

Help on Deciphering Kibble Label Ingredients

When comparing ingredients in dog foods, it pays to ask about the *source* of the ingredients. Are they human-grade? Are they fresh, dried, powdered, or otherwise processed? These characteristics affect both the flavor and nutritional value of the final product. When selecting a kibble it is good to buy one with all natural ingredient, human grade is good--organic is even better. Some manufacturers will specifically state that their product is free of hormones, antibiotics and pesticides, as well as chemical preservatives such as BHA, BHT and ethoxyquin. This is an important distinction because manufacturers are not required to list substances that are present in the ingredients when they go into the dog food. Single source ingredients are always better because you know what you're getting, as in, salmon oil versus fish oil, because the fish oil comes from unknown origins. Generally, the fewer number of ingredients, the better. This particularly helps when trying to determine allergies.

Below is a list of many of the ingredients commonly found in kibble; the definitions, and what nutritional value contained in products. The below list does not reflect all ingredients of any one particular manufacturer, but a list of many common ingredients found in various different products listed alphabetically. Although you will find many other ingredients on the market, by using the data below, you can extrapolate information regarding similar products.

Alfalfa Meal is the aerial portion of the alfalfa plant, reasonably free of other crop plants, weeds and mold, which has been finely ground. Alfalfa is an excellent source of phytochemicals and phytoestrogens and their antioxidant effect stimulates the immune system. Alfalfa is a good source, also, of vitamin C, folate, vitamin A, niacin and pantothenic acid. The unprocessed sprout contains more nutritional value than the ground meal.

Alfalfa Meal-Suncured, is the aerial portion of the alfalfa plant, reasonably free of other crop plants, weeds and mold, which has been suncured and finely ground.

Alfalfa Sprouts are rich sources of antioxidants, anti-carcinogens, phytochemicals, enzymes, trace minerals and numerous other living nutrients which work against toxins, resist cell mutation and invigorate the body's immune system. Sprouts are good sources of vitamin C, folate, beta carotene and niacin.

Amaranth is a seed plant which is a good alternative source of carbohydrate energy. Amaranth is a valuable carbohydrate ingredient with a unique flavor. It is also high in linoleic acids.

Animal Digest is a material which results from chemical and/or enzymatic hydrolysis of clean and un-decomposed animal tissue. The animal tissues used shall be exclusive of hair, horns, teeth, hooves and feathers, except in such trace amounts as might occur unavoidably in good factory practice and shall be suitable for animal feed. If it bears a name descriptive of its kind or flavor(s), it must correspond thereto. Animal digest is a cooked-down broth made from unspecified parts of unspecified animals. Any kind of animal can be included: goats, pigs, horses, rats, etc. The animals can be obtained from any source, so there is no control over quality or contamination.

Animal Fat is obtained from the tissues of mammals and/or poultry in the commercial process of rendering or extracting. Animal fat is a byproduct of meat meal processing. The origin of the contributing animals is never known, and the resulting oil is very low in **linoleic acid**, which is necessary for skin and coat health.

Apples are an excellent source of dietary fiber. About 81 percent of the fiber is soluble; most of it is of a type called pectin. Apples provide both soluble and insoluble fiber, some vitamin C and beta carotene, and potassium and boron.

Artificial Flavors and Colors are humanly-contrived additives, used to enhance a product and to appeal to the human eye. Artificial flavors and colors don't belong in dog food. Use of these ingredients can conceal damage or inferiority, or make the product appear better than it actually is. They add no nutritional value and raise questions about the health and safety of chemical additives to our dog's diets when eaten everyday.

Avocado Oil is a monounsaturated fatty acid. The best avocado oil used is cold-pressed and protected from exposure to heat and light. It is added after the food is cooked. Avocado oil is a rich source for the essential oils that promote a healthy skin and coat. The avocado has the highest vitamin E content of any fruit. It also contains lutein, which is a carotenoid. Lutein acts as an antioxidant, protecting cells against the damaging effects of free radicals. It benefits eyesight and reduces the risk of cancer and heart disease.

Bananas are a rich source of carbohydrates, potassium, magnesium and many vitamins.

Barley Flour consists principally of the soft, finely ground and bolted meal obtained from milling barley and consists essentially of the starch and gluten of the endosperm. Pre-processed ingredients, such as flours, have had much of their nutritional value leached from them. Fresh ground barley is a quality source of carbohydrates. Ground barley contributes additional protein, barley oil, bran and vitamins and minerals to the diet.

