat going anywhere near anything dead. Dogs also will eat poo, grass, berries, and other plant matter. In fact, research shows that up to 30 percent of the stomach contents of wolves contain plant matter.

Commercial pet food is a relatively recent concept. It's been around only about 100 years. Since then, major pet food companies have produced most of their products using a base of corn, wheat, or rice. Recognizing feeding carnivores an abundance of grains fed cancer and created fat, diabetic animals, the industry turned to grain-free, dry foods, which absolutely re-ignited the kibble industry, only this time with inappropriate levels of high-glycemic starch like potatoes and pea flower.

Now, trendier sources of carbs are also being introduced to the pet food industry such as lentils and garbanzo beans. In addition to increasing the carb content beyond what is species-appropriate, legumes contain lectins, which are molecules that can create GI inflammation and irritation. Fortunately for pet

owners, dogs and cats are among the most resilient animals on the planet. They're able to eat foods that they were never designed to eat without dying.

Degeneration does occur in these animals as a result of inappropriate nutrition but sudden death doesn't happen. This is actually how we've been able to deceive ourselves into believing that convenience pet foods are good for dogs and cats because they don't immediately die of malnutrition. However, in my opinion, we've created dozens of generations of nutritionally weakened animals that suffer from degenerative diseases linked to nutritional deficiencies.

The bottom line is that for 99.9 percent of the time on Earth, dogs and cats have absolutely consumed their natural diet, which is an ancestral diet of fresh foods. For .01 percent of the time, animals have consumed highly processed foods. On top of being biologically inappropriate, we add a lot of synthetic vitamins and minerals to meet basic nutritional requirements, and then heat the food to a very high temperatures, which at best denatures proteins and decreases nutrient value. But at worst, introduces carcinogens to your pet's body on a daily basis.

Two potent cancer causing substances are created when dry pet food is made by the extrusion process. When protein is extruded, carcinogenic heterocyclic amines are created. The byproducts of extruding starches are acrylamides. Both are known to cause cancer in dogs and cats. This is a little scary if you think about the fact that most pets on the planet are eating dry food for their entire lives, and the fact that the cancer rate is skyrocketing in companion animals.

Feeding dogs and cats inappropriate ingredients for several generations has created significant metabolic and physiologic stress. Inconvenient pet foods have really been the root of the problems of most of the inflammatory processes and degenerative diseases that plague today's dogs and cats. A biologically correct diet for a carnivore is a high moisture, high protein, moderate fat, and low carbohydrate. The vast majority of pet foods on the market today are the exact opposite. They're low moisture, low to moderate, poor quality protein and fat, and high in starch or carbs. All that to say, our goal is to mimic the ancestral diet of dogs and cats as closely as you can afford to do.

My list today is based off of these species-appropriate guidelines. As many of you know, I'm a huge advocate of feeding pets an unprocessed diet as this is exactly what they were designed to eat in the wild. Now I know some of you might be saying I would also like to eat an all-organic, free range, non-genetically modified organism (GMO), fresh food diet. I just can't afford to. Of course, not only do I get this, my recommendation is that you feed yourselves and your pets as much unprocessed, fresh food as you can afford to do.

Some of my clients also can't afford to feed an all fresh, living, raw food diet. What they do is they offer snacks. They offer fresh food snacks for their companions. So, their pets, let's say, eat an entirely processed diet for their meals but they use what's number one on my list for their pet's snacks and don't knock that. Actually, research does show that some healthy food is better than no healthy food at all. So, if you're capable of just using fresh foods as snacks, you're still providing excellent options for your dog or cat.

Out of 14 meals a week, some of my clients can afford to feed two or four of those meals in an unprocessed form and that's a great suggestion. Some clients can actually afford to do 50/50. They're feeding one meal of processed food a day and one fresh food meal a day. If that's what you're capable of doing, that's wonderful. But wherever you're at, don't panic. What I recommend is that you work towards providing the best food you can afford to feed. Starting at number one is no surprise.

1) It's a nutritionally balanced raw, homemade diet. This is the best food you could feed your dog or cat. It's very important not to wing it when preparing your pet's meals at home. I say this because when

Steve Brown and I analyzed many of the homemade and [inaudible 07:31] diets out there, they fall frighteningly short on trace minerals, antioxidants including really important nutrients like manganese, magnesium, vitamin E and D, copper, zinc, iron, choline, and essential fatty acids. Nutritional deficiencies over time will cause degenerative diseases in pets.

Additionally, if the diet doesn't have proper fat or calcium to phosphorus balance, it can actually cause a myriad of health problems especially in growing animals. So, it's critically important that you know your diet is balanced. The great thing about homemade, raw diets is that you get to handpick the ingredients. So, if your dog is allergic to chicken, you could pick a different protein source.

