

An Analysis of Oxyfresh's Digestive Enzymes

The following is a retrospective analysis of Oxyfresh's Digestive Enzymes. This report provides an in-depth look at the vital role enzymes play in your health.

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I. Introduction

Many of us may remember our mothers advising us to chew our food at least 32 times before swallowing. Our mothers probably knew what they were talking about — even if they did not fully understand why. The breakdown of nutrients that can be absorbed into the digestive system is vital to life. But this breakdown goes far beyond the simple act of chewing. Digestion, in fact, can only occur with the presence of enzymes.

The cooked and processed foods that make up most of what Americans eat place a strain on the body's ability to absorb the nutrients because these foods lack natural enzymes — biological molecules that accelerate chemical reactions through the breakdown of nutrients.

Put another way, enzymes are the workhorse of the digestive system. Without enzymes, your body has to work harder to digest the food you eat. This may result in bloating, cramps and tiredness after a meal because your body's pancreas must work harder to produce enzymes to break down and digest cooked and processed food.

Without a doubt, enzymes are the spark of life. They run your entire body. You couldn't digest or absorb food without them and would thus die.

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A). The History of Enzymes

The first person to actively study enzymes was Dr. Edward Howell in the 1930s. He determined that the quality of life and energy level depend on enzymes. If you're low on enzymes then you will have health problems. He contended that the act of cooking or processing food kills the enzymes present in raw food, thereby putting the entire digestive burden on the body. This leads to an imbalance in the production of metabolic enzymes according to the law of adaptive secretion. His research showed that humans in comparison to animals have a disproportionate amount of digestive enzymes. He believed that nature's plan called for food enzymes (enzymes in raw food) to help with digestion instead of forcing the body's digestive enzymes to carry the whole load. He wrote a number of papers about his work and also published a book in 1946, *The Status of Food Enzymes in Digestion and Metabolism*. The book was then reprinted with the title *Food Enzymes for Health and Longevity*. His pioneering theories about food enzymes fervently advocate using supplemental digestive enzymes with a cooked and processed food diet.

Today, many people take supplemental digestive enzymes to help them digest their food resulting in a healthy lifestyle. Over the past several decades many researchers have used Howell's theories as foundation for their research. Modern science has proved the efficacy of supplemental digestive enzymes and their impact on human health.

Prior to Dr. Howell's studies, the earliest studies on inorganic catalysts (enzymes) were done by the Swedish chemist Jöns Jakob Berzelius in 1835. Even though the catalytic activity of enzymes as found in yeast (the word enzyme is ancient Greek for "in yeast") had been used for centuries, it was not until 1926 that the first enzyme was obtained in pure form (crystalline). This was done by

James B. Sumner of Cornell University. Later, in 1946, Sumner received the Nobel Prize for his work with the enzyme urease, extracted from the jack bean. Urease is an enzyme that catalyzes the conversion of urea to ammonia and carbon dioxide. Certain bacteria that convert urea to ammonia as part of the nitrogen cycle contain this enzyme.

References

Jöns Jakob Berzelius — biography, part of Chemical Achievers from the Chemical Heritage Foundation.
The Nobel Prize in Chemistry 1946 — biographies of James B. Sumner and his co-recipients from the Nobel e-Museum.

B). Benefits of Oxyfresh's Digestive Enzymes

The underlying premise for taking a digestive enzyme supplement is the capacity for better nutrient absorption through enhanced digestion. The function of these supplements is to accelerate the process of digestion to a biologically significant level.

Oxyfresh's proprietary blend of Digestive Enzymes is one of the best on the market. These enzymes are made by the leading manufacturer in enzyme production and research: The National Enzyme Company (NEC), which has been producing supplemental enzymes for more than 70 years. NEC is a leader in nutritional enzyme technology. From research and development to marketing support, NEC provides Oxyfresh with a comprehensive nutritional enzyme package. Oxyfresh's proprietary blend, N*Zimes™, provide the perfect blend of fungal enzymes to aid your body in proper digestion.

Supplementing with Oxyfresh's Digestive Enzymes will help your body process the foods you eat and not produce gas, bloating or discomfort. These Digestive Enzymes contain naturally occurring enzymes essential for efficient digestion, nutrient absorption, elimination of toxins and energy utilization. Daily use helps to maintain proper pH. Oxyfresh's Digestive Enzymes will allow you to once again enjoy foods that previously did not agree with your digestive system.

