

# Digestion in our Pets

## Digestion & Enzymes

Does your pet show signs of less-than-optimal digestive health, such as occasional abdominal discomfort and gas, occasional bad breath, fussy eaters or vomiting?

Or do they eat grass frequently?

How about less-than-optimal joint health?

Minor food sensitivities?

Lack energy and overall less-than-ideal health?

You probably wouldn't suspect these issues to be connected with poor digestion, would you?

Many holistic veterinarians have discovered a solution that may help with all of these complaints and much more.

In fact, this may be one of your greatest allies in helping to maintain your pet's total health.

What is this solution?

## Enzymes

Enzymes may drastically improve your pet's digestion and absorption of nutrients, and as I suspect you'll soon discover, contribute considerably to your pet's well-being.

## The "Magic" of Enzymes

One of the vital forces and energy of life, enzymes are tiny protein molecules found in every living cell.

They're responsible for countless activities and functions involving energy production, metabolism, detoxification, and so much more.

Just to convey how powerful these molecules are...

As you read this one sentence, millions of biological reactions requiring the actions of enzymes are occurring in your pet's body.

Here are some of the many benefits of enzymes:

- Supports the immune system
- Aids the absorption of vitamins and minerals from food
- Promotes normal body weight without hunger cravings
  - Promotes respiratory health
- Helps reduce minor food sensitivities

- Helps promote normal cell growth
- Supports healthy teeth and gums
- Helps maintain healthy cholesterol levels.
- Reduces occasional bloating, gas, heartburn, and constipation
- Lessens skin irritation and excessive shedding
- Provides more energy due to better utilization of nutrients
  - Helps remove toxins from the body
  - Promotes comfortable movement of joints

The two main types of enzymes most important to your pet's well-being are metabolic and digestive enzymes.

Metabolic enzymes function throughout your pet's body to help carry out the critical bodily functions of building and maintaining every cell, tissue, and organ.

Digestive enzymes work in the stomach and intestines to break down the food your pet eats.

The four basic digestive enzymes are:

- Protease – helps break down and digest protein
- Amylase – helps break down and digest carbohydrates and starches
  - Lipase – helps break down and digest fat
  - Cellulase – helps break down fibre

Your pet's body depends on enzymes in their digestive track to unlock vitamins, minerals, and other important nutrients from the food so they can be absorbed.

#### What Happens When You're Pet Lacks Sufficient

First, the body robs critical metabolic enzymes from other important tasks, such as immune function, as digestion of food reigns as a high-priority, survival activity.

Second, a lack of digestive enzymes may result in incomplete digestion, allowing partially digested food particles to enter the bloodstream directly from the large intestine.

Less-than-optimal health may be at least partially due to your pet's body's response to undigested food particles circulating in the bloodstream.

Your pet relies at least partially on their diet for the enzymes they need to digest their food.

Where does your pet get the enzymes they need for digestion and other metabolic functions?

From two sources:

- diet
- and their body's

Just about every raw, fresh food – whether it is plant or animal source – contains enzymes.

However, enzymes are fragile beings. Heat, pesticides, herbicides, food preservatives, additives,

artificial colourings, and flavour enhancers easily destroy them.

In your pet's body, air pollutants, smoke, excessive UV rays from sunshine, and medications can deplete enzymes.

Free radicals produced during periods of increased activity and even normal cell activity also diminish your pet's enzymes.

If your pet consumes mostly processed or cooked food, they receive little or no enzymes from their food, and must rely on their body to manufacture many or all of the enzymes they need.

Your pet's pancreas produces protease, amylase, and lipase, but likely not enough to completely digest their food.

Wild dogs and cats provide valuable clues to your pet's digestive needs.

To better understand the role enzymes play in your pet's digestion, let's take a look at what happens when your pet's ancestor – whether it be a wild dog on the prairie or a wild cat in the desert – eats a meal.

When they slaughter their prey, they receive small amounts of grasses, fruits and vegetables, from consuming some of their prey's digestive tract.

However, by the time they consume them, these foods are already partially digested, mixed with the prey's rich secretions of pancreatic enzymes.

Predigestion of any vegetable matter found in the prey's GI tract is an important part of carnivores being able to assimilate the vitamins and antioxidants found in these foods, unlocking their nutritional benefits and allowing them to be passed up the food chain.

The fresh raw muscle meat from his prey also contains the natural, live enzymes needed for digestion.

Further, when any wild animal hunts prey in the wild, they devour organs rich with enzymes, such as the prey's pancreas, which provide supplemental, live digestive enzymes.

Because they receive sufficient enzymes from their prey for digestion, their own metabolic and digestive processes are not taxed. Their bodies are able to readily supply ample amounts of metabolic enzymes to carry out other important bodily functions.

Your pet's nutritional needs remain much the same as their ancestors...

For many reasons, most pet owners don't consider their pet's ancestral diet when deciding what to feed their pet.

