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WHAT'S REALLY IN PET FOOD

An API Report

Whole chickens, choice cuts of beef, fresh grains and all the wholesome nutrition your dog or cat will ever need.

These are the images pet food manufacturers promulgate through the media and advertising. This is what the $10 billion per year U.S. pet food industry wants consumers to believe they are buying when they purchase their products.

This report explores the differences between what consumers *think* they are buying compared to what they are actually getting. This document focuses in very general terms on the most visible name brands -- the pet food labels that are mass distributed to supermarkets and grocery stores -- but there are many smaller, more highly respected brands that may be guilty of the same offenses.

What most consumers are unaware of is that the pet food industry is an extension of the human food industry, also known as the agriculture industry. Pet food provides a place for slaughterhouse waste and grains considered "unfit for human consumption" to be turned into profit. This waste includes cow tongues, esophagi, and possibly diseased and cancerous meat. The "whole grains" used have had the starch removed and the oil extracted -- usually by chemical processing -- for vegetable oil, or they are the hulls and other remnants from the milling process. Some of the truly whole grains used may have been deemed unfit for human consumption because of mold, contaminants, or poor storage practices.

Four of the five major pet food companies in the United States are subsidiaries of major multinational food production companies: Colgate-Palmolive (Hills Science Diet Pet Food), Heinz (9 Lives, Amore, Gravy Train, Kibbles n Bits, Recipe, Vets), Nestle (Alpo, Fancy Feast, Friskies, Mighty Dog) and Mars (Kal Kan, Mealtime, Pedigree, Sheba). From a business standpoint, multinational food companies owning pet food manufacturing companies is an ideal relationship. The multinationals have a captive market in which to capitalize on their waste products, and the

pet food manufacturers have a reliable source from which to purchase their bulk materials.

There are hundreds of different pet foods available in this country. And while many of the foods on the market are virtually the same, not all of the pet food manufacturing companies use poor quality and potentially dangerous ingredients.

Ingredients

Although the purchase price of pet food does not always determine whether a pet food is good or bad, the price is often a good indicator of quality. It would be impossible for a company that sells a generic brand of dog food at $9.95 for a 40-lb. bag to use quality protein and grain in its food. The cost of purchasing quality ingredients would be much higher than the selling price.

The protein used in pet food comes from a variety of sources. When cattle, swine, chickens, lambs, or any number of other animals are slaughtered, the choice cuts such as lean muscle tissue are trimmed away from the carcass for human consumption. Whatever remains of the carcass -- bones, blood, pus, intestines, ligaments, and almost all the other parts not generally consumed by humans -- is used in pet food. These "other parts" are known as "by-products" or other names on pet food labels. The ambiguous labels list the ingredients, but do not provide a definition for the products listed. (See Article - Selecting a Commercial Pet Food for a more detailed list of ingredient definitions.)

The Pet Food Institute -- the trade association of pet food manufacturers -- acknowledges the use of by-products in pet foods as additional income for processors and farmers: "The purchase and use of these ingredients by the pet food industry not only provides nutritional needs for pets at reasonable costs, but provides an important source of income to American farmers and processors of meat, poultry and seafood products for human consumption."[1]

Many of these remnants are indigestible and provide a questionable source of nutrition for our animals. The amount of nutrition provided by meat by-products, meals, and digests can vary from vat to vat. James Morris and Quinton Rogers, two professors with the Department of Molecular Biosciences, University of California at Davis Veterinary School of Medicine, assert that, "There is virtually no information on the bioavailability of nutrients for companion animals in many of the common dietary ingredients used in pet foods. These ingredients are generally by-products of the meat, poultry and fishing industries, with the potential for a wide variation in nutrient composition. Claims of nutritional adequacy of pet foods based on the current Association of American Feed Control Officials (AAFCO) nutrient allowances ('profiles') do not give assurances of nutritional adequacy and will not until ingredients are analyzed and bioavailability values are incorporated."[2]

Another source of meat you won't find mentioned on pet food labels are dogs and cats. In 1990

the *San Francisco Chronicle* reported that euthanized companion animals were being used in pet food. Although pet food manufacturers vehemently denied the report, the American Veterinary Medical Association confirmed the *Chronicle*'s story.

Protein is protein once it is rendered. What is rendering? Rendering, as defined by *Webster's Dictionary*, is "to process as for industrial use: to render livestock carcasses and to extract oil from fat, blubber, etc., by melting."

