

Top Most Used Ingredients 2018

ABOUT THE RENDERING PROCESS: All these undesirable ingredients & by products are “denatured” before rendering. Denaturing is spraying crude carbolic acid, cresylic disinfectant or citronella on these dregs. (*NOTE: THESE DENATURING PRODUCTS ARE TOXIC.)

ANIMAL BY-PRODUCTS: Dead, Diseased, Euthanized from shelters or road kill animals. You can never know the source of the meat used to make **generic** by-product meals. This ingredient **should be avoided**.

ANIMAL DIGEST-(flavoring agent): Unspecified parts of unspecified animals which are cooked to a goopy broth (rendered) and used as a spray-on or added directly to the food. The grease that rises to the top is used as a source of fat and the rest of the mash is dried and used as “meat meal”. No quality control is used and this can include “4-D animals” (dead, diseased, disabled, or dying prior to slaughter), goats, pigs, horses, rats, roadkill or any misc dead animal.

ANIMAL FAT: There's no animal specified so it's anyone's guess where the fat came from. Can cause pancreatitis. From the FDA website: “There appears to be associations between rendered or hydrolyzed ingredients and the presence of [pentobarbital in dog food](#). The ingredients Meat and Bone Meal (MBM), Beef and Bone Meal (BBM), Animal Fat (AF), and Animal Digest (AD) are rendered or hydrolyzed from animal sources that could include euthanized animals.”

ANIMAL PLASMA-(animal blood, blood meal, dried blood): This is slaughtered animal waste. Rarely labeled (chicken blood, cow blood, etc.) This mixture is used in fertilizer and the FDA approves it in animal feeds including dog and cat foods. Dried blood may be high in protein but many people consider it a cheap waste product and controversial at best.

BREWERS YEAST EXTRACT: Liquid left over from brewery process, condensed. Can become toxic to the liver.

BREWERS YEAST: Waste product (used for flavoring, protein, B-vitamins) which can become very toxic to the liver and can cause allergies and arthritis.

BEEF AND BONE MEAL: (protein source) also see "Animal Fat" above: A byproduct made from beef parts which are not suitable for human consumption. It can incorporate the entire cow, including the bones, but the quality cuts of meat are always removed. This is an inexpensive, low quality ingredient used to boost the protein percentage. The unspecified meat might be chicken, or it might be road kill. Could be rendered horse meat. All this garbage can be added to pet food as 'crude protein.'

BEEF TALLOW – (fat source): Beef tallow is added to make lower quality dog foods palatable, instead of using quality fat sources such as nutritionally-rich chicken fat, or human grade vegetable oil.

BREWER’S RICE-(carbohydrate source): A cheap substitute for whole grain rice.

BROWN RICE SYRUP: Found in many products including baby formulas. Contains arsenic. Even in Organic.

CHICKEN MEAL: Many chicken meal ingredients include high levels of bone. EWG.org has linked high levels of bone with high levels of fluoride. **Science links high levels of fluoride with bone cancer.**

CORN OIL (preserved with TBHQ): TBHQ contains petroleum-derived butane, can be carcinogenic. Corn in any other form than organic most likely contains GMOs.

CORN STARCH: Can cause obesity, cancer and high blood pressure. Today, corn is loaded with GMOs not to mention Glyphosate sprayed onto our crops and is highly toxic. Buy **organic only** and limited (not daily) use of this ingredient is safest. You will find cornstarch in baking powders.

DRIED BAKERY PRODUCT: Dried bakery product is a mixture of bread, cookies, cake, crackers and other waste which have been artificially dried and ground into a coarse mixture.

DRIED EGG PRODUCT: “is product obtained from egg graders, egg breakers and/or hatchery operations that is dehydrated, handled as liquid, or frozen.” Eggs that do not pass for human consumption are used in this pet food ingredient (feed grade). Cheap source of protein, waste product of egg industry, free of shell.

FOOD FRAGMENTS: (filler/fiber source/carbohydrate source): Low cost by-products and leftovers from another food manufacturing process. Examples include WHEAT MIDDLINGS AND SHORTS, (floor sweepings), WHEAT GERM MEAL, WHEAT BRAN and BREWER’S RICE (a waste product of the alcohol industry).

Also avoid fragments which are labeled POTATO PRODUCT, MIDDLINGS/MIDS or MILL RUN of any kind.

GROUND YELLOW CORN(Maize) and CORN GLUTEN MEAL: Full of GMOs and a major reason for allergies and sugar imbalance in pets as well as causing serious health issues. This is used for a filler and is a useless ingredient in pet foods and is not easily digestible.

MEAT BY-PRODUCT: (protein source): Pet grade meat by-products consist of organs and parts either not desired, or condemned, for human consumption. This can include bones, blood, intestines, lungs, ligaments, heads, feet, and feathers. – This can also include the dreaded 4-Ds – (Dead, dying, diseased or dying prior to slaughter). The animal parts used can be obtained from any source, so there is no control over quality or contamination. Any kind of animal can be included: goats, pigs, horses, rats, road kill or any misc dead animal. It can also include pus, cancerous tissue, and decomposed (spoiled) tissue.

POTATO (white): increase of cancer; carcinogenic in foods.

PEA PROTEIN: High levels of peas – legumes – is linked to gut disorders.

RICE: (Brown and White): Most rice, if not organic, [contains arsenic](#).

SOYBEAN MEAL: Soybean meal also known as **Soyabean Oil Cake** is a solid residue **bi-product**, flour, created after grinding the soybean to extract soybean oil. It is widely **used as a filler** and source of protein in animal diets, including pig, chicken, cattle, horse, sheep, and fish feed. Fillers are only used for adding cheap priced ingredients into foods. Also soybean is full of GMOs. All soybean products should be avoided for pet foods.

