



# Understanding Enzymes

## WHAT ARE ENZYMES?

Enzymes are a delicate life-like substance found in all living cells whether animal or vegetable. Enzymes are energized protein molecules necessary for life. They catalyze and regulate nearly all biochemical reactions that occur within the body. In other words, enzymes turn the food we eat into energy and unlock this energy for use in the body.

PLANT ENZYMES are grown from food such as soybean and wheat in a laboratory setting with specific actions rendered in units. They are nonpathogenic *Aspergillus* species and are free of mycelium contamination. Removal of all the aspergilli and fungi leave only the enzymatic action. *Aspergillus* enzymes have a strong record of safe use in the food industry. They are considered food by the FDA. The plant enzymes available from our supplier are of the highest quality.

## WHY ARE ENZYMES IMPORTANT IN OUR PET DIET? *By Michelle Bacarella, MS RD*

We have all heard the phrase, "You are what you eat." Though this is certainly partially true, Dr. Brad Rachman's quote "We are what we assimilate" is a more realistic description. Assimilation is defined as the body's ability to utilize the nutrients from food. Although a healthy diet is extremely important, if the body is unable to fully digest and utilize our foods, the nutrients are wasted. Enzymes, the catalysts that aid the body in nutrient digestion and assimilation, are the necessary components for optimal digestion. Our dogs' and cats' digestive process is very similar to our own. Enzymes and the lack thereof can greatly affect our pets' nutritional status.

Although our pets' bodies are designed to produce the enzymes necessary for digestive function, aging and poor diet choices greatly reduce our pets' capacity to assimilate their foods. Unfortunately, most commercial pet food has been found to contain artificial preservatives, fillers with little or no nutritional value, poorly absorbed chemically derived vitamins, and animal "by-products" of unknown origin. In addition, the process used to manufacture pet food destroys the natural enzymes found in the raw ingredients that are a necessary for digestion.

How do we address this problem? First, raw meats, fruits, and vegetables are a rich source of enzymes. Unfortunately, along with decreasing their nutrient content, heating and processing foods destroys their naturally occurring enzymes. Although it may be unreasonable or impractical to suggest that pets eat only raw foods, it is practical to recommend that raw fruits and vegetables be included with some meals.

The addition of plant enzymes to our pets' meals would be a natural and effective way to ensure optimal digestive function. Many studies have shown that plant enzymes work synergistically with the body's own enzyme supply, effectively supporting the digestive process. Plant enzymes are also free of the limitations associated with animal enzyme products. Plant enzymes have been found to help far more than digestion. Plant enzymes have been successfully utilized to treat food allergies, celiac disease, pancreatic disorders, inflammation, constipation, diarrhea, leaky gut, bacterial overgrowth, liver dysfunction, and many other conditions.