What can the feeding of such ingredients do to your companion animal? Some veterinarians claim that feeding slaughterhouse wastes to animals increases their risk of getting cancer and other degenerative diseases. One factor is that the cooking methods used by pet food manufacturers and rendering plants do not destroy many of the hormones used to fatten livestock, or medications such as those used to euthanize dogs and cats.

Animal and Poultry Fat

You may have noticed a unique, pungent odor when you open a new bag of pet food -- the smell of restaurant grease from a hundred fast food restaurants. What is the source of that delightful smell? It is refined animal fat, kitchen grease, and other oils too rancid or deemed inedible for humans.

Restaurant grease has become a major component of feed grade animal fat over the last fifteen years. This grease, often held in fifty-gallon drums, is usually kept outside for weeks, exposed to extreme temperatures with no regard for its future use. The next few times you dine out, be sure to look out back behind the restaurant for a container with a rendering company's name on it. It is almost guaranteed that you will find one. "Fat blenders" or rendering companies then pick up this rancid grease and mix the different types of fat together, stabilize them with powerful antioxidants to retard further spoilage, and then sell the blended products to pet food companies.

These fats are sprayed directly onto dried kibble or extruded pellets to make an otherwise bland or distasteful product palatable. The fat also acts as a binding agent to which manufacturers add other flavor enhancers as well. Pet food scientists have discovered that animals love the taste of these sprayed fats. Manufacturers are masters at getting a dog or a cat to eat something she would normally turn up her nose at.

Wheat, Soy, Corn, Peanut Hulls, and Other Vegetable Protein

The amount of grain products used in pet food has risen over the last decade. Once considered filler by the pet food industry, grain products now make up a considerable portion of pet food. The availability of nutrients in grain products is dependent upon the digestibility of the grain. The amount and type of carbohydrate in pet food determines the amount of nutrient value the animal

actually gets. Dogs and cats can almost completely absorb carbohydrates from some grains, such as white rice. Up to 20% of other grains can escape digestion. The availability of nutrients for wheat, beans, and oats is poor. The nutrients in potatoes and corn are far less available than those in rice. Carbohydrate that escapes digestion is of little nutritional value due to bacteria in the colon that ferment carbohydrates. Some ingredients, such as peanut hulls, are used strictly for "filler" and have no nutritional value at all!

Two of the top three ingredients in pet food are almost always some form of grain products. Pedigree Performance Food for Dogs lists Ground Corn, Chicken By-Product Meal, and Corn Gluten Meal as its top three ingredients. 9 Lives Crunchy Meals for cats lists Ground Yellow corn, Corn Gluten Meal, and Poultry By-Product Meal as its first three ingredients. Since cats are true carnivores -- they must eat meat to fulfill certain physiological needs -- one may wonder why we are feeding a corn-based product to them. The answer is that corn is much cheaper than meat.

Of the top four ingredients of Purina O.N.E. Dog Formula -- Chicken, Ground Yellow Corn, Ground Wheat, and Corn Gluten Meal -- two are corn-based products ... the same product. This industry practice is known as splitting. When components of the same whole ingredients are listed separately -- such as Ground Yellow Corn and Corn Gluten Meal -- it appears there is less corn than chicken, even though the combined weight of the corn ingredients outweigh the chicken.

In 1995 Nature's Recipe pulled thousands of tons of dog food off the shelf after consumers complained that their dogs were vomiting and losing their appetite. Nature's Recipe's loss amounted to $20 million. The problem was a fungus that produced vomitoxin, an aflatoxin, which is a subset of mycotoxin, a poison given off by mold contaminated the wheat.

Although it caused many dogs to vomit, stop eating and have diarrhea, vomitoxin is a milder toxin than most. The more virulent strains of mycotoxins can cause weight loss, liver damage, lameness, and even death. The Nature's Recipe incident prompted the Food and Drug Administration (FDA) to intervene. Dina Butcher, Agriculture Policy Advisor for North Dakota Governor Ed Schafer, concluded that the discovery of vomitoxin in Nature's Recipe wasn't much of a threat to the human population because "the grain that would go into pet food is not a high quality grain."[3] Which means that the grain used in pet food is not fit for human consumption and therefore not a threat to the human population.

