

# Total-Zymes®

With L.E.A.D.S.®

Live Enzyme Activated Delivery System®

The most complete digestive enzyme for your pet!



**NWC Naturals®**  
**PET PRODUCTS**

For more information go to  
Total-Zymes.com Or call 888-207-3480

## Total-Zymes® is the only one with 16 enzymes for complete digestion!

Our high performance broad-spectrum digestive enzyme formula utilizes **16 high performance vegetarian enzymes** coupled with our exclusive L.E.A.D.S.® Live Enzyme Activated Delivery System®. Our L.E.A.D.S.® system will insure complete enzyme activation for better digestion and assimilation of all your pets' food at a cellular level, and no other pet enzyme product has it.

### What are the benefits of Total-Zymes®?

- ❑ Supports good digestion
- ❑ Supports a strong immune system
- ❑ Smaller and firmer stools
- ❑ Promotes proper elimination
- ❑ Pre-biotics to encourage gut health
- ❑ Better Delivery of Nutrients



With Over 23 years' experience



Available in two sizes

## The Answer?

Digestive enzymes are essential to good health because they enable the body to obtain nutrients from food. Without digestive enzymes, even the most nutritious foods will not be of any use to the body. A typical animal's diet is full of cooked and processed foods. These foods are unnatural to pets and it strains the digestive system as well as the pancreatic system. This makes ample amounts of digestive enzymes even more important. Total-Zymes® assists your pet's digestion by breaking down the fundamental components of their food with vegetarian enzymes. Even if our pet's diet consists of kibble, raw or canned food for their nutrient base, complete digestion is essential.

No matter the quality of their base diet, if the pet's digestive abilities are compromised, the nutrition will not be available. Total-Zymes® supports nutrient availability and absorption. Total-Zymes® Pet Digestive Powder is a high performance, broad-spectrum digestive enzyme formula utilizing 16 vegetarian enzymes and is coupled with our exclusive L.E.A.D.S.®, system, Live Enzyme Activated Delivery System®. The L.E.A.D.S.® system, first used in human nutrition, optimizes the enzymatic effectiveness in your pet's digestive tract using chelated minerals that activate the enzymes. Full enzymatic activity supports digestion and assimilation of all your pets' food at a cellular level.



**NWC Naturals Inc. is a member of NASC.** NASC Primary Suppliers are responsible suppliers of animal health and nutritional supplements for dogs, cats, and horses. We are committed to quality, vigilance, and continuous improvement to promote the wellbeing of companion animals. NASC Primary Suppliers must sign and abide by the NASC Code of Conduct when they join. Primary Suppliers must complete an independent facility audit and comply with the NASC's stringent quality requirements to earn permission to display the NASC Quality Seal on their products



Brief Description of Enzymes	What they digest
<b>Protease 3.0, Protease 4.5, Protease 6.0</b>	Protein digestion in all pH. ranges
<b>Peptidase</b>	Digests peptides to amino acids
<b>Amylase, Alpha-Galactosidase</b>	Carbohydrates
<b>Glucoamylase, Invertase, Maltogenic alpha amylase</b>	Glucose/sugars
<b>Lipase</b>	Fats and oils
<b>Cellulase, Pectinase</b>	Fiber
<b>Lactase</b>	Lactose and milk sugars
<b>Phytase, Hemicellulase</b>	Releases plant minerals from veggies
<b>Bromelain</b>	Supports the body as a Systemic enzyme

## Active Ingredient Over view

**Total-Zymes® is formulated by the author of the book “The Wonder of Probiotics”**

**1,2,3 Protease-** proteases refers to a group of enzymes whose function it is to break down proteins and are also referred to as proteolytic enzymes or proteinases. The proteins are broken down to its basic building blocks - amino acids. In order to have the amino acids available to the body, these enzymes must break down the proteins to free them, and this important compound is being used for health support of both people and their pets. Total-Zymes® includes 3 different proteases to insure wide pH activity.

**4, Peptidase-** without this crucial enzyme, (which most pet enzymes formulas leave out) the protein eaten and digested into peptides by the proteases will never break down into amino acids. Amino acids are the result of complete digestion and are essential to life. They are the building blocks of the body.