Barley—Ground, is the entire barley kernel, ground or chopped. Ground barley is a good quality source of carbohydrates. Using the entire barley kernel contributes additional protein, barley oil, bran, and vitamins and minerals to the diet. This is in contrast to the fractionated grain ingredients used by some manufacturers, such as cracked pearl barley or barley flour, which are leached of much of their nutritional value.

Barley—Pearled, is barley that has been de-hulled by machine brushing. Pearled barley has the bran removed but leaves the endosperm and germ intact, thereby contributing additional protein, barley oil and vitamins and minerals to the diet.

Beef & Bone Meal is the rendered product from beef tissues, including bone, exclusive of any added blood, hair, hoof, horn, hide trimmings, manure, stomach and rumen contents, except in such amounts as may occur unavoidably in good processing practices. Beef & bone meal is a byproduct made from beef parts which are not suitable for human consumption. It can incorporate the entire cow, including the bone -- although the quality cuts of meat are always removed before beef & bone meal is made.

Beef Broth is obtained by cooking beef, including bones and/or muscle, much the same process as making a stock. Beef broth adds moisture and increases the protein and palatability level of food.

Beef Fat is obtained from the tissues of cattle in the commercial process of rendering or extracting. Beef is not as high as chicken fat in linoleic acid (over 23%).

Beef Tallow is obtained from the tissue of cattle in the commercial process of rendering. Although this is a very palatable source of fat, it is low in linoleic acid. In addition, beef may be a source of allergies for some dogs.

Beet Pulp is the residue from sugar beets which has been cleaned, freed from crowns, leaves, and sand, and extracted in the process of manufacturing sugar. Beet pulp is added to some dog foods to act as a fibrous stool hardener or filler. Some manufacturers have found that beet pulp is an unnecessary ingredient.

BHA/BHT is short for Butylated Hydroxyanisole (BHA) and Butylated Hydroxytoluene (BHT), both of which are chemical preservatives. BHA and BHT have been banned from human use in many countries. In the US, they are still permitted in dog foods. Some manufacturers' foods are naturally preserved with Vitamins E and C.

Blueberries are a good source of fiber and do not pose a health risk in dog foods. They may add an interesting flavor to the food, which can affect a dog's taste preference.

Brewer's Dried Yeast is the dried, non-fermentive, non-extracted yeast that results as a by-product of the brewing of beer and ale. Although brewer's yeast is a good source of Vitamin B, it may be a potential allergen for some dogs.

Brewer's Rice is the small milled fragments of rice kernels that have been separated from the larger kernels of milled rice. Brewer's rice is a lower quality rice product that is missing many of the nutrients found in ground rice and ground brown rice.

Brown Rice—Ground, is a high quality source of carbohydrates and natural fiber. Ground brown rice is slightly less digestible than ground (white) rice. Ground brown rice is the entire product obtained in grinding the rice kernels after the hulls have been removed.

Canola Oil is the oil obtained from the repeated pressing of canola seeds. Canola oil, although a single-source oil, however it is lower in linoleic acid many other single sources.

Caramel Color is an artificial chemical coloring added to foods to make them appear more brown in color, providing no nutritional value.

Carrots are Carrots are particularly rich in beta-carotene, a carotenoids. A portion of dietary

beta-carotene is turned into vitamin A. Beta carotene on its own also is an antioxidant, believed to reduce the risk of certain cancers and heart disease.

Carrots—Dried, are the roots of the carrot plant that have had the moisture removed. Dried fruits and vegetables can be nutrient dense.

Cheese Meal is the product obtained by dehydrating cheeses. Cheese has been described as being difficult for many dogs to digest. Cheese is an excellent source of calcium. Some manufacturers use cottage cheese due to the higher digestibility factor.

Chicken is the clean combination of flesh and skin with or without accompanying bone, derived from the parts or whole carcasses of chicken- exclusive of feathers, heads, feet, and entrails. Chicken is an excellent source of protein.

Chicken Byproduct Meal consists of the dry, ground, rendered, clean parts of the carcass of slaughtered chicken, such as necks, feet, undeveloped eggs, and intestines -- exclusive of feathers except in such amounts as might occur unavoidably in good processing practices. Chicken byproduct meal is an inconsistent ingredient because of the multiple organs used, their constantly changing proportions, and their questionable nutritional value. Chicken byproduct meal is much less expensive and less digestible than chicken meal.

Chicken Fat is obtained from the tissues of chickens in the commercial process of rendering or extracting. Chicken fat is the highest of all animal sources in linoleic acid (over 23%).

Chicken Liver Digest is a material which results from chemical and/or enzymatic hydrolysis of clean and un-decomposed chicken liver tissue. Chicken liver digest is used by some manufacturers as a flavor enhancer. The liver's function is to process toxins. However, these toxins may remain in the organs after slaughter.