Soy is another common ingredient that is sometimes used as filler in pet food. Manufacturers use it to add bulk so that when an animal eats a product containing soy he will feel more sated. While soy has been linked to gas in some dogs, other dogs do quite well with it. Vegetarian dog foods use soy as a protein source.

Industry critics note that many of the ingredients used as humectants -- ingredients such as corn

syrup and corn gluten meal which bind water to prevent oxidation -- also bind the water in such a way that the food actually sticks to the colon and may cause blockage. The blockage of the colon may cause an increased risk of cancer of the colon or rectum.

Additives and Preservatives

Many additives are added to commercial pet foods to improve the stability or appearance of the food. Additives provide no nutritional value. Additives include emulsifiers to prevent water and fat from separating. Antioxidants prevent fat from turning rancid and antimicrobials reduce spoilage. Added color and flavor make the product more attractive to consumers and their companion animals.

How prevalent are synthetic additives in pet food? Two-thirds of the pet food manufactured in the United States contains preservatives added by the manufacturer. Of the remaining third, 90% includes ingredients already stabilized by synthetic preservatives. Premixed vitamin additives used to supplement pet food can also contain preservatives. This means that your companion animal may eat food with several types of preservatives that have been added at the rendering plant, the manufacturing plant and in the supplemental vitamins.

Additives in Processed Pet Foods

Anticaking agents	Flavoring agents	pH control agents
Antimicrobial agents	Flour treating agents	Processing aids
Antioxidants	Formulation aids	Sequestrants
Coloring agents	Humectants	Solvents, vehicles
Curing agents	Leavening agents	Stabilizers, thickeners
Drying agents	Lubricants	Surface active agents
Emulsifiers	Nonnutritive sweeteners	Surface finishing agents
Firming agents	Nutritive sweeteners	Synergists
Flavor enhancers	Oxidizing and reducing agents	Texturizers

Adding chemicals to food originated thousands of years ago with spices, natural preservatives and ripening agents. In the last 40 years, however, the number of food additives has greatly increased. Of the more than 8,600 recognized food additives today, no toxicity information is available for 46% of them. Cancer-causing agents are sometimes permitted if they are used at low enough levels. The risk of continued use at these cancer-causing agents has not been studied and the build up of these agents may be harmful. Ethoxyquin (EQ), for example, was found in dogs' livers and tissues months after it had been removed from their diet, and as of July 31, 1997, the FDA's Center for Veterinary Medicine requested that manufacturers reduce the

maximum level for EQ be cut in half, to 75 parts per million.

While the law requires studies of direct toxicity of these additives and preservatives, most of these additives have not been tested for their effect on each other once ingested. Three commonly used preservatives, BHA, BHT, and EQ, have a proven synergistic effect that may lead to the development of certain types of cancer.

Butylated hydroxyanisole (BHA) and butylated hydroxtoluene (BHT) are the most commonly used antioxidants in processed food for human consumption. For these antioxidants, there is little information documenting their toxicity or the safety of long-term use in pet food.

In animal feeds, the most commonly used antioxidant preservative is ethoxyquin. While some pet food critics and veterinarians claim ethoxyquin is a major cause of disease, skin problems, and infertility in dogs, others claim it is the safest, most stable preservative available for pet food. Ethoxyquin is not approved for use as a preservative in human food, however.

Nitrate is the exception to the rule when it comes to safety. Nitrate is used in meat for human consumption. When nitrate combines with bacteria, the chemical can change to another form with carcinogenic properties called nitrosamines. Very small amounts of this chemical can cause acute and chronic liver damage.

"Natural preservatives" and antioxidants are known as Vitamin C, Vitamin E, and mixed tocopherols. While the avoidance of using pet food laced with chemical preservatives is something to consider, some critics think that natural preservatives are somewhat less effective than chemical preservatives.

The Manufacturing Process

How Pet Food Is Made

Although feed trials are no longer required for a food to meet nutritional standards and profiles, most manufacturers do require a palatability study when developing a new pet food. Animals are fed side by side, one animal fed a new food while the other is fed a similar formula. The total volume eaten is used as a gauge for the palatability of the food. Most pet food companies keep their own animals for taste testing.