Soy is estrogenic and can wreak havoc on your dog's endocrine system. Tumors and illness have been linked to GMO ingredients. Other common soy ingredient names-Soy Protein Concentrate, Soy Protein Isolate.

SOY FLOUR: (filler/carbohydrate): A cheap allergy-causing ingredient used as filler. This is the leftover “dust” after the healthy cleaned and dehulled soybeans are processed; sometimes even sweepings from the factory floor.

UNSPECIFIED GRAIN SOURCES: CEREAL FOOD FINES, CORN BRAN, OAT HULLS, RICE HULLS, PEANUT HULLS, DISTILLERS GRAIN FERMENTATION SOLUBLES, and last but not least CELLULOSE (which is wood which is dried and ground up)

**NOTE: These ingredients listed above are all ALLOWED AS ACCEPTABLE INGREDIENTS IN THE AAFCO GUIDELINES!*

WHEAT FLOUR: **Wheat is the leading cause of dog allergies.** Absolutely useless with no nutritional value. This is the fine particles of wheat bran, wheat germ, and the offal from the “tail of the mill.” “Tail of the mill” means the floor sweepings of leftovers in the mill after everything has been processed from the wheat.

Wheat harvest protocol in the United States is to drench the wheat fields with Roundup several days before the combine harvesters work through the fields as withered, dead wheat plants are less taxing on the farm equipment and allows for an earlier, easier and bigger harvest.

Pre-harvest application of the herbicide Roundup or other herbicides containing the deadly active ingredient Glyphosate to wheat and barley as a desiccant was suggested as early as 1980. It has since become routine over the past 15 years and is used as a drying agent 7-10 days before harvest within the conventional farming community.

YEAST CULTURE: Flavoring, source of protein, potentially toxic to the liver.

[PROPYLENE GLYCOL](#) -(additive): Used in antifreeze solutions, in hydraulic fluids, and as a solvent. May be toxic if consumed in large amounts, and should definitely not be an ingredient in a food an animal will eat daily for weeks, months or even years of its life. This is not allowed for use in Europe as the findings have shown it to be dangerous.

TBHQ (TERT-BUTYLHYDROQUINONE): This preservative prevents rancidity. It is sometimes used along with similar preservatives, including BHA, BHT, and propyl gallate, with which it has a synergistic effect. (TBHQ is chemically related to BHA and forms when BHA is metabolized by the body.) One benefit of TBHQ over those other preservatives is that it does not cause discoloration in the presence of iron. In a government study which used a better design than other similar studies, TBHQ increased the incidence of tumors in rats.

BHA (Butylated Hydroxyanisole), BHT (Butylated Hydroxytoluene), and ETHOXYQUIN (Preservatives):

Ethoxyquin is banned from use in human foods, but is used to preserve the fish meal found in many pet food formulas. You won't find it on your pet food label because it is added before the fish meal arrives at the manufacturing facility. When considering dog foods containing fish, look for written manufacturer assurance on the label or website that the fish meal does not contain ethoxyquin.

Ethoxyquin has also been used as a pesticide for fruit. It has never been proven to be safe for the lifespan of a companion animal. It has been linked to thyroid, kidney, reproductive and immune related illnesses as well as cancer.

HYDROCHLORIC ACID:

Used in Kibbles n Bits dog food – Its use is a caustic chemical agent that is used in the production of chlorides, fertilizers, and dyes. Hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract. Simple common sense would indicate not to use this as a pet food ingredient!

***NOTE: MENADIONE SODIUM BISULFITE:**

This synthetic version of vitamin K has not been specifically approved for long term use, such as in pet food. It has been linked to many serious health issues. *(Preserved with BHT, includes processing aids of gelatin, sucrose, modified starch, and uses sodium aluminum as an anti-caking agent)*

The MSDS guide states :

“Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: 3 (Not classifiable for humans) by IARC.

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.

The substance is toxic to kidneys, lungs, liver, and mucous membranes.

Repeated or prolonged exposure to the substance can produce target organs damage.”

a-Tocopherol Acetate: One or more animal studies show tumor formation at high doses.

Beet Pulp: Pure sugar filler -- leads to weight gain, hyperactivity and feeds arthritis.

Beets: Implies whole beet is more nutritious than beet pulp alone but still contains sugar which can lead to weight gain, diabetes, hyperactivity.

Benzoic Acid: Benzoic acid is used as a food preservative. It prevents the growth of mold, yeast, and some bacteria..

Benzoic acid is also used in the manufacture of plasticisers, resin coatings and caprolactam. It is an antiseptic, antifungal, antipyretic agent, and can be used as an alkalimetric standard. Added to alcoholic beverages, baked goods, cheeses, gum, condiments, frozen dairy, relishes, soft sweets, cordials and sugar substitutes. Used in cosmetics, as an antiseptic in many cough medications and an antifungal in ointments; can cause asthma, especially in those dependant on steroid asthma medications. Is also reputed to cause neurological disorders and to react with sulphur bisulphite, shown to provoke hyperactivity in children and can cause asthma in those dependant on steroid asthma medications. Benzoic acid is an acid from benzoin and other resins and from coal tar, used as an antifungal agent in pharmaceutical preparations and as a germicide. The sodium salt of benzoic acid, sodium benzoate, is used as an antifungal agent in pharmaceutical preparations, and may be used as a test for liver function. It was at one time used as a food preservative although now replaced in cat foods because of its toxicity in cats. Other names: benzene carboxylic acid.

Bone Phosphate: According to PetfoodIndustry.com, much of the bone meal sold to U.S. pet food manufacturers is imported, typically from China, Pakistan or Thailand. It may or may not exceed safe maximum limits for lead or other heavy metals. This is a question you'll want to ask the pet food company whose products you purchase.