**5, Amylase-** amylase refers to a group of enzymes that breaks down sugars and starches. They are required to digest carbohydrates (polysaccharides) into smaller units (disaccharides), and eventually converting them into even smaller units (monosaccharides) such as glucose, which is the fuel of the body.

**6, Alpha-Galactosidase-**this enzyme breaks down carbohydrates, such as raffinose, stachyose, and verbascose. This enzyme breaks down carbohydrates, such as vegetables, whole grains. It can help support normal gas.

## The Wonder of Probiotics



A 30-Day Plan to  
 Boost Energy,  
 Enhance Weight Loss,  
 Heal GI Problems,  
 Prevent Disease,  
 and Slow Aging

John R. Taylor, N.D., and Deborah Mitchell

**7, Diastase AKA Maltogenic Alpha-Amylase-** is an enzyme that is the catalyst in the hydrolysis of disaccharide maltose to the simple sugar form – glucose. When starch is eaten, it is partially digested and transformed to maltose by both the saliva enzymes and pancreatic enzymes called amylases. The maltase is secreted in the intestines, and then convert this maltose into a readier useable sugar glucose, or the glucose could also be stored in the liver for future use.

**8, Lipase-** is the enzyme required to break down of fats and lipids. For fat to be digested properly, the liver starts this process emulsifying the large fat molecules, and bile breaks it down to small droplets, allowing the lipase to start its work. After the fats in the food are converted to fatty acids, they can be used for energy, hormone production support healthy health skin and coat.

**9, Glucoamylase-** is used to breakdown carbohydrates, specifically polysaccharides.

**10, Invertase-**this enzyme breaks down carbohydrates, especially sucrose.

**11, Pectinase-** breaks down carbohydrates, specifically pectin in fruits and some vegetables.

**12, Phytase-** breaks down carbohydrates, specifically phytates in plants. It can support mineral absorption and the bioavailability of iron, zinc, calcium, and magnesium.

**13, Hemicellulase-** is used to breakdown carbohydrates, especially polysaccharides such as hemi-celluloses, which are found in plant-based foods.

**14, Cellulase-** breaks down cellulose, an indigestible fiber found in many fruits and vegetables.

**15, Lactase-** digests dairy, particularly the lactose in cheese, yogurt, cottage cheese and milk.

**16, Bromelain-** This enzyme harvested from pineapple stems, is the top systemic enzyme. Is most notable for supporting the body as a systemic enzyme. As a natural systemic enzyme with many uses.

**17, Pre-biotics-** Inulin from chickory nourishes the gut and aids in colonizing of the probiotics and supports balancing the gut.

A study of Dr. Francis **Pottenger's cats** (over 600 of them) revealed that when the animals were fed only cooked or processed food over many generations, poor health presented itself at younger and younger ages. These animals suffered from a variety of poor health conditions. They had fewer enzymes to pass down to their offspring, resulting in minimal reserves of enzymes in the ensuing generations.

***We at NWC Naturals Pet Products will never use any animal-based enzymes such as pancreatin from slaughterhouse pigs and cows.***

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First, they are not as efficient as vegetarian enzymes and they are not as safe as vegetarian enzymes. The following side effects are possible **with animal-based enzymes such as pancreatin; ox bile or other animal sourced enzymes including hydrochloric acid.** High doses may cause diarrhea, cramping, or vomiting. Allergic reaction to animal-based products may include facial swelling, hives, scratching, and sudden onset of diarrhea, vomiting, shock, seizures, pale gums, cold limbs, or coma.

***That is why the formulators of Total-Zymes® will only use safe human quality vegetarian enzymes and formulate them just for pets.***

**Please keep in mind; enzymes do not survive the high heats required to process commercial pet foods. All kibble, roll and canned foods are cooked!**

A diet of commercial pet foods puts excess strain on a pet's digestive system. Temperatures as low as 118 degrees Fahrenheit will deactivate and kill all enzymes, requiring the pet's body to produce the extra enzymes it needs for digestion while robbing the systemic enzymes needed to run the body.

Many veterinarians have found enzyme supplementation to be beneficial in I support good digestion and supporting healthy joints, skin and coats. These benefits are compounded when probiotics are also added to the mix.