You also get to know deep in your heart that you've washed the veggies. You know that there are no pesticides on them. You've seen the quality of the meats that you're going to be feeding, and they should provide an enormous piece of mind because it's becoming increasingly more difficult to find ethical pet food companies that use locally sourced or even US-grown ingredients. With homemade food, you're in complete control of every ingredient that enters your pet's body. Of course, raw food is just that. It's raw and unadulterated. It contains all of the enzymes and phytonutrients that are typically destroyed when processing occurs.

Homemade food also gives you the flexibility to include a lot of nutritional variety in your pet's diet so you can buy seasonal fruits and veggies that are on sale. You can use produce that comes from your local supermarket or you can certainly use produce from your garden or your local farmer's market as well.

- 2) Nutritionally balanced, cooked, homemade diet. This option gives you all of the benefits I just discussed minus the benefits of the free enzymes and phytonutrients found in living foods. Interestingly, there are few nutrients that are more bioavailable when cooked such as lycopene. Some animals prefer cooked food. Some animals prefer warm food. Some clients prefer to cook the food. There are also some medical conditions such as recent GI surgery or pancreatitis where cooked food is just a smart idea for your pet.
- 3) Commercially available, balanced, raw food diet. Again, it's critically important that the diet be balanced and that you should be quite aware that there a lot of foods on the market out there that are not nutritionally complete. These foods should say right on the label, "For supplemental or intermittent feeding." I don't recommend feeding unbalanced foods without adding in the missing nutrients or pets can have nutrition-related medical problems in the future.

Commercially available, balanced, raw food diets are found in the freezer section of small or privately owned, upscale pet boutiques. Actually now, some big-box stores are also starting to carry a larger selection of frozen raw diets. You can also find an excellent selection online. There are new raw foods entering the market every month with a variety of different attributes: veggie, bone, and fat content vary widely between products. Commercial diets range from zero to 40 percent roughage or veggies. Actually, that impacts the amount of synthetic vitamins and minerals that must be added to the diet to make it nutritionally complete. The veggie content will also impact digestive and stool health. If you have a dog that suffers from chronic constipation, you would want to choose a food with higher veggie content.

Commercially available raw food diets range from low fat to high fat. If you have an obese cat, you would obviously pick a low-fat food for your cat. But if you have a German shorthaired pointer that runs lean and loses weight quickly, you choose a higher fat food for that dog. Ground bone, bone meal, or a bone meal equivalent mix will be added to raw diets for mineral balance. Some raw foods contain bone pieces that are actually pretty big, in fact, too big to be safely cooked. So, if you choose

to buy a commercially available raw food and you want to cook it, you need to make sure it's safe to do so.

Some raw food companies pride themselves on only using, happy, healthy, grass-fed animals and organic veggies. While other companies use animal meats and produce imported from China and other countries as well as factory-farmed and GMO-fed animals raised in feedlots here in the US, some companies use whole foods to meet the majority of their diet's trace mineral requirements while some other companies use very few ingredients and actually rely on ethical vitamin and mineral premixes to meet their nutritional requirements.

Another factor to consider is how the raw food is formulated. Meat-based foods like raw diets are almost always calorically dense. They should be formulated on a caloric basis and not on a dry matter basis. This is a more demanding method of formulating. Comparing the formulation on a dry matter basis to caloric basis shows that raw foods formulated on a dry matter basis actually fall significantly short or nutrients.

It's easy to tell if your raw food is formulated on a caloric basis because if you flip it over, the nutrients are listed as a gram or a milligram of nutrient per 1,000 kilocalories. Those foods formulated on a dry matter basis will have nutrients listed as a percentage of dry matter basis. I only recommend choosing raw foods that are formulated on a caloric basis.

How companies manage potentially pathogenic bacteria is another consideration, which ranges from doing nothing to batch testing, UV treatments, ozone, and fermentation treatments to HPP or high pressure pasteurization. The great thing about this sector of the pet food industry being the fastest growing category is you will be able to find a food that fits your ethical and financial parameters with the convenience of not having to make the food yourself. The downfall is, of course, you're obviously paying for the luxury of having someone else do the hard work for you. Like all pet food companies, you'll need to investigate the company you're buying from to make sure you're feeding the correct product for your pet's specific nutrition and medical goals.

4) Dehydrated or freeze-dried raw diet. If you can't or won't feed fresh raw food, a good alternative is the dehydrated freeze-dried category that's been reconstituted with water. These diets are shelf-stable so they're super convenient. To make them biologically correct, all you have to do is just add water. Dehydrated or freeze-dried raw diets haven't been processed at high temperatures. In many cases, the nutrient value has been retained minus a balanced fatty acid profile.

