



What is “animal plasma” and what is the source?

In nature, dogs and cats are meat eating predators, what scientists call carnivores. When wild dogs or cats consume their prey they eat the entire animal, including hair, bones, entrails, BLOOD, stomach contents, etc. The animal blood is as natural a part of a carnivore’s diet as the meat and bone consumed from prey.

No life exists without blood, and the nutrients it provides as part of the diet of carnivorous animals is essential. Nature’s Logic’s animal plasma is a highly palatable food (spray dried blood with red cells removed) composed of high levels of important albumin and globulin proteins. In the wild, carnivores do not eat diets supplemented by chemically synthesized vitamins, minerals and amino acids. The Nature’s Logic animal plasma is an important natural food ingredient which supplies natural sources of iron, sodium, chloride, potassium, calcium, phosphorus, magnesium, numerous vitamins, and over 18 amino acids. These nutrients found naturally in animal blood plasma play a huge role in creating a safer and more natural diet and help decrease the need for adding potentially toxic chemically synthesized supplements coming predominantly from China. Continued research has found that plasma proteins:

- Improve the efficiency of dietary protein utilization
- Possibly reduces pathogen attachment and replication
- Helps to maintain gut barrier function
- Reduces local inflammation of the small intestine
- Reduces mucosal damage in the intestinal tract
- Helps maintain “tight” junctions of the intestine

The source of our plasma is porcine. The product is collected at USDA meat processing plants and is further processed at state of the art facilities in Iowa and Kansas.

References:

Quigley et al. 2004. Effects of spray-dried animal plasma on intake and apparent digestibility in dogs. *J. Anim. Sci.* 82, 1685-1692; Pérez-Bosque et al. 2004. Effects of dietary protein on the immune response...*B. J. Nutr.* 2004; 134: 2667-2672; Garriga et al. 2005 Spray-dried porcine plasma reduces the effects of staphylococcal enterotoxin B on glucose transport. *J. Nutr.* 2005; 135:1653-1658; Pérez-Bosque et al. 2006. Spray-dried animal plasma prevents the effects of Staphylococcus aureus Enterotoxin B on intestinal barrier function...*J. Nutr.* 2006; 136:2838-2843; Rodriguez et al. 2007. Porcine immunoglobulins survival in the intestinal tract of adult dogs and cats fed dry food kibbles containing spray-dried porcine plasma (SDPP) or porcine immunoglobulin concentrate (PIC). *Anim. Feed Sci. Tech.* 139: 201-211; Pérez-Bosque et al. 2008. Dietary plasma proteins modulate the immune response of diffuse gut-associated lymphoid...challenged with Staphylococcus aureus Enterotoxin B. *J. Nutr.* 138: 533-537.

Why do some of your diets mix different proteins; I’m interested in a single protein diet?

There are very few commercial diets that exist, if any, that do not contain proteins from a number of sources. When only one meat or poultry source is listed in a product ingredient panel it should not be concluded that the product contains only one source of protein. When a multiple ingredient diet lists only one meat or poultry product, other protein sources are present from grain and vegetables (or fractions of these products such as soybean meal or glutens), natural flavoring (which is usually a high

protein dried or liquid chicken liver product), any form of plasma protein, any dairy product (such as cheese, whey, or eggs), fish products, and any proteinate or chelated form of a chemically synthesized mineral. The word proteinate refers to a man-made chemically synthesized trace mineral that has been bound to a protein carrier. Example: Copper Proteinate. Most protein carriers for these man-made forms of minerals are from rice, soy or can be an animal or synthetic form. In either case it is just another unknown and undisclosed protein in a pet food.

All of the Nature's Logic's diets, treats, and supplements have one main protein source. Other minor protein sources in the products such as animal plasma and dairy products are safe and natural ingredients which incorporate into each diet, treat, or supplement numerous natural food sources of essential amino acids, vitamins, minerals, and trace nutrients. The alternative, which Nature's Logic opposes, is to include in these products potentially toxic chemically synthesized nutrients.

Note: We have had a number of calls for a diet that contains no chicken protein due to their pets being sensitive to chicken protein of any form. For these customers we recommend our beef kibble formula which contains no ingredients from any source of chicken.

Are the chelated proteinate minerals in the pet food I use more natural and safer than other forms of chemically synthesized minerals?

