

Why so Many Dogs and Cats Have Digestive Issues

Bad breath, foul-smelling poop, bloating, gas, diarrhea and vomiting, as well as food sensitivities, lack of energy and joint issues can all be signs of this common problem. The good news is, there's an easy, fast-acting fix if you know what to look for.

Analysis by [Dr. Karen Shaw Becker](#)

STORY AT-A-GLANCE

- Enzymes are tiny protein molecules found in every living cell; the two main types of enzymes most important to your pet's well-being are metabolic and digestive enzymes produced by their own bodies. There are also enzymes found in live, fresh foods
- Raw, fresh food contains enzymes; however, enzymes are fragile and easily destroyed by heat; pesticides and herbicides; food preservatives, additives, artificial colorings, and flavor enhancers; and other influences
- Ultraprocessed pet foods lack healthy natural enzymes; production of both canned food and kibble requires very high temperatures that destroy any live enzymes present in the food
- Symptoms of digestive enzyme deficiency in dogs and cats include a variety of digestion-related issues, along with food sensitivities, lack of energy, and compromised joint health
- The best way to boost your pet's digestive enzyme supply is to feed as much living, raw food as possible, along with supplemental enzymes, if needed

Enzymes are tiny protein molecules found in every living cell that provoke chemical reactions in the body. The two main types of enzymes most important to your pet's well-being are metabolic and digestive enzymes. There are also enzymes found outside the body in living, unadulterated (unprocessed) whole foods.

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. Enzymes are crucial to countless important bodily functions, as they act as catalysts for all cellular functions, including energy production and detoxification.

Metabolic enzymes partly rely on specific vitamins and minerals to do their job, so nutritional deficiencies can disrupt a variety of bodily processes, such as impairing organ function over time. Linus Pauling's famous sentiment that most chronic degenerative diseases can be linked to a nutritional deficiency makes sense in this context.

The pancreas also makes enzymes specifically for digesting and assimilating nutrients, and these are what we're focusing on today, because digestive issues are so common in pets. Three types of digestive enzymes work in the small intestine to break down the food your pet eats. These include:

- Protease (including trypsin) for breaking down protein into amino acids
- Amylase for breaking down carbohydrates
- Lipase for digesting fats

Dogs and cats produce these digestive enzymes naturally; however, for a variety of reasons they often don't produce enough to process their food completely and efficiently.

How Your Pet's Digestion Should Work

When dogs and cats consume a meal the stomach stretches, prompting a substance called gastrin to be released, which in turn prompts special cells in the stomach to release hydrochloric acid. The enzyme pepsin is also released, and mixes with the food as a "pre-digestive" step to help facilitate the initial breakdown of proteins.

The food then moves into the small intestine, where the pancreas releases the digestive enzymes amylase, lipase, and protease. The gallbladder also secretes bile to help break down fat and stimulate peristalsis, among other important tasks.

When this process is working as intended, there's a rich blend of gastric acids, digestive enzymes, and bile in your pet's small intestine to facilitate optimal digestion and absorption of nutrients.

However, if there's dysbiosis or microbiome imbalance, and/or an insufficient supply of acids, enzymes, or bile, maldigestion and malabsorption of food can occur. In some cases, genetics can also play a role in heritable enzyme insufficiencies, such as exocrine pancreatic insufficiency (EPI). Unfortunately, this is a common issue among today's canine and feline family members.

Why Your Pet May Lack Crucial Digestive Enzymes

Enzymes come from two sources — your pet's body makes some of its own, and the rest come from the diet. Every raw, fresh food contains enzymes. Enzymatic activity is what's responsible for fresh food spoiling; the enzymes go to work fast breaking down the fats, proteins, and sugars in the food.

However, enzymes are fragile and easily destroyed by heat and other types of food processing, as well as pesticides, herbicides, food preservatives, additives, and a host of other internal and external influences.

If your pet consumes a mostly ultraprocessed or cooked diet, she likely receives little or no enzymes from her food (as enzyme activity would greatly shorten the food's shelf life) so must rely on her body to manufacture many or all the enzymes she needs. The pancreas produces protease, amylase, and lipase, but often not enough to completely digest the food she eats.

In the wild, dogs and cats upcycle the pre-digested contents of the digestive tract of prey animals, as well as the pancreas, which are teeming with the beneficial digestive enzymes their bodies need. Because they receive sufficient enzymes from their prey for digestion, their own metabolic and digestive processes are not taxed.

Both wild dogs and cats have also been documented to forage on grasses and other vegetation, which also supplements their bodies with additional food-based enzymes.