Dry food is made with a machine called an expander. First, raw materials are blended, sometimes by hand, other times by computer, in accordance with a recipe developed by nutritionists. The mixture is fed into an expander and steam or hot water is added into the mixture. The mixture is subjected to steam, pressure, and heat until the temperature reaches 305 degrees F. The mixture is then extruded through dies that determine the shape of the final product. Then it is cooked at a high temperatures and high pressure. Then the food is allowed to dry for another 30-45

minutes. Once the food is dried it is usually sprayed with fat to make it more palatable. Although the cooking process may kill bacteria in pet food, the final product can lose its sterility, during the subsequent drying, fat coating, and packaging process.

Ingredients are the same for wet and dry foods. The main difference between the two types of food is the water content. Wet or canned food begins with ground ingredients mixed with additives. If chunks are required, a special extruder forms them. Then the mixture is cooked and canned. The sealed cans are then put into containers resembling pressure cookers and commercial sterilization takes place. Some manufacturers cook the food right in the can.

There are three primary types of wet food. The "all meat" product is defined by AAFCO as "When an ingredient or a combination of ingredients derived from animals, poultry, or fish constitute 95% or more of the total weight of all ingredients of a pet food, the name or names of such ingredient(s) may form part of the product name of the pet food; provided that where more than one ingredient is part of such product name, then all such ingredient names shall be in the same size, style, and color print. For the purpose of this provision, water sufficient for processing shall be excluded when calculating the percentage of the named ingredient(s). However, such named ingredient(s) shall constitute at least 70% of the total product."[4]

The "dinner" product is defined as "When an ingredient or a combination of ingredients constitutes at least 25% but less than 95% of the total weight of all ingredients of a dog or cat food mixture, the name or names of such ingredient or ingredients may form a part of the product name of the pet food if each of the ingredients constitute at least 3% of the product weight excluding water used for processing and only if the product name also includes a primary descriptive term such as 'dinner', 'platter', or similar designation so that the product name describes the contents of the product in accordance with an established law, custom or usage or so that the product name is not misleading. If the names of more than one ingredient are shown, they shall appear in the order of their respective predominance by weight in the product. All such ingredient names and the primary descriptive term shall be in the same size, style and color print. For the purpose of this provision, water sufficient for processing shall be excluded when calculating the percentage of the named ingredient(s). However, such named ingredient(s) shall constitute at least 10% of the total product."[5]

The "flavor" product is formulated to have a specific flavor, and it is defined as "No flavor designation shall be used on a pet food label unless the flavor is detected by a recognized test method, or is one the presence of which provides a characteristic distinguishable by the pet. Any flavor designation on a pet food label must either conform to the name of its source as shown in the ingredient statement or the ingredient statement shall show the source of the flavor. The word flavor shall be printed in the same size type and with an equal degree of conspicuousness as the ingredient term(s) from which the flavor designation is derived. Distributors of pet food employing such flavor designation or claims on the labels of the product distributed by them

shall, upon request, supply verification of the designated or claimed flavor to the appropriate control official."[6]

What Happened to the Nutrients?

R. L. Wysong, veterinarian and long time critic of the pet food industry, has said, "Processing is the wild card in nutritional value that is, by and large, simply ignored. Heating, freezing, dehydrating, canning, extruding, pelleting, baking, and so forth, are so commonplace that they are simply thought of as synonymous with food itself."[7] The processing practices for grain and meat used in pet food severely diminishes its nutritional value.

To make pet food nutritious, pet food manufacturers must "fortify" it with vitamins and minerals. Why? Because the ingredients they are using are not wholesome, and the harsh manufacturing practices destroy what little nutritional value the food had to begin with.

Contaminants

Commercially manufactured or rendered meat meals are highly contaminated with bacteria because their source is not always slaughtered animals. Animals that have died because of disease, injury, or natural causes are a source of meat for meat meal. The dead animal may not be rendered or cooked until days after its death. Therefore the carcass is often contaminated with bacteria -- Salmonella bacteria contaminate 25-50% of meat meals. While the cooking process may kill bacteria, it does not eliminate the endotoxins that result from the bacteria. These toxins can cause disease. Pet food manufacturers do not test their products for endotoxins.

Escherichia coli (E Coli) is another bacteria that can be found in contaminated pet foods. E Coli bacteria, like Salmonella, can be destroyed by cooking at high temperatures, however, the endotoxin produced by the bacteria will remain. This endotoxin can cause disease as well.