## Benefits of Enzyme Supplementation

- Increases the bioavailability of nutrients by helping to convert food into fuel the body can use for energy.
- Shortens transit time of food through the gastrointestinal tract.
- Helps decrease the odor of feces because of less rotting and putrefaction.
- Supports a strong immune system
- Supports healthy skin, Normal Bowel Movements
- Assists in faster recovery and healing.

## Frequently Asked Questions

### 1. Why does the Total-Zymes® label look so different? Has the formula changed?

The **Total-Zymes® formula has not changed**. As a member of **NASC** (national animal supplement counsel) we have updated our label to use the **AFFCO** and **NASC** guidelines. The Association of American Feed Control Officials (**AAFCO**) is a voluntary membership association of local, state and federal agencies charged by law to regulate the sale and distribution of animal feeds and animal drug remedies. All ingredients in Total-Zymes® are **AAFCO** approved for safety and effectiveness. **Beware of digestion products for pets using unapproved and possibly unsafe ingredients.**

### 2. How do I use Total-Zymes® properly?

**Total-Zymes®** should be taken with **every meal**. One scoop of Total-Zymes® will digest one cup of any pet food. Total-Zymes® should be consumed just before or during meals. To mix with dry kibble add one scoop per cup of pet food in a small container with a snap on lid. Shake it a few times and then feed out of that container. Mix up fresh every day.

### 3. Why are the enzymes in this formula measured in FCCPU instead of mg.?

Enzymes are measured by reaction time, rather than by amount or weight. The unit measurements used for each enzyme refers to the length of time and the intensity of the reactions it creates.

### 4. Why use non-animal produced enzymes over animal/pancreatic enzymes?

The non-animal Vegetarian enzymes are purer, very proactive, and react faster within their specific task. Animal/pancreatic enzymes, although designed to react the same way, may cause several negative reactions. This is due to the fact they may bring with them inherently non-compatible elements from their originations to your pet. These products generally carry a warning label regarding possible side effects from their use.

### 5. What is the difference between vegetarian and animal-based enzymes?

Plant-based enzymes are derived from many sources including pineapple, papaya and fermentation. Animal-based enzymes are extracted from the pancreatic tissue of slaughtered pigs and cows. The high pH environment of the small intestine is the only place animal-based enzymes can function, as they are extremely sensitive to low pH ranges. This means that animal-based enzymes may not survive outside of this environment. Plant-based enzymes are not destroyed by the acidic conditions of the stomach and are therefore stable in the upper stomach, where they can begin processing food immediately.

### 6. Can I give my pet Total-Zymes® while they are on medication?

This formula has not been shown to interact with any medication, however if you have any specific questions, please direct them to your veterinarian.

### 7. Are there side effects with Total-Zymes®?

When taken as directed there are no known side effects with this formula. When you first introduce Total-Zymes® some pets will react like a normal food change, because the food was not digesting and now it is. So just like a food change do it gradually. 80% of pets have no reaction when adding the full serving of Total-Zymes®.

### 8. Can I give Total-Zymes® to my puppies or kittens?

This formula can be safely given to all pets regardless of age. Pets need Total-Zymes® as soon as they start eating processed food. Add **Total-Zymes®** to any cold or room temperature food or beverage. Remember heat and cooking destroys enzymes. And microwaving is definitely a No-No.

### 9. What if my child gets into the Total-Zymes® powder and eats it? A child could get into it but since it is human grade no worries

Only a facility that produces human supplements, undergoes the inspections and approval necessary to have genuine human grade status and therefore, a pet food or supplement must be made in such a plant in order to be called 'human grade'. The FDA and USDA are responsible for regulating human foods and supplements determining 'edible' status. In order to be allowed to produce human foods and supplements, a manufacturing facility undergoes far more frequent and detailed inspections by these and other agencies, compared with the inspection that a pet food plant undergoes.

### 10. Would any pet benefit from Total-Zymes®?

Yes, any pet that would naturally eat an all raw food diet in the wild will benefit greatly from **Total-Zymes®** And really do you know any pets that cook their food in the wild?



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