Even after thousands of years of selective breeding, not much has changed with your pet's digestive system. Your dog or cat is still a carnivore with a body designed to eat a fresh raw meat-based diet, complete with supplemental pancreas tissue.

Meat-eating animals naturally produce more protease to handle their high protein requirements, but they don't produce much amylase because their ancestral diet doesn't consist of grains nor do their bodies have a nutritional need for starches that require amylase for digestion.

Today's commercial ultraprocessed pet foods are intentionally enzyme-deficient to extend shelf life, not to mention the production of both canned food and kibble requires very high temperatures, which destroy any live enzymes present in the food. Raw and freeze-dried pet foods have the potential to contain some viable enzymes, because they have not been high heat processed.

Additionally, as your pet ages, production of enzymes often declines, and a lack of enzymes (both digestive and systemic) may be a major factor in less-than-optimal health. One way to slow degenerative disease is to make sure you're feeding a variety of minimally processed fresher foods, which research shows are more digestible than dry food.

With better nutrient assimilation and absorption, the body will have an abundance of vitamins and minerals needed to fuel the millions of cellular enzymatic reactions occurring on an ongoing basis.

Feeding your pet supplemental enzymes (more about this shortly) may not only boost digestion, but also spark improved cellular function throughout his body. Supplemental enzymes can also help with tissue and cellular structure. Most importantly, supplemental enzymes take the load off your pet's body to produce enzymes, unleashing a tremendous boost to his natural health.

Symptoms of Digestive Enzyme Deficiency

If pets aren't getting supplemental digestive enzymes from their diet, they must rely on their own natural supply. Signs that your pet may be lacking in digestive enzymes include:

- Acid reflux
- Bad breath
- Abdominal pain, cramping, gurgling
- Belching, gas
- Bloating
- Foul-smelling poop
- Vomiting undigested food a few hours after meals
- Diarrhea
- Undigested food in the stool

In addition to the above symptoms, ongoing digestive issues can also result in food sensitivities, lack of energy, systemic inflammation and less-than-optimal immune function.

How to Boost Your Pet's Digestive Enzymes

The first step is to offer as much minimally processed food as possible. Work to feed brands from the lower end of the processing scale, which retain more antioxidants, enzymes, polyphenols, and bio actives.

With more processing comes more nutrient loss, so the most to least enzyme-rich food categories are raw food, followed by freeze dried foods, dehydrated and gently cooked foods (one heat process) vs. baked, oven-dried, canned, and extruded (kibble), which involves many heat processes with each ingredient.

If you must feed ultraprocessed food, use supplemental enzyme-rich fresh foods from the refrigerator as treats and meat toppers. Check out our [pet food facts](#) to learn more about healthy human foods you can share with your pets. You can also share onion-free, fermented, enzyme-rich vegetables.

While raw food certainly supplies more digestive enzymes than highly processed (canned or kibbled) pet food, many animals consuming raw foods still benefit from supplemental digestive enzymes because they're not consuming fresh pancreas or entrails (where large amounts of enzymes can be found). Whether you feed your pet a healthy homemade or frozen species-specific diet, a canned or kibble diet, many animals benefit greatly from supplemental enzymes.

How to Select a High-Quality Digestive Enzyme for Your Pet

Enzymes for your dog or cat can come from three different sources: plant, animal, or fungus. I prefer animal-sourced enzymes, or blends containing animal-derived enzymes for the following reasons:

- They most closely mimic the contents of prey's gastrointestinal (GI) tract
- They provide pancreatin, replacing some of this beneficial substance coming from consuming the pancreas of prey
- Biologically non-vegan animals (dogs and cats) can benefit from a supplemental source of amylase as well, as both naturally consume low glycemic roughage (plant matter)

Look for a product that contains:

- **Betaine HCl** — Breaks down proteins into peptides and amino acids and fats into triglycerides
- **Bromelain (pineapple)** — One of the safest and most powerful enzymes to help break down and digest protein
- **Papain (papaya)** — A natural plant-sourced enzyme that works together with bromelain to digest protein
- **Pancreatin** — An animal-based pancreatic enzyme providing all three of these enzymes:
 - **Protease** — Helps break down proteins into amino acids for digestion
 - **Amylase** — For splitting and breaking down long-chain carbohydrates, including starch and glycogen (the energy-storage molecule in animal tissue) for digestion in the small intestine
 - **Lipase** — Helps break down and digest fats

I also recommend only products containing human grade ingredients.