Aflatoxin -- This is a toxin that comes from mold or fungi, as in the case of Nature's Recipe. The improper drying and storage of crops is the cause of mold growth, which can result in Aflatoxin contamination. Ingredients that are most likely to be contaminated with this toxin are cottonseed meal, peanut meal, and fish meal.

Labeling

The National Research Council (NRC) of the Academy of Sciences set the nutritional standards for pet food until 1974, when the pet food industry created a group called the American Association of Feed Control Officials (AAFCO). At that time AAFCO chose to adopt the NRC standards rather than develop its own. The NRC standards required feeding trials for pet foods that claimed to be "complete" and "balanced." The pet food industry found the feeding trials to be too restrictive, so

AAFCO designed an alternate procedure for claiming the nutritional adequacy of pet food. Instead of feeding trials, chemical analysis would be done to determine if a food met or exceeded the NRC standards.

The problem with chemical analysis is that it does not address the palatability, digestibility and biological availability of nutrients in pet food. Thus it is unreliable for determining whether a food will provide an animal with sufficient nutrients.

To compensate for the limitations of chemical analysis, AAFCO added a "safety factor," which was to exceed the minimum amount of nutrients required to meet the complete and balanced requirements. By establishing its own standards and disregarding the NRC standards, AAFCO established itself as the governing body for pet food. In essence the pet food industry developed their own standards for nutritional adequacy.

The digestibility and availability of nutrients is not listed on pet food labels. For more information about reading and understanding pet food labels, see Article - Selecting a Commercial Pet Food (scroll down to "Pet Food Shopping Checklist").

The 100% Myth -- Problems Caused by Inadequate Nutrition

The idea of one pet food providing all the nutrition a companion animal will ever need for its entire life is a myth

Cereals are the primary ingredients in most commercial pet foods. Most people select one pet food and feed it to their dogs and cats for a prolonged period of time. Therefore companion dogs and cats eat a primarily carbohydrate diet with little variety. Today, the diets of cats and dogs are a far cry from the primarily protein diets with a lot of variety that their ancestors ate. The problems associated with a commercial diet are seen every day at veterinary establishments. Chronic digestive problems, such as chronic diarrhea, are among the most frequent illnesses treated.

Allergy or hypersensitivity to foods is a common problem usually seen as diarrhea or vomiting. Food allergies have become an everyday ailment. The market for "limited antigen" also known as "hypoallergenic" diets is now a multi-million dollar business. These diets were formulated to address the increasing intolerance to foods that animals have developed.

Many commercial pet foods are made with ingredients that have poor protein digestibility. Diets containing protein with less than 70% digestibility cause diarrhea in dogs. Some fillers used in these foods can also cause colitis, which is the inflammation of the colon. Most pet food companies do not publish digestibility statistics and they are never seen on pet food labels.

Acute vomiting and diarrhea is often a symptom of bacteria contamination and the toxins

bacteria produce. Dry commercial pet food is often contaminated with bacteris, which may or may not cause problems. Improper food storage and some feeding practices may result in the multiplication of this bacteria. For example, adding water to moisten pet food and then leaving it at room temperature causes bacteria to multiply. Yet this practice is suggested on the back of some kitten and puppy foods.

Pet food formulas and the practice of feeding that manufacturers recommend have increased other digestive problems. Feeding only one meal per day can cause the irritation of the esophagus by stomach acid. Feeding two smaller meals is better.

Urinary tract disease is directly related to diet in both cats and dogs. Plugs, crystals, and stones in cat bladders are caused by commercial pet food formulas. One type of stone found in cats is less common now, but another more dangerous type has become more common. Manipulation of manufactured cat food formulas to affect acidity in urine and the amount of some minerals has directly affected these diseases. Dogs also form stones as a result of their diet.

History has shown that commercial pet food products can cause disease. An often-fatal heart disease in cats and some dogs was shown to be caused by a deficiency of an amino acid called taurine. Blindness is another symptom of taurine deficiency. This deficiency occurred because of inadequate amounts of taurine in cat food formulas. Cat foods are now supplemented with taurine.

Rapid growth in large breed puppies has been shown to contribute to bone and joint disease. Excess calories in manufactured puppy food formulas promote rapid growth. There are now special puppy foods for large breed dogs. But this recent change will not help the countless dogs who lived and died with hip and elbow disease.