Remember the definition of raw food means it will spoil if it's left at room temperature. These foods by definition are not the same as raw food diets but they can be a great choice for people on the move, people who are camping with their dogs or cats, pets that go to the day care, or need to be boarded. It's really the next best thing to a truly raw, fresh food diet. Make sure the brand that you select is nutritionally balanced for all life stages.

- 5) Commercially available cooked or refrigerated food. This is a new category of pet food that is exploding in the marketplace. Obviously, the food has been gently heat processed so the proteins have been slightly denatured but the moisture content is excellent and the food is fresher so the nutrient content is better than the other choices that will be lower on this list. You'll find these foods in the refrigeration section of pet stores. Now, actually, in many human grocery stores as well. The quality of raw materials going into to the cooked, refrigerated pet food ranges from absolutely terrible to excellent so you do need to do your research when you're choosing brands.
- 6) Human-grade canned food. If the Website doesn't say the ingredients are human grade, then they're not. Pet food made with human grade ingredients is a great deal more expensive than feeding feed-

- grade or animal-grade canned food. These foods will typically be found in boutiques and usually in small, independent retailers that really focus on great quality foods.
- 7) Super premium canned food. These products are typically found at big-box stores like Petco and PetSmart or in your traditional veterinarian's office. These foods contain feed-grade ingredients which in parentheses mean foods not approved for human consumption. But the moisture content is much more biologically correct than dry food. Many have excellent protein, fat, fiber, and carb ratios. I place this above the next category on the list.
- 8) Human-grade dry food. Dry food is not biologically correct in terms of moisture content compared to the ancestral diet. Additionally, even grain-free dry foods contain unnecessary starch that can cause inflammation issues in your pet. Human-grade is very important because the ingredients have passed quality inspection, which means it doesn't contain poor quality or rendered unidentified or mystery proteins. But as I mentioned, unlike dry food that has been baked, which it will clearly say on the label, "baked," you should assume, if it doesn't say that, that it's been extruded, which means you are probably feeding a small amount of carcinogens on a daily basis. Yuck!
- 9) Super premium dry food found at big-box stores and your local, conventional veterinary clinic. These extruded dry foods are made with feed-grade ingredients not approved for human consumption but are still usually, naturally preserved. Most of these foods contain added grains or starches, which are not species-appropriate and may harbor the risk of mycotoxins.
- 10) Grocery store brand canned food. These food choices ranked below super premium dry foods because even though the moisture content is more biologically appropriate, these foods usually contain high levels of unnecessary grains and synthetic toxic preservatives such as butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT), and ethoxyquin
- 11) Grocery store brand dry foods, which has all of the same issues as grocery store brand canned food minus the moisture.
- 12) Semi-moist pouched food, which is really bad. The reason this type of food is so far down the list is in order to make the food semi-moist, we have to add an ingredient called propylene glycol, and this is an undesirable preservative that actually is the second cousin to ethylene glycol, which is antifreeze. While propylene glycol is approved for use in pet foods, it's unhealthy for dogs and cats to consume.
- 13) Last on the list is unbalanced, homemade diet –raw or cooked. Dead last on the list for good reason is the idea that some pet owners believe that they can offer their dog or cat, let's say a chicken breast and some veggies and call it a day. A lot of people I know are caring but quite uneducated and they're feeding things like chicken wings, backs, and necks with some cheap ground beef to a growing puppy.

Yes, the food is homemade and yes, it's fresh, which is great. However, the food is nutritionally unbalanced, which can cause significant, irreversible, and potentially fatal health problems including endocrine abnormalities, skeletal issues, and organ degeneration as a result of deficiencies in calcium, trace minerals, and omega fatty acids.

These diets are the reason all homemade and most raw diets are feared and loathed by conventional veterinarians. We see animals that have been harmed by people feeding unbalanced diets and it's heartbreaking. Most importantly, it's entirely preventable. Homemade diets must be done right or not

done at all. If the diet you're feeding your dog or cat falls into one of the lower quality categories, don't despair. Most people are feeding their pets lesser quality foods because they either can't afford to feed a better food or they simply don't know what constitutes good nutrition for their pet.

If you discover that your pet is eating from the lower half of the list, set a goal to feed better quality foods now that you know can make a difference or when you can afford to feed a more nutritious diet. Everyone's pet food can be found in one of these categories. I encourage you to figure out where the diet you're serving right now falls on the list, and then strive for improvement by feeding more nourishing species-appropriate foods.

[End]