C). Digestive Problems On The Rise

Over 95 million Americans experience some kind of digestive problem, including 60 million who experience acid indigestion at least once a month and 15 million who experience acid indigestion on a daily basis. Use of over-the-counter antacids (pills, chewables, and liquids), as well as H2 blockers, can help alleviate the symptoms of this condition. Sales of over-the-counter antacids and H2 blockers are over \$1 billion per year.

Oxyfresh's Digestive Enzymes help your body more efficiently digest food and avoid gas, bloating and discomfort, thus, alleviating the need for acid indigestion medications.

II. Overcoming An Enzyme Deficiency

Most Americans have a very pronounced enzyme deficiency. This lack of enzymes leads to all sorts of medical complications. The following is a quote from Dr. Howell's book, *Food Enzymes for Health and Longevity*:

“Our body’s life force, vitality, vital force, strength, nerve energy or whatever you choose to call it has enzymes at its core. Without the life energy of enzymes we would be nothing more than a pile of lifeless chemical substances — vitamins, minerals, water and proteins. In both maintaining health and in healing, enzymes, and only enzymes, do the actual work. They are what we call, in metabolism, the body’s labor force. Each one of us is given a limited supply of bodily enzyme energy at birth.”

Dr. Howell continued: “This supply, like the energy supply in a new battery, has to last a lifetime. The faster you use up your enzyme supply, the shorter your life. A great deal of our enzyme energy is wasted haphazardly throughout life. The habit of cooking our food and eating it processed with chemicals and the use of alcohol, drugs, and junk food all draw out tremendous quantities of enzymes from our limited supply.”

A). Causes Of Enzyme Deficiencies

Frequent colds and fevers and exposure to extremes of temperature also deplete the supply. A body in such a weakened, enzyme-deficient state is a prime target for cancer, obesity, heart disease, or other degenerative problems. A lifetime of such abuse could end in the tragedy of death at middle age.

The saying “You are what you eat” is only partly correct. The truth is, you are what you *digest*. We cannot expect to be healthy if our digestive system isn’t functioning properly. Enzymes are essential to a healthy digestive system and a healthy body because they help transform undigested food into nutrients.

An “enzyme” acts in certain ways in the body to do specific jobs, including to:

1. Digest food
2. Break down toxins
3. Cleanse the blood
4. Strengthen the immune system
5. Build protein into muscle
6. Contract muscles
7. Eliminate carbon dioxide from the lungs, and
8. Reduce stress on the pancreas and other vital organs

Enzymes are the workers in your body — they carry out every chemical reaction. To have a healthy body you need both workers (enzymes) and building materials. The building materials are proteins (amino acids), minerals, and vitamins. All of these are necessary to build a healthy body. Trying to function without all the necessary enzymes is the reason for most body malfunctions.

B). Types of Enzymes

There are three major classes of enzymes:

- (1) Metabolic enzymes (enzymes that work in blood, tissues and organs)
- (2) Food enzymes from raw food
- (3) Digestive enzymes

Nature has placed enzymes in food to digest everything you eat: starches, fats, protein, fiber, sugars, and dairy foods — instead of forcing the enzymes secreted in our bodies to do all of the work.

There are seven categories of food enzymes:

- (1) Lipase, which serves to break down fat
- (2) Protease, which works to break down protein
- (3) Cellulase, which assists to break down fibers
- (4) Amylase to break down starch
- (5) Lactase to break down dairy foods
- (6) Sucrase to break down sugars
- (7) Maltase to break down grains

There are two ways to preserve and replenish our enzyme level: by eating raw food and by taking enzyme supplements.

III. Taking Supplemental Enzymes

Enzymes taken on an empty stomach will cleanse the blood. Enzymes taken with meals will thoroughly digest food. Deficiency diseases can be eliminated or avoided with the proper nutrition taken on a daily basis.

It's important that you use potent, plant-based enzymes that include a complex of lactase, protease, amylase, lipase, cellulase, invertase and papin. Oxyfresh Digestive Enzymes offers all these essential ingredients.

A). Why Take Enzymes?