As mentioned in the answer above, proteinate forms of trace minerals are created by binding a synthetic trace mineral to a protein. Much of the scientific literature states that this process "may" function to increase the bioavailability of the mineral but does not go as far as to state that it does emphatically. The literature further states the trace mineral salts used to make metal proteinates are synthetic substances. It further states the nature and method of production of the protein component of metal proteinates is confidential to the manufacturer and has not been disclosed. It is not possible to determine whether synthetic amino acids are incorporated into metal proteinates. Some literature states that a proteinate form of a synthetic mineral is 15% to 20% synthetic mineral and 80% to 85% protein. As stated above, this protein is not disclosed to the end user. It could be from plant, animal, or a synthetic amino acid.

Some examples of metal proteinates are copper proteinate, zinc proteinate, iron proteinate, calcium proteinate, etc. Other similar forms of synthetic minerals produced by similar means are metal amino acid complex, metal amino acid chelate, metal polysaccharide complex, and metal propionate.

Nature's Logic uses only natural minerals sourced from whole foods or naturally mined sources.

Why is "brewer's yeast" used as an ingredient in Nature's Logic™?

The simple answer is that Brewer's Yeast is one of the best sources of several B Vitamins. It also contains Niacin, Pantothenic Acid, Biotin, Choline Chloride and Folic Acid needed in the diet. It is also a great natural source of minerals such as Calcium, Copper, Iron, Magnesium, Manganese, Phosphorus, Potassium, Selenium and Zinc. The alternative is to use inferior food ingredients and then fortify the diet with chemically synthesized forms of vitamins and minerals. Some of the potential hypervitaminosis effects from over exposure to these synthetic supplements are ataxia, nervous system dysfunction, vomiting, increased PN concentration in blood and organs, anorexia and death. The inactive spray dried Brewers Yeast (Nutritional Yeast) Nature's Logic uses is Certified Kosher and Pareve and Chametz Free by Orthodox Union.

What is "natural flavoring" listed in your food?

The ingredient term "Natural Flavoring" is being removed from all Nature's Logic dry kibble and treat labels because this ingredient is no longer used. When first launched in 2006, Nature's Logic was sourcing this natural, dry liver palatant as part of its dry coating but discovered the

manufacturer/supplier was adding other processing aids to the ingredient which were not consistent with the ingredient quality standards we adhere to.

It was replaced by our own developed 100% natural dried chicken liver and beef liver powders. We blend these natural dried liver powders with our proprietary blend of plasma protein, probiotics and enzymes which make up our very important and nutritious coating for our kibble and treats. These ingredients are now listed separately on our packaging ingredient panels as new bags are printed.

What is “montmorillonite”?

The montmorillonite used in Nature’s Logic’s products is a natural source of mined colloidal trace mineral clay which contains over 50 mineral compounds. The area where this product is mined is a result of volcanic ash being deposited into inland sea waters.

This product is approved for inclusion into USDA Organic Certified products. Reported benefits from including this form of montmorillonite clay into animal feeds have been the binding of aflatoxins, lowered somatic cell counts by dairymen, improved weight gain, better utilization of food, glossier hair coat and improved hoof condition in horses.

A research department at Texas A & M University has conducted preliminary testing of montmorillonite. Initial results were positive for sequestering aflatoxins, but they indicated further study was needed.

Veterinarians are beginning to prescribe this form of clay to help dogs with diarrhea caused by cancer treatments (radiation and chemotherapy). Studies have proven the clay can be an effective alternative to other anti-secretory agents which can cause serious complications ranging from nausea to anemia, including neurological issues. In most cases, dogs had normal stools within 48 hours of being administered the clay.

Nature’s Logic’s products derive all nutrients from 100% food and other natural ingredients without the inclusion of chemically synthesized vitamins, minerals, or trace nutrients.

Why do Nature's Logic™ Canned diets use the AAFCO statement, “intended for intermittent or supplemental feeding only” and not an adequacy statement?

There are two ways to substantiate a dog or cat food that qualify it as a complete and balanced diet for a certain life stage or for all life stages. A manufacturer can substantiate a food by formulating so its dry matter analysis meets or exceeds the minimum AAFCO dog or cat nutrient profile, or the manufacturer can substantiate a food by subjecting the diet to an AAFCO feeding trial. For example, to qualify a diet to meet the AAFCO minimum feeding protocol for proving an adult maintenance claim for dog food, the diet must pass a 26 week test with guidelines of certain feeding parameters and certain clinical observations and measurements.