Chicken Meal is the dry rendered (cooked down) product from a combination of clean flesh and skin with or without accompanying bone, derived from the parts of whole carcasses of chicken -- exclusive of feathers, heads, feet, or entrails. Chicken meal is considered to be the single best source of protein in commercial dog foods. High quality, low ash chicken meal is very digestible and very palatable.

Chicory is derived from the root of the chicory plant, which after it has been dried and roasted, consists of mainly compounded sugars, and more specifically, fructose (fruit-sugar). Chicory root is a thick-rooted, usually blue-flowered European perennial composite herb, widely grown for its roots and as a salad plant. It is a member of the sunflower family. Chicory root is a mannanoligosaccharide added as a prebiotic to aid in digestion. The prebiotic feeds the probiotic, and hinders the growth of bad bacteria in the dog's digestive tract. In addition to enhancing digestive processes, chicory helps to keep the liver healthy. The inclusion of chicory root supplements in the diet supports the proper metabolism of cholesterol and the body's ability to absorb calcium, a nutrient that helps build and maintain strong teeth and bones.

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. Corn gluten meal is a low ash source of protein and acts as a urine acidifier.

Corn- Kibbled, consists of the dry product obtained by cooking cracked corn under steam pressure and extruding from an expeller or other mechanical pressure device. Corn products are commonly used in dog foods as a main protein source. Because corn products are lacking in certain amino acids such as methionine and arginine, they are not as nutritious as the high quality meats.

Corn Syrup is made by adding enzymes to corn starch, and it is turned into a syrupy mixture of glucose, dextrose and maltose. Corn syrup is used to make food more palatable, and does not contain any nutritional value.

Corn-Whole, is the whole corn kernel or the entire ear of corn without husks. While the whole corn kernel is nutritious, some believe corn to be highly allergenic.

Cottage Cheese is the result of separating milk or cream into curds and whey. The curds are drained and pressed to form the soft, white, spoonable cheese. Cottage cheese is an excellent source of calcium, phosphorus, protein and vitamins.

Digest is a material which results from chemical and/or enzymatic hydrolysis of clean and un-decomposed animal tissue. Digest is a palatability enhancer which can contain unpredictable parts from animals of unknown origin.

Egg is the part or whole of the reproductive body produced by hens. Eggs are an excellent source of protein, with naturally occurring complex combinations of amino acids.

Eggs—Dried, are USDA-inspected whole eggs, without the shell, in a dehydrated form--highly processed.

Egg Product is product obtained from egg graders, egg breakers, and/or hatchery operations that is dehydrated, handled as liquid, or frozen. Egg product consists of the unused leftovers from eggs for human production. It can include undeveloped eggs, shells, and other tissues unfit for human consumption.

Fish Meal is the clean, rendered (cooked down), dried ground tissue of un-decomposed whole fish or fish cuttings, either or both, with or without the extraction of part of the oil. Fish meal is made from unspecified types of fish.

Fish Oil is the oil from rendering (cooking down) whole fish. According to AAFCO definition, fish oil can contain cannery refuse; damaged, defective, or superfluous edible material produced during, or left over from, a manufacturing or industrial process. Many dog food manufacturers use this generic type of oil.

Flaxseed is the whole seed of the flax plant. What makes flaxseed so outstanding is its mix in both soluble and insoluble fiber. Together these fibers aid in digestion and help to prevent constipation, thereby offering protection against cancer. Flaxseed is also an excellent source of Omega 6 and Omega 3 essential fatty acids. These fatty acids help produce the soft, luxuriant coat on your dog. The richest source of alpha-linoleic acid is found in flaxseed.

Flaxseed Meal is the ground product obtained from the seed of the flax plant. Flaxseed meal is a good source of Omega 6 and Omega 3 essential fatty acids.

Garlic is valued for its anti-oxidant properties, as well as its enjoyable flavor, and also helps to repel insects.

Grain Fermentation Solubles are the dried material resulting from drying the water soluble materials after separation of suspended solids from grain fermentation. Grain fermentation solubles are an inexpensive byproduct of human food and beverage production which add little or no nutritional value to dog foods.

Green Peas are a fresh vegetable source of protein and contain a good source of vitamin A.

Herring is the clean tissue of un-decomposed whole herring or herring cuttings, either or both, with or without the extraction of part of the oils. Herring is an excellent single-source protein. It is also an excellent source of Omega 3 essential fatty acids.

