From the book

Food Pets Die For: Shocking Facts About Pet Food

by Ann N. Martin. NewSage Press (1997).

(Ann Martin is an animal rights activist and leading critic of the commercial pet food industry. She lives in London, Ontario, Canada.)

Television commercials and magazine advertisements for pet food would have us believe that the meats, grains, and fats used in these foods could grace our dining tables. Chicken, beef, lamb, whole grains, and quality fats are supposedly the composition of dog and cat food.

In my opinion, when we purchase these bags and cans of commercial food, we are in most cases purchasing garbage. Unequivocally, I cannot state that all pet food falls into this category, but I have yet to find one that I could, in all good conscience, feed my dog or cats.

Pet food labels can be deceiving. They only provide half the story. The other half of the story is hidden behind obscure ingredients listed on the labels. Bit by bit, over seven years, I have been able to unearth information about what is contained in most commercial pet food. At first I was shocked, but my shock turned to anger when I realized how little the consumer is told about the actual contents of the pet food.

As discussed in Chapter Two, companion animals from clinics, pounds, and shelters can and are being rendered and used as sources of protein in pet food. Dead-stock removal operations play a major role in the pet food industry. Dead animals, road kill that cannot be buried at roadside, and in some cases, zoo animals, are picked up by these dead stock operations. When an animal dies in the field or is killed due to illness or disability, the dead stock operators pick them up and truck them to the receiving plant. There the dead animal is salvaged for meat or, depending on the state of decomposition, delivered to a rendering plant. At the receiving plants, the animals of value are skinned and viscera removed. Hides of cattle and calves are sold for tanning. The usable meat is removed from the carcass, and covered in charcoal to prevent it from being used for human consumption. Then the meat is frozen, and sold as animal food, which includes pet food.

The packages of this frozen meat must be clearly marked as "unfit for human consumption." The rest of the carcass and poorer quality products including viscera, fat, etcetera, are sent to the rendering facilities. Rendering plants are melting pots for all types of refuse. Restaurant grease and garbage; meats and baked goods long past the expiration dates from supermarkets (Styrofoam trays and shrink-wrap included); the entrails from dead stock removal operations, and the condemned and contaminated material from slaughterhouses. All of these are rendered.

The slaughterhouses where cattle, pigs, goats, calves, sheep, poultry, and rabbits meet their fate, provide more fuel for rendering. After slaughter, heads, feet, skin, toenails, hair, feathers, carpal and tarsal joints, and mammary glands are removed. This material is sent to rendering. Animals who have died on their way to slaughter are rendered. Cancerous tissue or tumors and worm-infested organs are rendered. Injection sites, blood clots, bone splinters, or extraneous matter are rendered. Contaminated blood is rendered. Stomach and bowels are rendered.

Contaminated material containing or having been treated with a substance not permitted by, or in any amount in excess of limits prescribed under the Food and Drug Act or the Environmental Protection Act. In other words, if a carcass contains high levels of drugs or pesticides this material is rendered.

Before rendering, this material from the slaughterhouse is "denatured," which means that the material from the slaughterhouse is covered with a particular substance to prevent it from getting back into the human food chain. In the United States the substances used for denaturing include: crude carbolic acid, fuel oil, or citronella. In Canada the denaturing agent is Birkolene B. When I asked, the Ministry of Agriculture would not divulge the composition of Birkolene B, stating its ingredients are a trade secret.

At the rendering plant, slaughterhouse material, restaurant and supermarket refuse, dead stock, road kill, and euthanized companion animals are dumped into huge containers. A machine slowly grinds the entire mess. After it is chipped or shredded, it is cooked at temperatures of between 220 degrees F. and 270 degrees F. (104.4 to 132.2 degrees C.) for twenty minutes to one hour. The grease or tallow rises to the top, where it is removed from the mixture. This is the source of animal fat in most pet foods. The remaining material, the raw, is then put into a press where the moisture is squeezed out. We now have meat and bone meal.

The Association of American Feed Control Officials in its "Ingredient Definitions," describe meat meal as the rendered product from mammal tissue exclusive of blood, hair, hoof, hide, trimmings, manure, stomach, and rumen (the first stomach or the cud of a cud chewing animal) contents except in such amounts as may occur unavoidably in good processing practices. In an article written by David C. Cooke, "Animal Disposal: Fact and Fiction," Cooke noted, "Can you imagine trying to remove the hair and stomach contents from 600,000 tons of dog and cats prior to cooking them?" It would seem that either the Association of American Feed Control Officials definition of meat meal or meat and bone meal should be redefined or it needs to include a better description of "good factory practices."