The following is the nutritional adequacy statement used for diets formulated to meet the AAFCO nutrient profile: “(Name of product) is formulated to meet the nutritional levels established by the AAFCO Dog (or Cat) Food Nutrient Profiles for _____.” (Blank is to be completed by using the stage or stages of the pet’s life, such as gestation/lactation, growth, maintenance, or the words “All Life Stages”).

There are 36 minimum nutritional levels in the AAFCO nutrient profile for dogs and 42 nutritional levels in the AAFCO nutrient profile for cats of amino acids, fats, vitamins and minerals to meet in order

for a manufacturer to state that a diet is complete and balanced and is formulated to meet the nutritional levels established by AAFCO.

The following is the nutritional adequacy statement used for diets passing an AAFCO feeding trial: "Animal feeding tests using AAFCO procedures substantiate that (Name of Product) provides complete and balanced nutrition for _____." (Blank is to be completed by using the stage or stages of the pet's life, such as gestation/lactation, growth, maintenance, or the words "All Life Stages".

Pet Food companies that formulate to meet the AAFCO Nutrient Profile use 20 to 30 different chemically synthesized vitamins, minerals and sometimes amino acids. Following is a typical example ingredient food panel of a natural grain free canned pet food taken from the manufacturer's web site on the internet.

Ingredients: Chicken, Turkey, Chicken Broth, Chicken Liver, Flaxseed, **Tricalcium Phosphate**, Eggs, Peas, Carrots, Lecithin, **Choline Chloride**, **L-Ascorbyl-2-Polyphosphate**, **Vitamin E Supplement**, **Niacin Supplement**, **Vitamin B12 Supplement**, **Vitamin A Supplement**, **Thiamine Mononitrate**, **Biotin**, **Riboflavin Supplement**, **d-Calcium Pantothenate**, **Pyridoxine Hydrochloride**, **Vitamin D3 Supplement**, **Folic Acid**, Dried Kelp, Salt, **Calcium Carbonate**, **Taurine**, **Potassium Chloride**, **Zinc Proteinate**, **Iron Proteinate**, **Manganese Proteinate**, **Copper Proteinate**, **Sodium Selenite**, **Ethylenediamine Dihydriodide**, Artichokes, Cranberries, Pumpkin, Tomato, Blueberries, Broccoli, Cabbage, Kale, Parsley (Note: This particular natural diet has 43 total ingredients; about 19 recognizable food ingredients and about 24 chemically synthesized vitamins, minerals, and amino acids.)

Here are a few quotes from the 2006 AAFCO Official Publication and also from some publications by The National Research Council (NRC). The NRC publications and studies are some of the research used by AAFCO to determine nutrient requirements for pet food. These statements about the use of synthetic vitamins and minerals should be of concern to all pet owners. AAFCO and NRC have done a good job in showing both concern and exposing this information. It is all available to the public; not just industry.

"Knowledge of nutrient requirements and toxicities (of synthetic mineral supplements) is incomplete and/or imprecise in many cases." (AAFCO 2006)

"The Committee considered the matter of contaminants in mineral feed ingredients for several years before adopting an approach to the problem as reported in the 1978 Official (AAFCO) Publication." (Official Guidelines for Contaminant Levels Permitted in Mineral Feed Supplements, AAFCO 2006)

"The current scientific literature, however, is not complete enough to support the estimation of maximum tolerable levels for any (synthetic) vitamin. In most cases, however, one can use the literature to estimate ranges of vitamin intake that can be presumed to be safe." (NRC Vitamin Tolerance of Animals)

"The available information for most of the (synthetic mineral) elements is less than desired, and it is likely that these tolerance levels will need to be modified. Problems that may arise when two or more elements are present at high levels represent a virtually unexplored area." (NRC Mineral Tolerance of Domestic Animals)

In the past few years there have been FDA recalls of zinc oxide due to high levels of dioxin, a common chemically synthesized form of zinc supplement commonly used in pet foods. There have been recalls of pet foods that caused illness and death in pets from excessive amounts of chemically synthesized vitamin D. There have been pet food recalls of diets with suspected elevated levels of iron and copper that caused illness and death in pets.