Kelp is dried seaweed of the families Laminariaceae and Fucaeeae. Kelp is a general term used to describe large brown seaweeds. Seaweeds have been used throughout the world for centuries as a rich source of natural organic minerals and vitamins like iodine, potassium and calcium. The thyroid gland depends upon minerals, especially iodine, to function properly and to secrete adequate amounts of thyroxin and trilodothyronine. These hormones influence metabolic rate and body temperature. Kelp is not only rich in iodine, but is also an additional natural source of beta-carotene, B vitamins and vitamin C.

Lecithin is a specific phospholipid and the principal constituent of crude phosphatides derived from oil-bearing seeds. Lecithin is essential for normal fatty acid transport within cells. It is obtained chiefly from soybeans, corn and egg yolk.

Menhaden Fish Meal is the clean, dried, ground tissue of un-decomposed whole fish or fish cuttings, either or both, with or without the extraction of part of the oil.

Natural Flavors are minimally processed flavor ingredients that do not contain synthetic or artificial components.

Oatmeal is the dry ground product of cleaned oats with the hulls removed. Oatmeal is a good source of carbohydrate energy. Some manufacturers use Oatmeal with its natural nutrients intact and without preprocessing. This is in contrast to the fractionated oat ingredients used by some

manufacturers such as oat bran, oat flour or feeding oat meal, which have been leached of much of their nutritional value. A natural, healthy grain that's rich in B vitamins. Because of its sticky texture it helps hold food together without using artificial binders

Feeding Oat Meal is obtained in the manufacture of rolled oat groats or rolled oats and consists of broken oat groats, oat groat chips, and floury portions of the oat groats, with only such quantity of finely ground oat hulls as is unavoidable in the usual process of commercial milling. Feeding oat meal is a fractionated grain which results from processing oats for human consumption. It is missing the nutritional value of whole oats, as the hull and portions of the endosperm are missing.

Peanut Hulls consist of the outer hull of the peanut shell. Peanut hulls have no nutritional value whatsoever, and there are concerns regarding the level of residual fungicides that soak into peanut hulls as they are grown. They are used exclusively as a filler ingredient.

Pears contain vitamin A, and if the skin is included, provide a good source of dietary fiber.

Potatoes (not sweet) provide B vitamins, carbohydrates, zinc, vitamin C, copper, iron, magnesium, niacin and potassium.

Poultry By-Product Meal consists of the 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 practices. This is a low-quality, inconsistent ingredient, with multiple organs used, constantly changing proportions, and questionable nutritional value. The origin can be any fowl (turkeys, ducks, geese, buzzards, etc.), instead of a single source, like chicken. Poultry by-product meal is much less expensive and less digestible than chicken meal.

Poultry Fat is obtained from the tissues of poultry in the commercial process of rendering or extracting. Poultry fat is a byproduct of meat processing. The origin of the contributing animals is never known; the source can be any fowl (turkey, chicken, geese, buzzard, etc.) and the resulting oil is very low in linoleic acid.

Probiotics help prevent disease and sickness. They are especially critical for dogs that are under stress from shipping, showing, surgery, and kennel stays.

Quinoa is a pigweed whose seeds are ground and widely used as food. It is not a true cereal grain, but the botanical fruit of an herb plant. It is treated as a grain in cooking. Quinoa is a good source of protein and nutrients.

Rice Bran is the pericarp or bran layer and germ of the rice. Rice bran is a grain fraction, an inexpensive source of fiber that is considered a filler ingredient.

Rice Flour consists principally of the soft, finely ground and bolted meal obtained from milling rice (containing essentially the starch and gluten of the endosperm) together with fine particles of rice bran and the offal from the 'tail' of the mill. Whenever flour is part of an ingredient's name,

the grain has been processed and some (or all) of the nutritional value has been lost. Frequently these flour ingredients are simply the leftover dust from processing human food ingredients.

Rosemary, along with its cancer prevention properties, is a highly effective preservative.

Safflower Oil is obtained by extracting oil from safflower seeds. Although this is a very high quality source of fat (rich in linoleic acid), however it is not very palatable for many dogs.

Salmon is a marine and freshwater food fish. Some manufacturers use the clean tissue of un-decomposed, whole salmon and/or salmon cuttings. Salmon is an excellent single-source protein. It is also an excellent source of Omega 3 essential fatty acids, which play a vital role in the structures of cell membranes. Essential fatty acids stimulate growth, benefit skin and hair, influence the inflammatory response and affect the development of the nervous system, including the brain.

Salmon Fishmeal is the clean, rendered, dried ground tissue of un-decomposed salmon or salmon cuttings, either or both, with or without the extraction of part of the oil. Salmon fishmeal is a good source of essential fatty acids.