Broth: Has been identified as sources of hidden MSG known as **excitotoxins**.

Calcium Carbonate: It is commonly used medicinally as a calcium supplement or as an antacid, but excessive (daily) consumption can be hazardous. Also used in paints, plastics, ceramics, putty, polishes, insecticides and inks. Used as fillers in adhesives, matches, pencils, crayons and linoleum. *(Permitted by AAFCO to contain a certain level of heavy metal contaminants)*

Calcium Chloride: Used as a source of calcium but can cause digestive upset, heart issues. Though the FDA deems calcium chloride (CaCl₂) to be "generally recognized as safe", in the UK it is listed as a hazardous irritant which "causes irritation to skin, eyes and respiratory organs" and it carries the warning "Harmful if inhaled or swallowed."

Calcium Hydroxide: aka "slaked lime," which is considered toxic, according to the National Institutes of Health. Food additive.

Calcium Iodate: *(Permitted by AAFCO to contain a certain level of heavy metal contaminants; due to strong oxidizing capacity, is incompatible with copper or phosphorus)*

Calcium Propionate (a preservative): Chemical. Potentially carcinogenic, antifungal.

Calcium Sulfate: Plaster of Paris! Firming agent. *(Not to be given to animals with kidney and liver issues.)*

Canola Oil: Canola oil is not allowed in infant formula in the United States or Canada. Some

studies in humans have associated intake of canola oil with cardiac fatty infiltration. ” In a Japanese study of rats fed a diet containing Canola Oil...“These results indicate that promotion of hypertension-related deterioration in organs is likely to have relevance to the short life span in the canola oil group.”

Carrageenan: A hidden MSG and also known as an excitotoxin. In animal studies, carrageenan has been shown to cause ulcers, colon inflammation, and digestive cancers. While these results seem limited to degraded carrageenan – a class that has been treated with heat and chemicals – a University of Iowa study concluded that even undegraded carrageenan could become degraded in the human digestive system.

Celery: Celery can bring on edema (fluid buildup in body), respiratory problems, and systemic anaphylaxis with vascular collapse in humans.

Cellulose or Powdered Cellulose: is nothing more than 100% filler.

Chlorine Dioxide: Which turns out it's an EPA registered Pesticide, a Bacteriostat, Fungistat, Germistat and All-purpose Deodorizer.

Choline Chloride: Can cause side effects such as gastrointestinal distress, diarrhea, and vomiting. *(Uses corn as a carrier)*

Citric Acid: Chemical preservative, can cause digestive upset, stomach irritation. Damages tooth enamel. Most citric acid is produced from corn, manufacturers do not always take out the protein which can be hydrolyzed and create MSG causing reactions in MSG-sensitive people.

Cobalt Carbonate: Has carcinogen, mutagen and reproductive toxicant (CMR) properties.

Copper Amino Acid Complex (source of chelated copper): Better source of copper improves use, needed for iron absorption, bone formation, protein metabolism, blood clotting.

Copper Sulphate: Used in foods and fertilizers. Signs reported in cats and dogs after ingestion of copper pennies include diminished appetite, depression, vomiting, dehydration and abdominal pain. Some breeds of dogs are particularly sensitive to copper poisoning due to a genetic defect. These include dalmatians, bedlington, west highland white, and skye terriers, in which ingestion of copper results in weakness, anorexia and vomiting. Older dogs may develop liver damage and excess fluid in the peritoneal cavity.

Disodium Inosinate: Disodium inosinate is a food additive. Like MSG (monosodium glutamate), which it often contains, disodium inosinate is often used as a flavor enhancer in packaged food products and in fast food such as hamburgers and tacos. It has several potential side effects.

D-Activated Animal Sterol: Animal sterol is a substance found in fat and skin, and D-activated means the animal sterol was treated with UV radiation to form vitamin D. So basically scientists created a substance in the laboratory that duplicates the end product of what happens when people or animals go outside on a sunny day and their skin synthesizes vitamin D from exposure to sunlight; it's basically a lab made vitamin supplement.

D-Calcium Pantothenate/ D-pantothenic acid: Also known as vitamin B5. Vitamin B5 is commercially available as D-pantothenic acid, as well as dexpanthenol and calcium pantothenate, which are chemicals made in the lab from D-pantothenic acid. This is a Synthetic vitamin. *(Made in China)*

delta-Tocopherol (synthetic): This delta-tocopherol is chemically synthesized and is used as an antioxidant and source of vitamin E in food. Typical products include synthetically vitamin enriched foods, processed meat products.

Dicalcium Phosphate: This is a texturizer in food. It can be toxic to the body, and in some cases life-threatening when taken in excess. It is best to avoid this ingredient. *(Uses corn as a carrier)*

DL-Alpha Tocopherol Acetate: Synthetic vitamin E, also listed as DL-Alpha Tocopheryl Acetate. Only about half as effective as natural vitamin E and not as readily available to the body.

DL-Methionine: For use as an aid in acidifying the urine of dogs and cats. DL-Methionine is also an aid in controlling the odor from feline and canine urine residues. *(Synthetic protein made in China)*

Dried Cellulose: Very harsh on digestive tract, suspected to include cardboard or peanut hulls.

Dried Whey: Can encourage allergies, cheap protein source from cow's milk.

Egg Product: Cheap source of protein, waste product of egg industry, free of shell.

Erythorbic acid: Erythorbic acid, formerly known as isoascorbic acid and D-araboascorbic acid, is a stereoisomer of ascorbic acid. It is a vegetable-derived food additive produced from sucrose. It has no nutritional value. It is used most commonly in processed meats, where it retards nitrosamine formation and color fading. Most likely *sourced from China*.

Ethylenediamine Dihydr iodide: A form of salt/sodium.