We inherited an enzyme reserve at birth and this quantity is decreased as time goes by from an enzyme deficient diet. As we become enzyme deficient, we age faster. The more we store up our enzyme reserve, the healthier we'll be.

A nursing mother provides her baby with all the enzymes it needs to digest her milk. Have you ever noticed that the stool of a breast-fed baby doesn't stink? It's only when a baby starts eating cooked, processed food that his stool begins to stink.

This happens because the cooked food won't digest properly and travels, undigested, into the small intestine. (Once we cook food at high temperatures of 118 degrees or more, enzymes are destroyed and no longer work.) It's the beginning of the toxemia cycle (undigested food putrefying in the bowel tract that continues to poison the blood), which is the root of all disease. It's been estimated that 80 percent of diseases are caused by improperly digested foods and their by-products being absorbed into the body.

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Survival into the 21st Century, by Viktoras Kulvinskas

B). Who Should Take Enzymes?

If you're sick or trying to recover from an acute or chronic disease, taking enzyme supplements would be beneficial. People with hypoglycemia, endocrine gland deficiencies, obesity, anorexia nervosa, and stress-related problems, could all benefit from multiple and individual enzyme supplementation. During all acute and chronic illnesses, enzymes are used up more rapidly than normal.

Individual enzymes have also been used to alleviate skin ailments (psoriasis, acne, eruptions, stretch marks, etc.), chronic inflammation, cardiovascular disease, circulatory problems, high blood pressure, arteriosclerosis, high cholesterol, fatigue, Epstein-Barr Syndrome, asthma, allergies, arthritis, swelling, bee stings, joint mobility, diabetes, respiratory ailments, viruses, bacteria, mutant cells, fever, all types of infections (including colds, flu, sore throat, yeast), parasites, *Candida albicans*, multiple sclerosis, fibromyalgia, tumors, depression, anxiety, ADD/ADHD and insomnia.

What if you're already healthy and active? You may already be taking vitamins, minerals, and other concentrated foods. What makes all of these elements work? Enzymes.

Athletes and other active individuals can benefit by taking enzyme supplements because any time the body temperature is raised, as during exercise, enzymes are used up more rapidly than normal. Carbohydrates are burned more rapidly, and more nutrients are needed for fuel supplies. The active individual usually eats mostly cooked food so it's like burning the candle at both ends. Enzymes are used up rapidly and little is brought in to replenish the supply.

As you grow more health-conscious, you strive for a greater enjoyment of life. More energy, and a stronger mind and body will be needed to face the stresses that the future will bring. Enzymes can be instrumental in achieving such a goal.

C). How Do We Know Enzymes Are Working?

One of the ways is in what you *don't* experience: no indigestion, no bloating, no stomach gas, no heartburn, or flatulence caused by incomplete digestion.

What you *will* experience is an increase in formed bowel movements — at least 1 to 2 times a day, usually after every meal — “one meal in, one meal out.” Also, these movements will not have a foul odor. When this happens, it means your food is being digested properly and used by your body instead of sitting in your intestines to rot and putrefy.

You may experience mild symptoms of cleansing such as acne, bloating, gas, dull headaches or queasiness. These are only temporary. If you experience discomfort, make sure you drink 8 to 10 glasses of water a day to reduce the cleansing symptoms and get at least 10 to 15 minutes of exercise daily.

It's been clinically proven that the more enzymes you take, the quicker your body can repair, restore, and strengthen itself, sometimes taking a few days to a few weeks. (Allergy symptoms usually disappear one hour after taking Amylase.) However, for minimal usage, you must wait at least 3 to 4 months before evaluating your results. It takes time to re-educate the body's natural ability to repair, restore, and strengthen itself, so be patient.

You'll also notice changes in your body. Your body can do magnificent healing on its own, given the proper nutrients.

Dr. Bernard Jensen wrote in his book, *Tissue Cleansing Through Bowel Management*, that "... the greatest healing power comes from within out. We find that healing comes according to the one law ... that is 'Hering's Law of Cure.'" It further states that "all cure starts from within out and from the head down and in reverse order as the symptoms have appeared." Do you understand what that means? This means we have to return over the same "track" we traveled to get the disease.

Again, your body can do magnificent healing on its own, given the proper nutrients.