There is also evidence that hyperthyroidism in cats results from commercial pet food diets. This is a new disease that first surfaced in the 1970s, when canned food products appeared on the market. The exact cause and effect are not yet known. This is a serious and sometimes terminal disease and treatment is expensive.

Many nutritional problems appeared with the popularity of cereal-based commercial pet foods. Some occur because the diet is incomplete. Some are a result of additives. Others are a result of contamination with bacteria, toxins and other organisms. In some diseases the role of commercial pet food is understood, in others, it is not. The bottom line is that diets composed primarily of low quality cereals and rendered meat meals are not as nutritious or safe as you should expect for your cat or dog.

What Consumers Can Do

- Write or call pet food companies and the Pet Food Institute and express your concerns about commercial pet foods. Demand that they improve the quality of ingredients in their products.
- Call API with any information about the pet food industry, specific manufacturers, or specific products.
- Call API for additional copies of the Pet Food Report.
- Take a copy of this report to your veterinarian to further his or her knowledge about commercial pet food.
- Give a copy of this report to your family and friends with companion animals to alert them of the dangers of commercial pet food.
- Stop buying commercial pet food. Or if that is not possible, reduce the quantity of commercial pet food and supplement with fresh foods. Purchase one of the books available on pet nutrition and make your own food. Be sure that a veterinarian or a nutritionist writes the recipes to ensure that they are balanced and complete.
- Please be aware that API is not a veterinary hospital, clinic, or service. API does not and will not offer any medical advice. If you have concerns about your companion animal's health or nutritional requirements, please consult your veterinarian.

API's Own Book

Because nutrition for companion animals is such a complex subject for caregivers, the Animal Protection Institute is developing our own popular reference book on optimal nutrition for companion cats and dogs. Still in an early stage of development, this book will not be available before late 2000 at the very earliest.

The book's co-authors are experts in their fields:

> Donald R. Strombeck D.V.M., Ph.D., is Professor Emeritus at the University of California, Davis, School of Veterinary Medicine. Dr. Strombeck's textbook *Small Animal Gastroenterology* is now in its third edition and is considered the "bible" on this subject. From 1980 to 1996, Dr. Strombeck was invited to speak to veterinary medicine meetings around the world. In recent years, he has focused his research and clinical work primarily on nutrition.
>
> Elizabeth J. Colleran D.V.M., M.S., graduated from Tufts University School of Veterinary Medicine in 1990 and earned her Masters' of Science Degree (Animals and Public Policy) in 1996. Prior to becoming a veterinarian, Dr. Colleran worked in marketing and management for the IBM Corporation for 11 years. Presently she works as a small animal veterinarian and acts as a veterinary consultant to API.

Contact API for some sample recipes from this book. (These recipes are not available in email format. You *must* supply us with your postal address, please).

For Further Reading about Animal Nutrition

The Animal Protection Institute recommends the following books, many of which include recipes for home-prepared diets:

- *Dr. Pitcairn's Complete Guide to Natural Health for Dogs & Cats*, Richard H. Pitcairn, D.V.M., Ph.D. & Susan Hubble Pitcairn, Rodale Press, Inc., ISBN 0-87596-243-2.
- *Vegetarian Cats & Dogs*, James A. Pedan, Harbingers of a New Age, ISBN 0-941319-02-4.
- *The Consumer's Guide to Dog Food*, Liz Palika, Howell Book House, ISBN 0-87605-467-X.
- *Reigning Cats and Dogs*, Pat McKay, Oscar Publications, ISBN 0-9632394-1-4.
- *The Healthy Cat and Dog Cookbook*, Joan Harper, Pet Press, ISBN 0-525-47586-9.
- *Food Pets Die for: Shocking Facts about Pet Food*, Ann N. Martin, NewSage Press, ISBN 0-939165-31-7.
- *Cat Care Naturally*, Celeste Yarnall, Charles E. Tuttle Co. Inc., ISBN 0-8048-3025-8.
- *"It's for the Animals!" Guided Tour of Natural Care "Cook" Book & Resource Directory*, Helen L. McKinnon, C.S.A. Inc. To order, contact It's for the Animals!; P.O. Box 5378; Clinton, NJ 08809; phone 908-537-4144; fax 908-537-6610.