Ferrous Sulfate: Ingestion of iron containing products may result in serious toxicity. While lethal doses are not readily available in domestic species, as little as 400 mg (of elemental iron) is potentially fatal in a child. Initial symptoms of acute iron poisoning usually present as an acute onset of gastrointestinal irritation and distress (*vomiting—possibly hemorrhagic, abdominal pain, diarrhea*).

Ferrous Sulfate Monohydrate: Known to cause cancer and cause toxicity in higher doses. Can cause GI upset.

Fish Meal: A source of protein and fatty acids which can add **mercury** to the diet. The primary fish that you need to be careful about are *salmon* and *trout*. *(Do not need to give on a daily basis due to toxicity of mercury in fish)*

Dr Karen Becker's comments on fish meal,

*"Ethoxyquin is still being used in many pet foods currently available on the market. It is used to preserve the fat in **almost all fish meals** – fat that is made from waste products.*

Always remember that if the label doesn't list exact ingredients, including the exact meat source, you have absolutely no idea what's in that food. And because ethoxyquin is added before the raw ingredients are shipped to the pet food manufacturers, it doesn't get listed or disclosed on the product label.

The pet food company you purchase your cat's or dog's food from may not be adding ethoxyquin, but that doesn't mean it isn't in the fish meal in that food.

*Don't make the mistake of assuming if the fish meal product label doesn't list ethoxyquin, it's not in there. Fish meal also happens to be one of the main pet food ingredients also contaminated with *mycotoxins*."*

Folic Acid: *(Permitted by AAFCO to contain a certain level of heavy metal contaminants and sourced from China)*

Glucono-Delta-Lactone: A food additive made from glucose and loaded with GMO's.

Glucose oxidase: Glucose oxidase is found in honey and acts as a natural preservative.

Glycerin or Glycerine: Sweetens food, used as humectant (keeps food moist), interferes with nutrient assimilation.

Glyceryl Monostearate: An emulsifier (breaks down fats), lethal to lab rats, still under investigation by FDA.

Glycine: Non-essential amino acid used as antacid, indicates very poor quality food.

Guar Gum/Arabic Gum: Can cause gastric upset in some.

Hops: An ingredient in beer that can be toxic to your dog. The consumption of hops by your dog can cause panting, an increased heart rate, fever, seizures, and even death.

Hydrochloric Acid: A highly corrosive ingredient used as to convert corn starch to syrup. It is the same ingredient used in leather processing, household cleaning, and building construction.

Iodized Salt: Used to cover rancid meats and fats, get cats to drink more - causes kidney dysfunction, hypertension.

(Permitted by AAFCO to contain a certain level of heavy metal contaminants)

Iron Oxide: Can be cultivated from rust! Synthetic iron oxide may be safely used for the coloring of dog and cat foods in an amount not exceeding 0.25 percent by weight of the finished food. Color additive! Synthetic iron oxide for dog and cat food use shall conform to the following specifications:

Arsenic (as As), not more than 5 parts per million.

Lead (as Pb), not more than 20 parts per million.

Mercury (as Hg), not more than 3 parts per million.

L-Alanine: Non-essential amino acid used as supplement in heavy grain-based foods but causes cancer in lab mice.

L-Ascorbyl-2-Polyphosphate (source of Vitamin C): Cheap, feed-grade source of Vitamin C, used as supplement, non-absorbing.

Lactic Acid: A syrupy, water-soluble liquid, C₃H₆O₃, produced in muscles as a result of anaerobic glucose metabolism, and present in sour milk, molasses, various fruits, and wines.

A **synthetic form** of the compound is used in foods and beverages as a **flavoring and preservative**, in dyeing and textile printing, and in pharmaceuticals.

Lecithin: Derived from soybeans and contains GMOs. Lecithin should not be administered in dogs that are on a certain diet (e.g. a low fat diet). Lecithin is known as a safe dietary supplement and no major side effects have been reported.

However, there may be a few adverse reactions, especially if your dog receives lecithin in higher doses: Vomiting, Diarrhea, Bloating, Lack of appetite, Gas, Skin rashes, if the dog has intolerance to lecithin. Long-term consumption of soy lecithin produced rats that were inactive physically and mentally with poor reflexes. The study concluded that soy lecithin supplementation in early stages of life may lead to behavioral and cerebral abnormalities.

Liver: Non-descriptive source can include any mammal tissue. Liver can become toxic to the body in higher doses. This is one of the cheapest sources of flavoring; but does include some iron and other vitamins, however, it can deplete your pet's Vitamin A levels, which will affect your pet's muscles and bones. Make sure it has the animal of choice in front of it (for ex: chicken liver). The problem with liver in pet foods is it should not be fed daily. Once a week is sufficient and it should not be cooked which in this case, it has been cooked with no benefits left in it.

L-lysine monohydrochloride: Poor source of Lysine (essential amino acid found in meat), cheaper to use for food enrichment for grain-based foods.

Lysine: Indicates heavy soy-based food which dogs can die from unless they have lysine to help digest it, best to avoid this diet unless soy is missing.

Magnesium Chloride: Magnesium Ammonium Chloride processed with hydrochloric acid. It fireproofs wood, carbonizes wool, and is an additive in glue and cement.

Magnesium Stearate: Magnesium Stearate is not a supplemental source of magnesium but rather a form of stearic acid. Also can cause a biofilm to be created in your intestine, which will prevent the absorption of nutrients. Unfortunately, this chalk filler stimulates your gut to form a biofilm – a sort of sludge lining – that acts as an effective barrier to the absorption of not only that particular vitamin but all the nutrients you'd normally get from food sources as well.

Magnesium Oxide: This is an antacid and has been known to cause tumors in lab rats.

Malt Syrup: Most Malt Syrups added for sweetening flavor do elevate blood sugar/triglycerides response. Many rice syrups, rice honey, and other malt sugars have significant amounts of glucose, maltose, and corn syrup ADDED to heighten their sweetness index.