Salt is a natural mineral, necessary for life and good health. Most dog food ingredients contain enough sodium to meet a dog nutritional needs.

Sea Salt, also know as solar salt, is a natural mineral necessary for life and good health. Even though regular salt (mined) and sea salt (solar) come from different places, by the time they make it onto the market, they are practically identical in every way, including nutritional value. Most dog food ingredients contain enough sodium to meet a dog's nutritional needs.

Sorghum is the ground grain of the sorghum plant. Sorghum is a member of the grass family; its leaves and stalk resemble corn but it does not have ears. Although sorghum is good source of carbohydrates, it is low in digestibility.

Soybean Hulls consist primarily of the outer covering of the soybean. Soybean hulls are used exclusively as a filler ingredient and have no nutritional value whatsoever.

Soybean Meal is the product obtained by grinding the flakes which remain after removal of most of the oil from soybeans by a solvent or mechanical extraction process. Soybean meal is a poor quality protein filler. The "Crude Protein" analysis on pet food labels is only a measurement of the amount of nitrogen in a food -- not the quality of the protein. Because of this, pet food companies can use the cheaper by-products of human food production, such as soybean meal, to boost protein numbers. Meat is always the best source of quality protein. Meat protein is better absorbed and retained and is higher in essential amino acids like methionine and arginine. Soybean meal has a biologic value less than 50% of that of chicken meal.

Sunflower Oil is obtained by extracting oil from sunflower seeds. Sunflower oil has a high concentration of linoleic acid (73%), which is important for good skin and coat health.

Sweet Potatoes are a member of the morning glory family and unrelated to the white potato. While sweet potatoes are a nutritious food with many important nutrients, they do contain higher levels of sugar. Due to an enzyme in the food, sweet potatoes convert most of their starches to sugar as they mature. Depending on how much is added to a product, this ingredient may not be appropriate for diabetic dogs.

Tomato Pomace is the mixture of tomato skins, pulp, and crushed seeds. This is an inexpensive byproduct with the potential for pesticide residues in discarded tomato skins, which are the largest component of tomato pomace.

Turkey is the clean combination of flesh and skin with or without accompanying bone, derived from the parts or whole carcasses of turkey or a combination of thereof - exclusive of feathers, heads, feet, and entrails. Turkey is an excellent source of highly digestible protein.

Vegetable Oil is the product of vegetable origin obtained by extracting the oil from seeds or fruits which are processed for edible purposes. The source vegetables for this oil (and their nutrient properties) are unknown.

Vitamins are organic compounds that function as parts of enzyme systems essential for the transmission of energy and the regulation of metabolisms of the body. Minerals are inorganic substances essential for a host of vital processes within the body. AAFCO regulates minimum standard quantities of vitamins and minerals in levels that dogs need to survive. All pet food manufacturers supplement their products with vitamins and minerals.

Wheat—Ground, is the entire wheat kernel, ground or chopped. Ground wheat is a good quality source of carbohydrates. Because it includes the entire wheat kernel, it contributes additional protein, wheat oil, bran, and vitamins and minerals to the diet. This is in contrast to the fractionated wheat ingredients used by some manufacturers such as wheat bran, wheat flour or wheat middlings, which are leached of much of their nutritional value.

Wheat Mill Run and Middlings consist of coarse and fine particles of wheat bran and fine particles of wheat shorts, wheat germ, wheat flour and offal from the "tail of the mill." Commonly referred to as "floor sweepings," this ingredient is nothing more than inexpensive filler with little or no nutritional value.

Wheat—Whole Grain, consists of the entire wheat kernel. Whole grain wheat is a good quality source of carbohydrates. Because it includes the entire wheat kernel, it contributes additional protein, wheat oil, bran, and vitamins and minerals to the diet.

Whey Protein concentrate is the product obtained by removal or separation of water, lactose and/or minerals from whey by ultrafiltration, dehydration or other process. Although this can be a safe and healthy supplement to a dog's food, some manufacturers use only human grade, unprocessed proteins and dairy products in their foods.

Yeast Culture is the dried product composed of yeast and the media on which it is grown, dried in such a manner as to preserve the fermenting activity of the yeast. Yeast culture is an

unnecessary flavoring ingredient, used in inexpensive pet foods in an attempt to compensate for a lack of real food flavors. In addition, yeast in this form, may be an allergen for some animals.

Yucca Schidigera is a supplement from the yucca plant. There is some evidence that consecutive use of yucca can interfere with absorption of fat soluble vitamins.