These two books list the ingredients and nutritional information for most commercial pet foods:

- *The Cat Food Reference*, Howard D. Coffman, PigDog Press, ISBN 0-9645009-3-0.
- *The Dry Dog Food Reference*, Howard D. Coffman, PigDog Press, ISBN 0-9645009-1-4.

The books listed above are not all the titles currently available, and the exclusion of a title does not necessarily mean it is not useful for further reading about animal nutrition.

Please note: The Animal Protection Institute is not a bookseller, and cannot sell or send these books to you. Please contact your local book retailer or an online bookstore, who can supply these books based on the ISBN provided for each title.

What API is Doing

- API is a liaison to the AAFCO Pet Food and Ingredient definitions committees. By attending AAFCO meetings, we hope to learn more about the industry itself and about potential avenues for bringing about change.
- An API representative attends AAFCO meetings to give voice to our and the consumer's

concerns about pet food.

- API is involved in lobbying for the federal regulation of pet food and the development of more stringent standards for the quality of ingredients used.
- API will continue to provide information to the public about the pet food industry and the products they promote.

Who to Write

AAFCO Pet Food Committee
Dr. Rodney Noel -- Chair
Office of Indiana State Chemist
Purdue University
1154 Biochemistry Building
West Lafayette, IN 47907-1154
http://www.aafco.org/

FDA -- Center for Veterinary Medicine
David A. Dzanis, DVM, Ph.D., DACVN
7500 Standish Place
Rockville, MD 20855
(301) 594-1728
http://www.fda.gov/cvm/

Pet Food Institute
1200 19th Street NW
Washington, DC 20036-2401
(208) 857-1120
(208) 223-4579

Pet Food Contact List

Advanced Pet Diets
Breeder's Choice Pet Foods
16321 East Arrow Highway
Irwindale, CA 91706
(800) 255-4286

Alpo
Friskies Petcare Company
Glendale, CA 91203
(800) 366-6033

Amway
Amway Corporation
7575 Fulton

ANF
Century Pet Care
PO Box 326

Grand Rapids, MI 49335

Anmar
Natura Pet Products
1171 Homestead Rd., #275
Santa Clara, CA 95050
(800) 532-7261

Bil Jac
Kelly Foods Corporation
3457 Medina Road
Medina, OH 44256
(800) 321-1002
http://www.biljac.com/

Breeder's Choice
Breeder's Choice Pet Foods
16321 East Arrow Highway
Irwindale, CA 91706
(800) 255-4286

Cargill
Cargill Inc.
PO Box 9000
Minneapolis, MN 55440
(800) 328-1189

Diamond
Diamond Pet Food Company
PO Box 146
Meta, MO 65058
(800) 442-0402

Eukanuba
The Iams Company
PO Box 14597
Dayton, OH 45413
(800) 525-4267

Flint River Ranch Products
Flint River Ranch
1243 Columbia Avenue, B-6
Dana Point, CA 92629
(800) 722-3261

Avo-Diets
Breeder's Choice Pet Foods
16321 East Arrow Highway
Irwindale, CA 91706
(800) 255-4286

Blue Seal
Blue Seal Feeds
PO Box 8000
Londonderry, NH 03053
(800) 367-2730

California Natural
Natura Pet Products
1171 Homestead Rd. #275
Santa Clara, CA 95050
(800) 532-7261

Cornucopia
Cornucopia Pet Foods, Inc.
229 Wall Street
Huntington, NY 11743
(516) 427-7479

Eagle
Eagle, Inc.
PO Box 506
Mishawaka, IN 46546-0506
(800) 255-5959

Excel
Pet Products Plus, Inc.
1600 Heritage Landing, #112
St. Charles, MO 63303
(800) 592-6687

FROMM Family Nutritionals
FROMM Family Foods, Inc.
PO Box365

Riverside, CA 92507
(909) 682-5048

Full Balance
Muenster Milling Co., Inc.
PO Box 585
Muenster, TX 76252
(800) 772-7178

Holistic Gold
Jaydan Diversified Inc.
1222 Fewster Drive, Unit 7
Mississauga, ONT L4W 1A1
Canada
(800) 954-1117

Innova
Natura Pet Products
1171 Homestead Rd., #275
Santa Clara, CA 95050
(800) 532-7261