Unfortunately, such formulation creates a blood serum response similar to sucrose and "robs" vital enzymes, minerals, and vitamins from the body for digestive assimilation. Only 100% Barley Malt Syrup has a minimal effect on internal healthy physiology, but its expense may be prohibitive for most.

Maltodextrin: Sweet and tasteless powder it is used as binding agent for some pharmaceutical products, and many chewable supplements. Found In popular sodas and drinks, candy and most sport performance powders and beverages. Maltodextrin is also produced from corn starch. This means it is most likely developed from genetically modified corn which is another issue that affects the gut health.

Triggers health issues with people who suffer from Celiac diseases and allergies to corn, potatoes or wheat. Unexplained weight gain due to the large number of calorie content in maltodextrin causes unexpected weight gain. Causes reactions similar to wheat, corn or potato allergy like hives, itching, rashes, asthma or allergic rhinitis, bloating and flatulence.

Maltodextrin is a dangerous sweetener with a glycemic index two times higher than sugar. The glycemic index is a measurement of how rapidly your blood sugar will spike after consuming certain foods. This means maltodextrin is even worse for you than sugar.

Eating foods containing this ingredient causes your pancreas to produce a large amount of the growth hormone insulin in an attempt to balance out your blood sugar levels. This is a big problem because an overproduction of insulin allows for rapid growth of tumor cells due to hormone imbalances. This in turn can lead to breast, ovarian, and prostate cancer along with obesity, diabetes, high cholesterol, Alzheimers, and stroke.

Manganese Amino Acid Chelate: People with chronic liver disease have trouble getting rid of manganese. Manganese can build up in these people and cause shaking, mental problems such as psychosis, and other side effects. If you have liver disease, be careful not to get too much manganese.

Manganous Oxide Calcium Iodate: Often used in bleaching tallow.

Manganese Proteinate: Contains hydrolyzed vegetable protein. Best source of manganese, necessary to development of strong bones and enzyme activators, enhances immune system.

Manganous Sulfate: Good source of manganese although exposure to it for a long time in high doses can lead to damage of the liver and nervous system.

Modified Starch: Cheap source of carbohydrates, filler, causes digestive upset.

Modified Food Starch: A catch-all term describing starches (derived from corn, wheat, potato, or rice) that are modified to change their response to heat or cold, improve their texture, and create efficient emulsifiers, among other reasons. Found in most highly processed foods, low-calorie and diet foods, cookies, frozen meals.

Monoglyceride: A monoglyceride is a type of glyceride molecule, also known as a lipid or fat. It can come from plant oils or animal fats, and it can also be manufactured synthetically.

MSG (Monosodium glutamate) disguised under the term “yeast extract,” Maltodextrin, and sunflower oil.

Natural Chicken Flavor: A dog food manufacturer can call its food “beef flavored” if the dog, when eating it, can detect that beef flavor. The thing is, this flavor can come from any number of sources: from beef itself, from beef meal or by-products, from other animal products such as chicken, or from “artificial flavors” produced in the laboratory. Whatever tastes like beef, even if it’s really not beef, falls under the Flavor Rule. Natural Flavor is also known as hidden MSG.

Onion Extract or Onion Powder: Onions are **toxic** to dogs and can cause death.

Phosphoric Acid: A clear colorless liquid, H_3PO_4 , used in fertilizers, detergents, food flavoring, and pharmaceuticals. A harmless but unnecessary ingredient, used in inexpensive, poor quality dog food as flavoring, emulsifier and discoloration inhibitor.

Phosphoric acid is banned in organic food and drinks.

Polysorbate 80: Polysorbate 80 is used as an emulsifier in food items and is also a common ingredient in vaccines. According to the Polysorbate 80 Material Safety Data Sheet, it may be carcinogenic as well as mutagenic. When injected into prepubescent rats, polysorbate 80 caused abnormal growth of reproductive organs and made the rats sterile. Polysorbate 80 could also be harmful to people with Crohn's disease.

Potassium Bromate is a chemical added to flour to make bread rise better and give it a uniform consistency. Most of what is added to flour breaks down during the cooking process into bromide, which at this time, is shown little to no health risk, but what hasn't been broken down remains in the baked good and is a known carcinogen. Numerous petitions have been made to the FDA to ban this ingredient and many flour mills have voluntarily stopped adding it to their products. It is banned in most countries except the U.S. and Japan. Potassium bromate causes thyroid and kidney tumors in rats, and it's banned from food use in many countries. In California, products containing potassium bromate are required to carry a cancer warning. Fortunately, negative publicity has made the additive relatively rare, but until the FDA banishes it, you should remain on the lookout.

Potassium Sorbate: Additive consists of pure potassium sorbate and it is intended to be used as a preservative in semi-moist feed for dogs and cats. Higher than normal levels of potassium in the blood leads to hyperkalemia.

Potassium Chloride: Is used to treat dogs and cats with low potassium levels. Side effects: muscular weakness, stomach disturbances, heart rhythm disturbances." The following drugs can potentially interact

with potassium chloride: angiotensin converting enzyme inhibitors, spironolactone, digitalis, non-steroidal anti-inflammatory agents, anticholinergic agents, glucocorticoids, mineralocorticoids, and ACTH. Potassium blood levels should be measured regularly. *(Permitted by AAFCO to contain a certain level of heavy metal contaminants)*

Potassium iodide: Endocrinologic side effects have included both hyper- and hypothyroidism. By inhibiting the release of thyroid hormone from the thyroid gland, iodide can cause goiter and hypothyroidism. Hypersensitivity, GI complaints include an unpleasant, "brassy" taste, throat or retrosternal burning, sore gums, and salivation. Renal side effects have included acute renal failure secondary to tubular necrosis following KI overdose.