Nature's Logic launched its products in late March 2006 and chose not to use any added chemically synthesized vitamins or minerals that have been either suspected or proven to be the cause of illness and death in pets and resulted in many past recalls of diets. Nature's Logic chose to design foods, treats, and supplements made of 100% whole foods from which all nutrients are safely derived without the addition of potentially toxic synthetic forms. Nature's Logic also chose this protocol for producing its products because it is well known in the industry that most man-made vitamins and amino acids are sourced from China. Following is a typical example ingredient food panel of a Nature's Logic canned food using 100% whole foods and natural ingredients and no added chemically synthesized vitamins, minerals, or amino acids

INGREDIENTS: Chicken, Chicken Broth, Chicken Liver, Chicken Heart, Egg Product, Animal Plasma, Flaxseeds, Montmorillonite, Cottage Cheese, Brewers Yeast, Cod Liver Oil, Egg Shell, Apple, Suncured Alfalfa Meal, Tomato Powder, Parsley, Blueberry, Cranberry, Apricots, Spinach, Artichoke, Broccoli, Carrots, Pumpkin, Kelp, Chicory Root, Rosemary.

All 42 required nutrients in the AAFCO Nutrient Profiles for dogs and cats are naturally present in all Nature's Logic products. For most nutrients there are 2 times, 3 times, or 4 times or more the required minimum amount of these nutrients in our finished products from the whole food ingredients. But because Nature's Logic has a fraction less of one or two nutrients than the AAFCO Nutrient Profile, the intermittent statement had to be used until the Nature's Logic Diets are substantiated by an AAFCO Feeding Trial. Having less of a nutrient does not mean a pet is not getting enough of that nutrient. In fact, it is scientifically known that synthetic forms are not as bio-available as natural forms of nutrients found in whole foods. So a smaller amount of a real nutrient from food may actually provide more of that nutrient than a larger amount of the same nutrient in synthetic form. A successful feeding trial for our dry food has been completed. The same testing will be done for the canned products and the labels will be changed to incorporate the adequacy statement as those tests are completed in the near future.

Nature's Logic is committed to providing what it believes is the best and safest nutrition for our pets, even though it meant launching a product temporarily with the "intermittent" statement until the feeding trials were complete. The feeding trial proved our commitment was right. In the feeding trial, the Nature's Logic canine and feline dry diets exceeded all the established kennel averages in all areas of the test including blood analysis.

Why do other companies use chemically synthesized vitamins, minerals, and trace nutrients if they pose a potential toxic risk?

When a pet food manufacturer adds chemically synthesized vitamins and minerals to its formulas, it is an admission that the food ingredients alone are inadequate to supply the nutritional needs of a dog or cat. The National Research Council states that chemically synthesized mineral and vitamin supplements are provided frequently to correct the deficiencies in the ingredients used in animal diets.

As far as toxicity, one has to use at one's own risk or at the risk of their pet, products that are supplemented with synthetics. The experts admit they may or may not have determined what the upper safety levels of these elements are. They also admit that it may represent a virtually unexplored area when two or more synthetic mineral elements are present at high levels. There happens to be up to twelve of these synthetic mineral elements added to pet food, not just two.

As a caution, it is recommended that if you choose to use daily diets that include chemically synthesized vitamins and minerals, to avoid over exposure, feed treats and supplements that are made from 100% food and list no added vitamins and minerals in the ingredient panel. The Nature's Logic treats and supplements are made from 100% food with no added synthetic nutrients. All nutrients come from whole foods only.

Nature is no cheat in the way it supplies wild dogs and cats an adequate diet without the use of chemically synthesized minerals and vitamins. Nature's Logic accomplishes the same with its products. They are a reflection of a carnivore's natural prey diet made up of meat, organ meat, blood products and micronutrients from concentrates of fruits and vegetables. All these products together compose a diet rich and adequate in amino acids, fats, vitamins, minerals, enzymes, and beneficial bacteria.

I have always been told that cats need taurine in their diets, so why don't I see taurine on your cat food packaging ingredient panels?

Yes, cats require the amino acid taurine in their diets and AAFCO has established a minimum of .10% in dry food and a minimum of .20% in canned food in their Nutritional Profile for cats.