Another important thing to remember is to include *L. Salivarius* and *L. Plantarum* in your daily regimen of dietary supplements. These two friendly bacteria work to restore the proper balance of bacteria in your intestinal flora, attacking many of the unfriendly bacteria and other detrimental "invaders" while promoting the growth of beneficial organisms. These hard-working probiotics (pro = for, biotics = life) produce a variety of substances that can prevent cancerous tumors, deactivate viruses, produce natural antibodies, reduce cholesterol, and enhance the immune system.

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IV. Use Of Oxyfresh's Digestive Enzymes

Oxyfresh's proprietary Digestive Enzymes contain naturally occurring enzymes essential for efficient digestion, nutrient absorption, and elimination of toxins. A sluggish digestive tract can inhibit your metabolism and frustrate weight-loss efforts. Natural enzymes in raw plant food help. The plant enzymes lipase, protease, amylase, cellulase and lactase are all found in Oxyfresh's Digestive Enzymes.

A). What People Are Saying

"I take two Oxyfresh Digestive Enzymes every time I take any other nutritional product to enhance absorption. I find this increases the effectiveness of supplements without having to take more of them. Digestive Enzymes resolved the bloating and cramping I used to experience after eating meals. I would not be caught without my enzymes."

Sarah Kedzierski
Cape Canaveral, Florida

"Digestive Enzymes give me an extra boost of energy by assisting my body in the elimination of fat — helping me burn calories more efficiently."

Roxie Lord
Salt Lake City, Utah

“Digestive Enzymes are amazing! I went to an after-work get-together and ate turkey sausage, cheese, crackers, sweet and sour chicken and diet soda — all of it packed with sodium. When I got home, I took two Digestive Enzymes, and an apple, and went to bed. I made it through the night with no heartburn, no stomach pills and no bloating or swelling. I couldn’t believe it!”

Trisha Tarleton
Goleta, California

“We take Oxyfresh Digestive Enzymes with every meal to help us maintain our ideal weight effortlessly.”

Nile and Delfin Costa
Cape Coral, Florida

B). Frequently Asked Questions

How do enzymes work?

Enzymes are natural protein molecules that act as highly efficient catalysts in biochemical reactions, meaning they help a chemical reaction to take place quickly and efficiently. Thus, they speed the digestion process. Enzymes are highly efficient in increasing the reaction rate of biochemical processes, which typically proceed very slowly, or in some cases, not at all.

I eat a mostly healthy diet that includes lots of raw fruits and vegetables. Can I benefit from Digestive Enzymes?

Yes. A “mostly” healthy diet is probably still void of some digestive enzymes. Supplementing with enzymes can only help your body and also balance your pH level.

Will taking enzymes make my digestive system ‘lazy’?

No, the pancreas adapts to any type of food that is consumed. Supplemental enzymes are support tools used to help assimilate food and the body adapts to these enzymes.

Can I take Digestive Enzymes while I am on medication?

Oxyfresh Digestive Enzymes are a high quality digestive enzyme supplement with no added chemicals or fillers. It has not been shown to interact with any medications.

Can I take Digestive Enzymes with my vitamins?

Millions of people take daily vitamin supplements not realizing they may be wasting their money. If you lack the powerful enzymes necessary to break down the elements you consume, many vitamins may be left intact and undigested, rendering them useless. In order for vitamins to be effective, enzymes must be present. Enzymes actually help activate the vitamins you are taking.

Should I take Digestive Enzymes with food or on an empty stomach?

Either. Enzymes taken on an empty stomach will cleanse the blood. On an empty stomach, enzymes will also work to balance your pH and cleanse your digestive tract. Enzymes taken with meals will thoroughly digest food.

V. Digestive Enzymes And Your Health

In order to stay alive, the human body has to work like a high-powered factory. Every second, countless processes are completed; every cell working like a single musician in an enormous orchestra.

And just as a symphony is harmonious only when every musician is attentive to the conductor and produces the right role at the right time, the correct reactions have to take place at every moment in time in all the cells of the body — some faster, some slower.

Even in this gigantic metabolic mechanism is a conductor to prevent chaos. In fact, the body produces its own conductor: a multiplicity of enzymes function as a steering control and insure that all processes take place in a regulated manner.