Powdered Cellulose: Cheap filler/source of fiber, suspected to include cardboard, causes irritable bowel problems.

Propionic Acid (a preservative): Potentially harmful mold inhibitor.

Propylparaben: Propylparaben is in the paraben family of preservatives used by the food, pharmaceutical, and personal care product industries. Parabens mimic estrogen and can act as potential hormone (endocrine) system disruptors.

Pyridoxine Hydrochloride (source of vitamin B6): Although pyridoxine has generally been considered relatively nontoxic, long-term (eg, 2 mo or longer) admin of large (megadose) dosages (eg, usually 2 g or more daily) of pyridoxine can cause sensory neuropathy or neuronopathy syndromes. Seizures, ataxia, and peripheral neuropathy occur in animals given toxic doses (greater than 1 g/kg). *(Made in China)*

Rosemary Extract: Can cause seizures and neurological problems. (According to the book, "The Complete Holistic Dog Book", Rosemary is considered an excellent stimulant, particularly in regard to the heart, nervous system and brain. Because of this, Rosemary can, in fact cause seizures when used often.)

Salmon/Salmon Oil/Herring: A source of protein and fatty acids which can add mercury to the diet. *(Do not need to give on a daily basis due to toxicity of mercury in fish)*

Smoke flavor: Indicates flavor which can potentially become carcinogenic, retards bacteria on rancid meat.

Sodium Bisulfate: It Might Burn Your Pet's Mouth, Throat, and Stomach - But it's being added to food anyway. Sodium bisulfate is not to be confused with menadione sodium bisulfate, which is synthetic vitamin K3. It should also not be confused with sodium bisulfite, which is a chemical preservative used in fruits and wines.

According to [MedlinePlus](#), in humans, symptoms from swallowing more than a tablespoon of this acid can include burning pain in the mouth, diarrhea, vomiting, and severe low blood pressure.

Sodium Carbonate: Neutralizer for rancid fats, similar to lye.

Sodium Caseinate: Another hidden form of [MSG](#).

Sodium Chloride/Salt: An Ingredient that does not belong in pet foods. Used to cover up rancid meat and fat, can cause kidney and heart disease, hypertension -- used to encourage pets to drink. *(Permitted by AAFCO to contain a certain level of heavy metal contaminants)*

Sodium Diacetate: A free flowing, acidic sodium salt widely used as food flavoring, preservative, and pH buffer.

Sodium Hexametaphosphate: Cheap source of phosphorus can become deadly to dogs- emulsifier, texturizer.

Sodium Nitrite (for color retention): Potentially highly carcinogenic.

Sodium Phosphate: Non-digestible source of phosphorous (vital to maintaining acid/alkalinity pH).

Sodium Selenite: According to [PAN, a database for pesticide chemicals](#), both sodium selenite and sodium selenate are classified as "Highly Toxic," based on oral administration trials using rabbits and rats. And according to the US Environmental Protection Agency (EPA), the highest allowable level of selenium in public drinking water is 50 parts per billion, which is equivalent to 50 micrograms, dry weight. *(Permitted by AAFCO to contain a certain level of heavy metal contaminants)*

Sodium silico aluminate: Sodium, sensitive individuals should limit intake. Additionally, the association of aluminum and Alzheimer's disease remains inconclusive.

Sodium Tripolyphosphate: Used as rancid meat preservative.

Sorbic Acid (a preservative): A mold and yeast inhibitor.

Sunflower Oil: Although sunflower oil sounds like it could be healthy, it's actually on the list of the main oils to avoid. This is due to the heavy refining process that it undergoes to produce more volume. Therefore, sunflower oil is a hydrogenated fat and to be avoided. Although healthy, cold pressed fats can do wonders for the body in the right amounts, hydrogenated fats are truly the opposite. They contribute to obesity, diabetes, high cholesterol, high blood pressure, heart disease, hormonal imbalances, toxic buildup, and cancer.

Taurine: Synthetic protein needed for cats especially. *(sourced from China.)*

Tetra Sodium Pyrophosphate: Is a rust stain remover used in cleaning products (TSP)!!!! Why is it in food? Emulsification of rendered animal fats! Very toxic, causes nausea and diarrhea.

Thiamine Mononitrate: Is a synthetic form of vitamin B1. Not to be given to a pet with kidney or liver disease. It has the potential to illicit mild to severe allergic reactions. *(BI-Made in China)* Can reduce

function in liver and kidneys and cause organ failure.

Trace Minerals (potassium chloride): Source of potassium to balance pH, small intestinal ulcers may occur, indicates lack of well-rounded supplementation.

Tricalcium Phosphate: contains Fluoride.

Vegetable Oil: Non-descriptive source of fat, contains unsaturated fat which is hard on the body, causes premature aging. Excessive consumption of vegetable oil can also contribute to: Asthma, Blindness, Heart disease, Cancer.

Vitamin A Acetate: One or more animal studies show tumor formation at very low doses. Restricted in cosmetics (recommendations or requirements) - use, concentration, or manufacturing restrictions - Use is restricted in Canadian cosmetics.

Xanthan Gum: Xanthan gum is a polysaccharide produced by fermentation of carbohydrates by the gram-negative bacteria *Xanthomonas campestris*. It is used as a thickening and suspending agent in processed foods. Xanthan gum is made using carbohydrates from corn, wheat, dairy, or soy. It's possible pet food companies that add xanthan gum to their products might try to advertise its high fiber content, low glycemic value, or the fact that it's "gluten-free." Remember not to fall for marketing spin! When all's said and done, xanthan gum is just another non-nutritive, carb-based additive in processed pet food.

Yucca Schidigera Extract: Yucca schidigera is a medicinal plant native to Mexico.

