

Enzymes and Your Pet's Health

by T.R. Robeck, DVM, PhD

White Fang's ancestor, the wolf pack leader, moved silently through the coniferous forest of the Pacific Northwest, stalking his prey in a routine that had been repeated throughout his life. His sense of smell allowed him to pursue his adversary long before he was able to see her. He instinctively knew that as he pushed his way through the underbrush, his pack mates would circle their intended quarry and charge as one. The fact that he had not eaten in two nights combined with the fear he felt radiating from the doe and her fawn caused an overwhelming rush of anticipation and desire. Unable to restrain his primitive needs any longer, he charged.....!

This was a typical day for a distant relative of our friendly lovable companion animals. They like our ancestors had to rely on finding food the old fashion way, hunting - then eating their prize raw!

The 90's have born a number of buzz words, and convenience is probably the most overused. One of the prices that we pay as a society for this convenience is a serious decline in our overall health. This threat to our health is generally in the form of fast food. Fast or processed food is all the rage for both humans and pets. Although years of nutritional research has gone into the development of dog and cat food, one of the most important facts about your pet's normal physiology was forgotten. Dogs and cats, like all animals, were designed to eat their food raw! This fact has not been forgotten by the zoological community, where it has been known for years that diets entirely or partially raw are essential to long term health of their animals.

What effect does eating processed food have on overall health?

First, the process (pulverization, sanitation, pasteurization, preservation, heating, drying or canning) in creating this food destroys all of the living potential (enzymes) of that food. Raw food is full of living enzymes that allow the being from which it was derived to live and breath -- over 3000 enzymes have been identified in the human body alone. If these enzymes are not destroyed by modern food processing they can be utilized by the consuming animal to aid in digestion. In other words, the enzymes that were essential to the deer's life, upon death, become essential to the health of the wolf. I call this "enzyme recycling". How important is "enzyme recycling"? A simple illustration is that calves are designed to grow and thrive on cows milk, right? What do you think happens to calves fed pasteurized milk (the same milk we rely on for health)? They fail to thrive and nine out of ten will usually die! "How can this be?" you may ask. Pasteurization destroys all of the enzymes in the cow's milk --- therefore, "enzyme recycling" cannot occur and the health of the animal is in jeopardy. Another classic example of how processed food dramatically affects the health of animals is a study performed by Francis Potter, MD. Potter carried out a ten year study with 900 cats to determine the affects of various controlled diets. The cats on raw food produced healthy kittens generation after generation, and lived long and generally disease free life. The cats on cooked food developed ailments common to modern man: including heart, kidney, liver and thyroid disease, pneumonia, paralysis, loss of teeth, difficulty in labor, diarrhea and irritability. The first generation of kittens were sick and abnormal; the second were often born dead and by the third, the mother was sterile.

How does the lack of enzymes in food jeopardize your animal's health?

Very simply, processing of food places all of the burden of digestion upon your pet. Digestion is the most energy draining process your body undertakes each day. During digestion little energy is left for physical activity (eat a large pizza, then try and go jogging), and protection against or fighting off

illnesses (Does anybody feel like eating when they have a fever?). Processing food also makes food partially indigestible or poorly digestible. Thus, more food must be consumed, to provide the micro and macronutrients essential to your pet's health. Further, long-term exposure to undigested or maldigested food can cause gastrointestinal tract inflammation and disease. Chronic absorption of maldigested macromolecules into the blood stream can result in inflammatory reactions which manifest themselves in a number of allergic and autoimmune diseases. These diseases may include: food allergies, atopic dermatitis, chronic renal disease, organ calculus or stone formation, inflammatory bowel disease, arthritis and joint diseases, chronic recurring hepatitis and pancreatitis and many other inflammatory diseases. Chronic immune stimulation has also been linked with neoplastic disease of the bowel, pancreas, lymphocytes and other organs. Finally, if the body spends an abnormal amount of energy on digesting food and cleaning up the effects of maldigestion, the body's immune system can become overburdened and susceptible to attack by infectious agents including bacteria, fungi and viruses. Older animals can be especially prone to maldigestion because of the lifelong depletion or drainage of enzymes from their bodies. This constant stress on the enzyme manufacturing systems results in a decreased ability to produce functional enzymes. Thus their organs must produce even more enzymes to compensate both for the indigestibility of the food and the ineffectiveness of their enzymes. Therefore, it is extremely urgent that enzymes be replaced in older animals.

What can be done to aid your companion animal's fight against the diseases associated with eating processed food?

Move to the country, and let your dog do his thing (if he still remembers how) or a more practical solution would be to supplement your dog's or cat's diet with digestive enzymes (powder form or capsules).

How do digestive enzymes work?

Plant based digestive enzymes, usually in powder form, can be easily administered to your dog or cat in their meal. Once inside the stomach, supplemental enzymes can begin to break down food before it reaches the small intestine -- where most of the digestion normally occurs. Thus, these enzymes replace or enhance the enzymes that would normally be found in raw food. The addition of these enzyme means your dog or cat is able to thoroughly utilize all of the nutrients and energy in the food provided, and avoid having maldigested food particles contributing to the disease processes mentioned above.

You may ask yourself, "Do supplemental enzymes really work?"

Absolutely! Enzymes have been used with human and animal diets for more than 60 years. However, recent advances in the science of enzymology have allowed the development of plant based enzyme products with performance superior to any other type of enzymes available today. These superior plant based enzymes are active in a wide range of pH (acidity) environments, thus they can work immediately upon consumption and can continue to digest after the food has passed into the duodenum. Also, the enzymes are strong enough, that by using therapeutic doses your veterinarian can treat various disease processes. Veterinary dermatologists have been using these enzymes to treat various skin allergies, skin infections (demodicosis, scabies, seborrhea, etc.) and digestive disorders. Enzymes not only help cleanup dermatologic problems, but for relatively healthy animals they will result in an overall increase in the coat quality and appearance (show dogs and cats). Enzymes can be used to accelerate healing after strenuous exercise (working dogs), injuries, and surgery. In humans, enzymes have been used with success in treating various autoimmune disorders, e.g., multiple

sclerosis, rheumatoid arthritis (similar to systemic lupus erythematosus (SLE), and other immune-mediated arthritides in dogs), and viral, bacterial and fungal infections and neoplasia.

Should I place all of my animals on enzymes?

Without question. Enzymes are safe, with no toxic side effects. Plant enzymes are considered a food supplement and should be a part of every animal's diet. Overwhelming evidence exists which suggests that the addition of plant based enzymes to your dogs and cats diet will remove the stress placed upon their bodies from eating processed food and promote an increased resistance to disease. This increase in over health will result in a long and happy life.

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