When taurine is listed as an ingredient in a product's ingredient panel, this means the base diet contains inadequate levels of natural taurine and the producer has added a man-made synthetic form of this required amino acid to the diet mixture to meet adequacy. No taurine is listed in any Nature's Logic ingredient panel because the natural ingredients of the diet contain adequate amounts of natural taurine from the high levels of meat, poultry, and organ tissue ingredients. This is the way cats should derive all their needed protein, including taurine. In an independent analysis of Nature's Logic dry food, it contained 60% more taurine than the AAFCO required minimum. During our cat feeding trial, the blood work showed the taurine levels were well above the AAFCO required minimums.

It should also be of interest to all concerned pet owners that it has been publicized that almost all man-made synthetic taurine added to pet foods is manufactured and imported from China.

I have just started using your Nature's Logic dry cat food on my 3 cats. I have always used a high end natural food, but I wanted to start using Nature's Logic because my neighbor's cats have really blossomed on your food. Two of my cats had no problems adjusting and love it, but the third cat is having digestive upset. Can you help me?

Many pet owners think that if they are switching from another high end diet to Nature's Logic, there really doesn't need to be a transition time because the diets are similar and are both high end and natural. Nature's Logic is very different from all other commercial diets and a very slow transition is highly recommended. Nature's Logic is different because it is much higher in meat or poultry content than most other diets, has higher probiotic and enzyme activity than other diets, and the most notable difference is its utilization of a superfood concentrate of dried fruits and vegetables to derive many of the vitamins, minerals, and trace nutrients rather than using added chemically synthesized vitamins and minerals for adequacy. By using this superfood concentrate of fruits and vegetables and high animal ingredient inclusion, this also allows Nature's Logic to produce diets that are free from many ingredients known to be produced and imported from China such as synthetic taurine and most of the man-made vitamins added to commercial pet foods.

Nature's Logic has prepared a cat food transitional protocol for your assistance. This will help guide you and your cat through a slow transition onto the food for success and health.

I have heard from veterinarians and breeders that I should not feed a high protein diet to my large breed puppy because it may cause it to grow too quickly and possibly cause skeletal growth problems. How does your company address this issue since all of your diets would be considered high protein?

Nature's Logic believes its products will not, and could not, cause any puppy (large breed or small) to grow too fast and develop skeletal growth issues.

This is not to say other brands of high protein diets are not contributing to skeletal growth issues in large breed puppies but for reasons that do not exist in the Nature's Logic diets.

Unlike Nature's Logic, all other commercial dry diets contain as many as 26 chemical forms of synthetic vitamins, minerals and amino-acids. Many of these chemical forms of nutrients are known to cause toxic to lethal effects if taken in high doses or for extended periods of time.

Vitamin A: It is known that continued high, synthetic doses can cause cervical spondylosis which is a degenerative joint disease affecting the cervical vertebrae, intervertebral disks and surrounding ligaments and connective tissue. This disease can also put pressure on the nerve root resulting in pain or a prickling sensation radiating down the arms. Synthetic Vitamin A can also cause proliferative gingivitis, incisor exfoliation, thin mandibles, bone changes, and depleted cartilage matrix.

Vitamin D: Excessive amounts have resulted in calcinosis (an abnormal deposit of calcium salts in body tissue).

Vitamin B6: Excessive amounts have resulted in degeneration of posterior columns of the spine.

Phosphorus: The over supplementation of man-made forms of phosphorus have resulted in stiff joints, bone loss, bone porosity, and deposition of calcium in tendons and organs.

The above results came from tests reported and studied by The National Academy of Science. These tests, conducted on numerous kinds of animals including dogs and cats, resulted in negative effects on animals occurring in as little as a few days to after a year or more of research. After looking at this data, it is Nature's Logic's belief that the likely cause of large breed developmental problems are from both average and high protein diets containing a toxic brew of 20 to 26 chemical forms of synthetic supplemental nutrients similar to those mentioned in the test results above. Thus, one could infer that a whole food, high protein diet like Nature's Logic would not cause developmental problems.

It is Nature's Logic's position that a properly formulated whole food diet using high animal protein content will never cause negative effects such as large breed puppy growth issues. Many diets have the following disclaimer, "natural with added vitamins and minerals." This disclaimer means that the food is natural, but it contains unnatural (synthetic) supplements and the manufacturer does not want the liability of the potential risk involved in their use. In other words, use this product at your own risk.

References:

Vitamin Tolerance of Animals, National Research Council; National Academy Press

Mineral Tolerance of Domestic Animals, National Research Council; National Academy Press