However, you may be surprised to learn that, even after thousands of years of selective breeding, not much has changed with your pet's digestive system.

Dogs and cats are still carnivores with bodies designed to eat fresh, raw meat and bones. And, thirty years of studies confirm that the natural diet of both cats and dogs doesn't contain grains or seeds, unless they are pre-digested by small prey animals.

Just take a glimpse at your pet's teeth – the first step of her digestive process. You'll find they clearly lack suitable tooth surfaces to grind grains so common in today's pet diets.

However, it's not just their teeth keeping them from naturally eating grains...

Their body isn't designed to digest them.

Meat-eating animals, such as cats and dogs, naturally produce more protease to handle their high protein requirements.

They don't naturally produce much amylase because their ancestral diet doesn't consist of grains nor does their body have a nutritional need for grains and starches.

Adding to a lack of appropriate enzymes, dogs and cats' digestive tracts are shorter than humans' are and simply not designed to digest starchy foods effectively.

Here's the real issue... Consuming these foods on a regular basis can result in less-than-optimal metabolic function.

If you feed your pet a commercial dry or canned diet, most likely they are enzyme-deficient. As we've already seen, for a food to maintain its natural enzymes, it must be uncooked and unpasteurized, non-irradiated, and untreated with any source of heat.

To be frank, today's commercial pet foods lack healthy natural enzymes. In essence, the food is dead, over-processed and in-organic.

Production of both canned food and dried kibble require very high temperatures, which destroy any live enzymes present in the food.

If the manufacturer adds enzymes, they often break down when exposed to air, light, and the processing needed for the food's long shelf life.

Additionally, pet food processing can cause food nutrients to become chemically trapped, which can cause them to pass through your pet's digestive system unutilized. Enzymes are needed to help unlock these food nutrients and aid in digestion.

Young and old alike, both dogs and cats may benefit from supplemental enzymes. Unlike humans, dogs and cats in the wild do not produce enzymes in their saliva.

However, studies reveal an interesting phenomenon when researchers switch dogs' diets from enzyme-rich raw food to a high carbohydrate, heat-processed diet. They begin to produce the enzyme amylase in their saliva within a week.

Commercial pet food proponents highlight this as a good thing. But is it really?

First, it's not a natural occurrence for the species.

Second, producing these extra enzymes may be robbing animals of precious enzymes for metabolic functions elsewhere in their bodies.

When fed grains, the pancreas must produce large amounts of amylase to deal with the starch, cellulose, and carbohydrates, which is something it's not designed to do.

What's more, a carnivore's pancreas does not secrete cellulase to split cellulose into glucose molecules. Dogs simply have not become efficient at digesting and utilizing grains or plant material as a source of high quality protein.

Here's the problem with this ramped up need for extra enzymes: As your pet ages, production of enzymes declines. And this can lead to unwanted consequences for your pet.

Many holistic veterinarians recognize that a lack of enzymes – both digestive and systemic – may be a major factor in less-than-optimal health.

Think about it. If your pet's cells, tissues, and organs can't function without enzymes, then might a shortage have a negative effect on his body and speed up the aging process?

If you feed your pet a commercial dry or canned diet, most likely they are enzyme-deficient.  
Using Naturally Occurring Enzymes to Boost.

The first step in providing your pet with the enzymes they need for both digestion and metabolic functioning is to provide the foods appropriate for their species.

I recommend switching your pet over to a diet containing as much living, raw ingredients as possible.

Raw meat is an ideal food for your cat or dog, but I understand that some pet owners are hesitant to take that step. The next best thing you can do for your pet is to feed slightly cooked or pureed raw, enzyme-rich vegetables.

How you feed the raw foods is very important. And the variety of foods you include determine whether or not you're providing your pet with a well-balanced and healthy diet.

Raw food (meat) certainly supplies more digestive enzymes than processed (canned or kibbled) pet food, but don't be fooled, many animals consuming raw foods still benefit from enzymes.

All raw food diets attempt to mimic, as closely as possible, what our carnivorous companions would be eating in the wild.

Cats catch and kill mice, dogs eat rabbits and other small prey.

However, there are three parts of the whole prey model no manufacturer will add to their commercially available raw foods: fur (fibre), guts and glands.

Why? Frankly, it's gross. And there are risks.

Entrails – the stomach and intestines – are where parasites are found. To keep raw food diets parasite free manufacturers wisely elect to not include entrails.

Pancreas and other small glands are also not included because ensuring a steady source of supply is difficult.

This means even animals eating a raw food diet can lack these beneficial substances.

Whether you feed your pet a healthy homemade or frozen species-specific diet, a canned or a dried kibble diet, they will benefit greatly from supplemental enzymes.

Supplementing with enzymes helps ensure they can completely digest their food without dipping into that fragile bank of metabolic enzymes.

Using enzymes for total body systemic use is not new. Many holistic veterinarians have been employing this secret for years.

**For more on this, please contact us.**