When 4-D animals are picked up and sent to these rendering facilities, you can be assured that the stomach contents are not removed. The blood is not drained nor are the horns and hooves removed. The only portion of the animal that might be removed is the hide and any meat that may be salvageable and not too diseased to be sold as raw pet food or livestock feed. The Minister of Agriculture in Quebec made it clear that companion animals are rendered completely.

Pet Food Industry magazine states that a pet food manufacturer might reject rendered material for various reasons, including the presence of foreign material (metals, hair, plastic, rubber, glass), off odor, excessive feathers, hair or hog bristles, bone chunks, mold, chemical analysis out of specification, added blood, leather, or calcium carbonate, heavy metals, pesticide contamination, improper grind or bulk density, and insect infestation.

Please note that this article states that the manufacturer might reject this material, not that it does reject this material.

If the label on the pet food you purchase states that the product contains meat meal, or meat and bone meal, it is possible that it is comprised of all the materials listed above.

Meat, as defined by the Association of American Feed Control Officials (AAFCO), is the clean flesh derived from slaughtered mammals and is limited to that part of the striate muscle that is skeletal or that which is found in the tongue, diaphragm, heart, or esophagus; with or without the accompanying and overlying fat and the portions of the skin, sinew, nerve, and blood vessels that normally accompany the flesh. When you read on a pet food label that the product contains "real meat," you are getting blood vessels, sinew and so on-hardly the tasty meat that the industry would have us believe it is putting in the food.

Meat by-products are the non rendered, clean parts other than meat derived from slaughtered mammals. It includes, but is not limited to, lungs, spleen, kidneys, brain, livers, blood, bone, partially defatted low temperature fatty tissue, and stomachs and intestines freed of their contents. Again, be assured that if it could be used for human consumption, such as kidneys and livers, it would not be going into pet food. If a liver is found to be infested with worms (liver flukes), if lungs are filled with pneumonia, these can become pet food. However, in Canada, disease-free intestines can still be used for sausage casing for humans instead of pet food.

What about other sources of protein that can be used in pet food? Poultry-by-product meal consists of ground, rendered, clean parts of the carcasses of slaughtered poultry, such as necks, feet, undeveloped eggs, and intestines, exclusive of feathers, except in such amounts as might occur unavoidably in good processing practice.

Poultry-hatchery by-products are a mixture of egg shells, infertile and unhatched eggs and culled chicks that have been cooked, dried and ground, with or without removal of part of the fat.

Poultry by-products include non rendered clean parts of carcasses of slaughtered poultry such as heads, feet, and viscera, free of fecal content and foreign matter except in such trace amounts as might occur unavoidably in good factory practice. These are all definitions as listed in the AAFCO "Ingredient Definitions."

Hydrolyzed poultry feather is another source of protein - not digestible protein, but protein nonetheless. This product results from the treatment under pressure of clean, intact feathers from slaughtered poultry free of additives, and/or accelerators.

We have covered the meat and poultry that can be used in commercial pet foods but according to the AAFCO there are a number of other sources that can make up the protein in these foods. As we venture down the road of these other sources, please be advised to proceed at your own risk if you have a weak stomach.

Hydrolysed hair is a product prepared from clean hair treated by heat and pressure to produce a product suitable for animal feeding.

Spray-dried animal blood is produced from clean, fresh animal blood, exclusive of all extraneous material such as hair, stomach belching (contents of stomach), and urine, except in such traces as might occur unavoidably in good factory practices.

Dehydrated food-waste is any and all animal and vegetable produce picked up from basic food processing sources or institutions where food is processed. The produce shall be picked up daily or sufficiently often so that no decomposition is evident. With this ingredient, it seems that what you don't see won't hurt you.

Dehydrated garbage is composed of artificially dried animal and vegetable waste collected sufficiently often that harmful decomposition has not set in and from which have been separated crockery, glass, metal, string, and similar materials.

Dehydrated paunch products are composed of the contents of the rumen of slaughtered cattle, dehydrated at temperatures over 212 degrees F. (100 degrees C.) to a moisture content of 12 percent or less, such dehydration is designed to destroy any pathogenic bacteria.

Dried poultry waste is a processed animal waste product composed primarily of processed ruminant excreta that has been artificially dehydrated to a moisture content not in excess of 15 percent. It shall contain not less than 12 percent crude protein, not more than 40 percent crude fiber, including straw, wood shavings and so on, and not more than 30 percent ash.