Yucca contains saponins. Preliminary study shows these saponins may benefit arthritis and its extract may help fight cancer. Probably, short-term intake of small quantities is safe. However, yucca may cause hemolysis (burst of red blood cells), and overdose of yucca may cause loose stool and bleeding. Their use for more than three months in a row is not recommended as they may interfere with the absorption of fat soluble vitamins. (*Uses processing aids of mineral oil; calcium carbonate, and rice hulls as carrier*)

Zinc Oxide: Zinc is essential but should not be taken in high doses or even moderately elevated doses over a long period of time.

Zinc Sulfate: Processed with sulfuric acid. Used as an acid in calico-printing and to preserve wood.

COLORING

Titanium Dioxide: Potentially carcinogenic artificial color used as white pigment and dough conditioner and it has been shown to cause autoimmune disorders.

CARAMEL COLORING: Caramel coloring is a mix of sugars, ammonia, and, in some cases, sulfite. When heated at high temperatures, this combination turns into 2-methylimidazole (2-MEI) and 4-methylimidazole (4-MEI) – proven cancer inducers.

Blue #1 (Brilliant Blue): In 2003, the U.S. FDA issued a public health advisory to warn health care providers of the potential toxicity of this synthetic dye in enteral feeding solutions. Other names used for Brilliant blue FCF are **FD&C Blue No.1**, Acid Blue 9, D&C Blue No. 4, Alzen Food Blue No. 1, Atracid Blue FG, Erioglaucine, Eriosky blue, Patent Blue AR, Xylene Blue VSG. Irritation, itching, gastrointestinal upset, possible mutagenic and tumor igenic effects, nausea. Toxicity, including death, has been reported only in association with FD&C Blue No. 1 tinting of enteral feedings, intended as a means of visually detecting pulmonary aspiration, although causality has not been established.

Blue 2 (artificial color)

The color additive FD&C Blue No. 2 is principally the disodium salt of 2-(1,3-dihydro-3-oxo-5-sulfo-2H-indol-2-ylidene)- 2,3-dihydro-3-oxo-1H-indole-5-sulfonic acid with smaller amounts of the disodium salt of 2-(1,3-dihydro-3-oxo-7-sulfo-2H-indol-2-ylidene)-2,3-dihydro-3-oxo-1H-indole-5-sulfonic acid and the sodium salt of 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-2,3-dihydro-3-oxo-1H-indole-5-sulfonic acid. Additionally, FD&C Blue No. 2 is obtained by heating indigo (or indigo paste) in the presence of sulfuric acid. The color additive is isolated and subjected to purification procedures. The indigo (or indigo paste) used above is manufactured by the fusion of N-phenylglycine (prepared from aniline and formaldehyde) in a molten mixture of sodamide and sodium and potassium hydroxides under ammonia pressure. The indigo is isolated and subjected to purification procedures prior to sulfonation. The largest study suggested, but did not prove, that this dye caused brain tumors in male mice. The FDA concluded that there is "reasonable certainty of no harm", but personally I'd rather avoid this ingredient and err on the side of caution.

Citrus Red #2

It's toxic to rodents at modest levels and caused tumors of the urinary bladder and possibly other organs.

Red #3 (Erythrosine)(artificial color)

Recognized in 1990 by the FDA as a thyroid carcinogen in animals and is banned in cosmetics and externally applied drugs.

Red 40 (Allura Red)(artificial color)

The color additive FD&C Red No. 40 is principally the disodium salt of 6-hydroxy-5-[(2-methoxy-5-methyl-4-sulfophenyl)azo]-2-naphthalenesulfonic acid.

The most widely used food dye. While this is one of the most-tested food dyes, the key mouse tests were flawed and inconclusive. An FDA review committee acknowledged problems, but said evidence of harm was not "consistent" or "substantial." Like other dyes, Red 40 is used mainly in junk foods. Personally I'd rather avoid this ingredient and err on the side of caution.

Yellow 5 (Tartrazine)(artificial color)

The color additive FD&C Yellow No. 5 is principally the trisodium salt of 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4- [4-sulfophenyl-azo]-1H-pyrazole-3-carboxylic acid (CAS Reg. No. 1934-21- 0). To manufacture the additive, 4-amino-benzenesulfonic acid is diazotized using hydrochloric acid and sodium nitrite. The diazo compound is coupled with 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazole-3-carboxylic acid or with the methyl ester, the ethyl ester, or a salt of this carboxylic acid. The resulting dye is purified and isolated as the sodium salt. The second most widely used coloring can cause mild allergic

reactions, primarily in aspirin-sensitive persons. Yellow 5 causes sometimes-severe hypersensitivity reactions and might trigger hyperactivity and other behavioral effects in children.

Yellow 6 (Sunset Yellow)(artificial color)

The color additive FD&C Yellow No. 6 is principally the disodium salt of 6-hydroxy-5-[(4-sulfophenyl)azo]-2-naphthalenesulfonic acid (CAS Reg. No. 2783-94-0). The trisodium salt of 3-hydroxy-4-[(4-sulfophenyl)azo]-2,7-naphthalenedisulfonic acid may be added in small amounts. The color additive is manufactured by diazotizing 4-aminobenzenesulfonic acid using hydrochloric acid and sodium nitrite or sulfuric acid and sodium nitrite. The diazo compound is coupled with 6-hydroxy-2-naphthalene-sulfonic acid. The dye is isolated as the sodium salt and dried. The trisodium salt of 3-hydroxy-4-[(4-sulfophenyl)azo]-2,7-naphthalenedisulfonic acid which may be blended with the principal color is prepared in the same manner except the diazo benzenesulfonic acid is coupled with 3-hydroxy-2,7-naphthalenedisulfonic acid.