Enzymes are optimally designed for this task. Enzymes are highly specialized. Just as a key can only open one lock, an enzyme sets only one highly specific reaction in motion. With its complement of enzymes, the body is therefore able to control both the type and extent of those metabolic processes that need to be initiated.

A). Unhealthy Eating Habits and Digestive Disorders

The human digestive process is very resilient and can adapt itself to many types of food. In spite of that, a large portion of the Western population suffers from some kind of digestive disorder. Gas, bloating, heartburn, constipation, and others are just some of the digestive maladies that people endure on a daily basis. Now, if our digestive system is so resilient and adaptable, why do we still face these digestive problems? Stress and medication do play a role, but the main problem is the modern diet.

The modern diet mostly consists of cooked and processed food that is devoid of all the natural enzymes and has lost many of its nutrients. This diet could not only be implicated in the most common problems associated with digestion but can also cause or exacerbate serious disease conditions like celiac sprue, irritable bowel syndrome, acid reflux, and even autism.

The modern diet and lifestyle put an unusual stress on the digestive system resulting in incomplete digestion of food and malabsorption. We are not receiving all the nutrients from food first of all because our food is nutrient depleted and secondly because our digestive system is unable to extract all the nutrients from food. A majority of the population takes some kind of vitamin and mineral supplement to make up for the loss of essential nutrients in food. Incomplete digestion can be overcome by taking supplemental digestive enzymes.

B). Digestion And Aging

Our bodies are machines and just like machines they age and become less efficient. Studies have shown that the secretion of pancreatic enzymes decreases with age, which means that you lose your digestive capacity as you get older. That is why many older adults complain of not being

able to eat what they once did. The use of supplemental digestive enzymes after every meal can replace the digestive enzymes lost due to aging.

A recent study also shows improvement in protein utilization in nursing home patients given digestive enzyme supplements. Another research article that focuses on gastric emptying time concluded that fatty food increases gastric emptying time. But when subjects were administered the same fatty meal with supplemental lipase, the gastric emptying time was reduced significantly. This has direct implication for people suffering from heartburn and indigestion where fatty foods are the culprit. A 1971 British clinical study showed that taking a digestive enzyme supplement significantly alleviates the symptoms of dyspepsia.

Researchers agree, then, that digestion of nutrients is reduced with age. For example, reduced stomach acid and digestive enzymes lead to reduced digestion and absorption of vitamin B12. This vitamin, along with folic acid, is important for the central nervous system (among other things). Deficiencies, common in the elderly, can contribute to dementia such as Alzheimer's disease.

A survey conducted in 1999 by the University of California listed a number of socio-economic groups most at risk of sub-optimal nutrient intake. The elderly were considered likely to be lacking in vitamins D, C, B6, B2, and folic acid, as well as minerals, especially zinc.

It is generally agreed that it is best to obtain our nutrients from a good and healthy diet. But what if your institutional diet is not as good and healthy as the “caveman” diet that the human species grew up with? And what if you can't digest, absorb, or metabolise even the best of diets? You get sick or you supplement your diet as best you can.

Thus there is a very strong case for the routine addition of well-prescribed vitamin and mineral supplements to the diet, especially if you are elderly. Also consider supplements that improve the digestion, including digestive enzymes to increase digestive power.

C). Enzymes And Your Immune System

Enzymes play an important role in the balance of the body's immune system. Every day, the body is exposed to attack; it is continually faced with the need to defend itself against pathogens and environmental pollution.

We have to thank our energetic immune system for the fact that we are not perpetually ill. Enzymes help fight off these attacks. But even the best defense from these outside factors can sometimes threaten to collapse.

All defense units work in close cooperation. It is only when the body maintains them in balance that they can react rapidly and effectively. Long-term stresses, such as chronic diseases, make it difficult for the body to find its balance again.

In elderly people, regulation does not always function optimally either. As noted earlier, the natural protection of enzymes decreases with the advancing years. This is where Digestive Enzymes are able to help.

VI. Summary

This report has covered how Digestive Enzymes:

- Assures complete digestion
- Reduces chronic illness
- Strengthens the immune system
- Dissolve fats
- Helps eliminate gas and toxins
- Helps resist disease
- Helps slow aging
- Provides balance in your immune system

Oxyfresh's Digestive Enzymes will aid in each of these areas. These top quality enzymes are part of a complete nutritional line that will enhance your longevity and vitality.

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