Dried swine waste is a processed animal-waste product composed primarily of swine excreta that has been artificially dehydrated to a moisture content not in excess of 15 percent. It shall contain not less than 20 percent crude protein, not more than 35 percent crude fiber, including other material such as straw, woodshavings, or acceptable bedding materials, and not more than 20 percent ash.

Undried processed animal waste product is composed of excreta, with or without the litter, from poultry, ruminants, or any other animal except humans, which may or may not include other feed ingredients, and which contains in excess of 15 percent feed ingredients, and which contains in excess of 15 percent moisture. It shall contain no more than 30 percent combined wood, woodshavings, litter, dirt, sand, rocks, and similar extraneous materials.

After reading this list of ingredients for the first time and not really believing that such ingredients could be used in pet food, I sent a fax to the chair of the AAFCO to inquire. "Would the 'Feed Ingredient Definitions' apply to pet food as well as livestock feed?" The reply was as follows, "The feed ingredient definitions approved by the AAFCO apply to all animal feeds, including pet foods, unless specific animal species restrictions are noted."

[Editors Note: If it goes in to livestock feed, and we eat livestock, then we eat it too.]

If a pet food lists "meat by-products" on the label, remember that this is the material that usually comes from the slaughterhouse industry or dead stock removal operations, classified as condemned or contaminated, unfit for human consumption. Meat meal, meat and bone meal, digests, and tankage (specifically animal tissue including bones and exclusive of hair, hoofs, horns, and contents of digestive tract) are composed of rendered material. The label need not state what the composition of this material is, as each batch rendered would consist of a different material. These are the sources of protein that we are feeding our companion animals.

In 1996 I decided to find out the cost of this "quality" material that the pet food companies purchase from the rendering facilities. Aware that a phone call from an ordinary citizen would not elicit the information I required, I set about forming my own independent pet food company. Stating that my company was about to begin producing quality pet food, I asked for a price quote on meat by-products and meat meal from a Canadian rendering company and from a U.S. rendering company. Both facilities I contacted were more than pleased to provide this information. As I was just a small company and did not require that much material to begin production, the cost was higher than it would have been for one of the large multinationals.

Meat and bone meal, with a content of a minimum of 50 percent protein, 12 percent fat, 8 percent moisture, 8 percent calcium, 4 percent phosphorus, and 30 percent ash, could be purchased by me, a small independent company for less than 12Â¢ (Canadian) a pound. As for the meat by-products the prices varied:. liver sold at 21Â¢ per pound, veal at 22Â¢ per pound, and lungs for only 12Â¢ per pound.

The main ingredient in dry food for dogs and cats is corn. However, on further investigation, I found that according to the AAFCO, the list is lengthy as to the corn products that can be used in pet food. These include, but are not limited to the following ingredients.

Corn four is the fine-size hard flinty portions of ground corn containing little or none of the bran or germ.

Corn bran is the outer coating of the corn kernel, with little or none of the starchy part of the germ.

Corn gluten meal is the dried residue from corn after the removal of the larger part of the starch and germ, and the separation of the bran by the process employed in the wet milling manufacture of corn starch or syrup, or by enzymatic treatment of the endosperm.

Wheat is a constituent found in many pet foods. Again the AAFCO gives descriptive terms for wheat products.

Wheat flour consists principally of wheat flour together with fine particles of wheat bran, wheat germ, and the offal from the "tail of the mill." Tail of the mill is nothing more then the sweepings of leftovers after everything has been processed from the week.

Wheat germ meal consists chiefly of wheat germ together with some bran and middlings or shorts.

Wheat middlings and shorts are also categorized as the fine particles of wheat germ, bran, flour and offal from the "tail of the mill."

Both corn and wheat are usually the first ingredients listed on both dry dog and cat food labels. If they are not the first ingredients, they are the second and third that together make up most of the sources of protein in that particular product. Perhaps the pet food industry is not aware that cats are carnivores and therefore should derive their protein from meat, not grains?

In 1995 one large pet food company, located in California, recalled $20 million worth of its dog food. This food was found to contain vomitoxin. Vomitoxin is formed when grains become wet and moldy. This toxin was found in "wheat screenings" used in the pet food. The FDA did investigate but not out of concern for the more than 250 dogs that became ill after ingesting this food. It investigated because of concerns for human health. The contaminated wheat screenings were the end product of wheat flour that would be used in the making of pasta. Wheat for baking flour requires a higher quality of wheat. Wheat screenings, which are not used for human consumption, can include broken grains, crop and weed seeds, hulls, chaff, joints, straw, elevator or mill dust, sand, and dirt.