Industry-sponsored animal tests indicated that this dye, the third most widely used, causes tumors of the adrenal gland and kidney. In addition, small amounts of several carcinogens contaminate Yellow 6. However, the FDA reviewed those data and found reasons to conclude that Yellow 6 does not pose a significant cancer risk to humans. Yellow 6 may also cause occasional allergic reactions. Another ingredient I would rather avoid and err on the side of caution rather than risking my pet's health.

Green #3 (Fast Green)

Caused significant increases in bladder and testes tumors in male rats.

(FYI-FDA does not require listing of Red 40, Blue 1, Yellow 5 & 6)

Sweeteners

Cane Molasses

AAFCO: A by-product of the manufacture of sucrose from sugar cane. It must contain not less than 43% total sugars expressed as invert.

Sugar or sweetener is an absolutely unnecessary ingredient in pet foods, added to make the product more attractive. Continuous intake can promote hypoglycemia, obesity, nervousness, cataracts, tooth decay, arthritis and allergies. Pets also get addicted to foods that contain sugars, so it can be a tough piece of work to make them eat something healthier.

Corn Syrup

A syrup prepared from cornstarch, used in industry and in numerous food products as a sweetener. Sugar or sweetener is an absolutely unnecessary ingredient in pet foods, added to make the product more attractive. Continuous intake can promote hypoglycemia, obesity, nervousness, cataracts, tooth decay, arthritis and allergies. Pets also get addicted to foods that contain sugars, so it can be a tough piece of work to make them eat something healthier.

Fructose

A very sweet sugar, C₆H₁₂O₆, occurring in many fruits and honey and used as a preservative for food

and as an intravenous nutrient.

A monosaccharide found naturally in fresh fruit and honey. It is obtained by the inversion of sucrose by means of the enzyme invertase. Used in small quantities it serves as a nutrient for probiotics, specifically bifidobacteria, which ferment it and produce beneficial enzymes.

High Fructose Corn Syrup

HFCS and cane sugar are NOT biochemically identical or processed the same way by the body. High fructose corn syrup is an industrial food product and far from “natural” or a naturally occurring substance. It is extracted from corn stalks. The rapidly absorbed glucose triggers big spikes in insulin—our body’s major fat storage hormone. Both these features of HFCS lead to increased metabolic disturbances that drive increases in appetite, weight gain, diabetes, heart disease, cancer, dementia, and more.

HFCS contains contaminants including mercury that are not regulated or measured by the FDA.

An FDA researcher asked corn producers to ship a barrel of high fructose corn syrup in order to test for contaminants. Her repeated requests were refused until she claimed she represented a newly created soft drink company. She was then promptly shipped a big vat of HFCS that was used as part of the study that showed that HFCS often contains toxic levels of mercury because of chlor-alkali products used in its manufacturing. Poisoned sugar is certainly not “natural”.

Sorbitol

A white, sweetish, crystalline alcohol, C₆H₈(OH)₆, found in various berries and fruits or prepared synthetically and used as a flavoring agent, a sugar substitute for people with diabetes, and a moisturizer in cosmetics and other products.

Sugar

Sugar or sweetener is an absolutely unnecessary ingredient in pet foods, added to make the product more attractive. Continuous intake can promote hyperglycemia, obesity, nervousness, cataracts, tooth decay, arthritis and allergies. Pets also **get addicted** to foods that contain sugars, so it can be a tough piece of work to make them eat something healthier. DI-Alpha Tocopherol Acetate.

Sugar, cane molasses, caramel, corn syrup in any form, sorbitol, sucrose, fructose, glucose, ammoniated glycyrrhizin.

Useless, unnecessary and adds empty calories. Bad ingredients used by companies to make food more palatable to the animal. Used to cover up rotten and rancid foods, and is known to cause hyperglycemia, obesity, nervousness, cataracts, tooth decay, arthritis and allergies.

Unfiltered Water: Unfiltered water contain chemicals, pesticides, fluorides, metals and many other contaminants including bacteria. All water should be filtered and provided fresh daily. The water going into pet foods is of unknown source.

The [Environmental Working Group](#) (EWG) has released a study of 10 brands of manufactured dog foods analyzed for fluoride content. Eight had levels that could put dogs at risk from developing bone cancer, thyroid disease and other health problems.

Even small amounts of fluoride consumed from tap water can damage your bones, teeth, brain, disrupt your thyroid function, lower IQ and/or cause cancer. Fluoride exposure disrupts the synthesis of collagen

and leads to the breakdown of collagen in bone, tendon, muscle, skin, cartilage, lungs, kidney and trachea. Fluoride confuses the immune system and causes it to attack the body's own tissues, and increases the tumor growth rate in cancer prone individuals. Fluoride depresses thyroid activity.

FEATHERS/FEATHER MEAL: Feathers are broken down to amino acids through a process called hydrolyzing. Hydrolyzing means to break down a protein source enzymatically. If enough enzymes are present, any type of protein can be hydrolyzed, allowing its amino acids to be absorbed through the walls of an animal's digestive tract and into the bloodstream. This means the protein is digestible, but not necessarily bioavailable. The bioavailability or biological value (BV) of a nutrient is the measure of its usefulness to the cells of the body.

For example, eggs have a biological value of 100 percent, meaning all the amino acids in an egg are useful to the body. Soy has a BV of around 55 percent, which means 45 percent of the protein in soy winds up as waste product in the blood that the kidneys must filter out.

Feathers have 0 percent bioavailability, so while they can be made digestible through the hydrolyzing process, they cannot be used by your pet's body at the cellular level.

In addition, many amino acids are damaged by heat, and as we know, commercially available pet food – especially kibble – is processed at extremely high temperatures. Since amino acids act synergistically (interdependently) in the body, damage to some amino acids can render other, undamaged amino acids useless.

Read more about it [here](#)....