Joy Demand
Best Feeds
PO Box 246
Oakdale, PA 15071
(800) 245-4125

Ken-L Ration
Heinz Pet Products
Box 5700
Newport, KY 41071
(800) 828-9980

Natural Life
Natural Life Pet Products
PO Box 943
Frontenac, KS 66763-0943
(800) 367-2391

Neura
Old Mother Hubbard Dog Food Company, Inc.
PO Box 1719
Mequon, WI 53092
(800) 325-6331

Gereen
Gereen Enterprises
6216 Baker Lane
Alvarado, TX 76009
(800) 358-4908

Iams
The Iams Company
PO Box 14597
Dayton, OH 45413
(800) 525-4267

Joy
Best Feeds
PO Box 246
Oakdale, PA 15071
(800) 245-4125

Kasco
Pet Products Plus, Inc.
1600 Heritage Landing, #112
St. Charles, MO 63303
(800) 592-6687

Matrix
Natura Pet Products
1171 Homestead Rd., #275
Santa Clara, CA 95050
(800) 532-7261

Nature's Recipe
Nature's Recipe Pet Foods
341 Bonnie Circle
Corona, CA 91720
(800) 843-4008

Nutro
Nutro, Inc.
445 Wilson Way

Lowell, MA 01853-1179
(800) 225-0904

Optimum
Optimum Pet Care
3775 Southwestern Blvd.
Orchard Park, NY 14127
(800) 833-9224

Perfect Balance
Muenster Milling Co., Inc.
PO Box 585
Muenster, TX 76252
(800) 772-7178

PetGuard Premium
PetGuard Inc.
PO Box 728
Orange Park, FL 32067-0728
(800) 874-3221

Precise Pet Products
Precise Pet Products
PO Box 630009
Nacogdoches, TX 75963
(800) 446-7148

Pro Plan
Ralston Purina Company
PO Box 1606
St. Louis, MO 63188
(800) 778-7462

Purina O.N.E.
Ralston Purina Company
PO Box 1606
St. Louis, MO 63188
(800) 778-7462

Science Diet
Hill's Pet Nutrition, Inc.
PO Box 148
Topeka, KS 66601-0148

City of Industry, CA 91744
(800) 833-5330

Pedigree
Kal Kan Pet Care
PO Box 58853
Vernon, CA 90058-0853
(800) 525-5273

PetCo
PetCo
9151 Rehco Rd.
San Diego, CA 92121

PETsMART
PETsMART
10000 N. 31st Ave. Ste. C100
Phoenix, AZ 85051
(602) 944-7070

Pro Balanced
Gold Kist Inc.
PO Box 2210
Atlanta, GA 30301
(770) 393-5204

Purina
Ralston Purina Company
PO Box 1606
St. Louis, MO 63188
(800) 778-7462

Regal
Regal Pet Foods
305 West Chesapeake Ave.
Towson, MD 21204
(800) 638-7006

Sensible Choice
Pet Products Plus, Inc.
1600 Heritage Landing, #112
St. Charles, MO 63303

(800) 445-5777

Solid Gold
Solid Gold Holistic Animal/Equine Nutrition Center
1483 N. Cuyamaca
El Cajon, CA 92020
(800) DOG-HUND

Top Nutrition
Grama Pet, Inc.
9804 S.W. 138 Ave.
Miami, FL 33186
(305) 383-2717

Walter Kendall
Breeder's Choice Pet Foods
16321 East Arrow Highway
Irwindale, CA 91706
(800) 255-4286

Wayne
Pet Products Plus, Inc.
1600 Heritage Landing, #112
St. Charles, MO 63303
(800) 592-6687

Wysong
Wysong Corporation
1880 North Eastman
Midland, MI 48640
(517) 631-0009

(800) 592-6687

The Pet Pantry
The Pet Pantry Int'l Inc.
PO Box 5148
Stateline, NM 89449
(702) 588-2027

Wal-Mart
Wal-Mart
(800) WALMART

Waltham Formula
Kal Kan Pet Care
PO Box 58853
Vernon, CA 90058-0853
(800) 525-5273

Winner's Choice
Grama Pet, Inc.
9804 S.W. 138 Ave.
Miami, FL 33186
(305) 383-2717

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1. Pet Food Institute, (2).
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3. Knight-Ridder.
4. AAFCO, Regulation PF3(e)
5. AAFCO, Regulation PF3(f)
6. AAFCO, Regulation PF3(a)
7. Wysong. *Rationale*, 40-41.

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