Fat is usually the second ingredient listed on the pet food labels. Fats can be sprayed directly on the food or mixed with the other ingredients. Fats give off a pungent odor that entices your pet to eat the garbage. These fats are sourced from restaurant grease. This oil is rancid and unfit for human consumption. One of the main sources of fat comes from the rendering plant. This is obtained from the tissues of mammals and/or poultry in the commercial process of rendering or extracting.

An article in Petted Industry magazine does not indicate concern about the impurities in this rendered material as it relates to pet food. Dr. Tim Phillips writes, "Impurities could be small particles of fiber, hair, hide, bone, soil or polyethylene. Or they could be dirt or metal particles picked up after processing (during storage and/or transport). Impurities can cause clogging problems in fat handling screens, nozzles, etc. and contribute to the build-up of sludge in storage tanks.

Other tasty ingredients that can be added to commercial pet food include:

Beet pulp is the dried residue from sugar beet, added for fiber, but primarily sugar.

Soybean meal is the product obtained by grinding the flakes that remain after the removal of most of the oil from soybeans by a solvent extraction process.

Powdered cellulose is purified, mechanically disintegrated cellulose prepared by processing alpha cellulose obtained as a pulp from fibrous plant material. In other words, sawdust.

Sugar foods by-products result from the grinding and mixing of inedible portions derived from the preparation and packaging of sugar-based food products such as candy, dry packaged drinks, dried gelatin mixes, and similar food products that are largely composed of sugar.

Ground almond and peanut shells are used as another source of fiber.

Fish is a source of protein. If you own a cat, just open a can of food that contains fish and watch kitty come running. The parts used are fish heads, tails, fins, bones, and viscera. R.L. Wysong, DVM, states that because the entire fish is not used it does not contain many of the fat soluble vitamins, minerals, and omega-3 fatty acids. If, however, the entire fish is used for pet food, oftentimes it is because the fish contains a high level of mercury or other toxin making it unfit for human consumption. Even fish that was canned for human consumption and that has sat on the shelf past the expiration date will be included. Tuna is used in many cat foods because of its strong odor, which cats find irresistible.

In her book The Natural Cat, Anitra Frazier describes the "tuna junkie" as an expression used by veterinarians to describe a cat hooked on tuna. According to Frazier, "The vegetable oil which it is packed in robs the cat's body of vitamin E which can result in a condition called steatitis.'' Symptoms of steatitis include extreme nervousness and severe pain when touched. The lack of vitamin E in the diet causes the nerve endings to become sensitive, and can also induce anemia and heart disease. However, excess levels of vitamin E can be toxic. A veterinarian with an understanding of nutrition should be consulted.

One commercial food that most cats and dogs seem to love are the semi-moist foods. These kibble and burger-shaped concoctions are made to resemble real hamburger. However, according to Wendell O. Belfield and Martin Zucker in their book, How to Have a Healthier Dog, these are one of the most dangerous of all commercial pet foods. They are high in sugar, laced with dyes, additives, and preservatives, and have a shelf life that spans eternity. One pet owner wrote to me explaining that she had fed her cat some of these semi-moist tidbits. The cat became ill shortly after eating them, and even professional carpet cleaners could not remove the red dye from the carpet where her cat had been ill. In his book, Pet Allergies: Remedies for an Epidemic, Alfred Plechner, DVM., writes, "In my opinion, semi-moist foods should be placed in a time capsule to serve as a record of modern technology gone mad."

The pet food industry corrals this material, then mixes, cooks, dries and extrudes the stuff. (Extruding simply means it is pushed through a mold to form the different shapes and to make us think that these so called "chunks" are actually pieces of meat.) Dyes, additives, preservatives are routinely added and they can accumulate in the pet's body. According to the Animal Protection Institute of America newsletter, "Investigative Report on Pet Food, "Ethoxyquin (an antioxidant preservative), was found in dogs' livers and tissue months after it had been removed from their diet."

After processing, the food is practically devoid of any nutritional value. To make up for what is lacking, vitamins, minerals, amino acids, and supplements are dumped into the mix. If the minerals added are unchelated (chelated means minerals will more readily combine with proteins for better absorption), they will pass through the body virtually unused. Most are added as a premix, and if there is a mistake made in the premix, it can throw off the entire balance. Veterinarians Marty Goldstein and Robert Goldstein have stated that the wrong calcium/magnesium ratio can cause neuromuscular problems. As an example, when I had the commercial pet food tested by Mann Laboratories for my court case, most of the minerals showed excess levels.