## CONTENTS:

Enzyme Supplements, Foods, and Benefits: An Introduction ................................................................. 4

Enzymes: The Maintenance Crew That Keeps Your Body in Check ...................................................... 5

Where Do Enzymes Come From, and How Can You Make Sure You’re Getting Enough? .................... 7

What Happens When Our Food Lacks Enzymes? ..................................................................................... 8

“Micro Miracle” Enzymes: Digestive vs. Systemic (Proteolytic) ............................................................ 10

The Many Types and Uses of Enzymes .................................................................................................... 11

Kiwifruit and Purple Grapes .................................................................................................................... 16

Enzymatically-Active Mushrooms ......................................................................................................... 17

Sprouting and Fermentation .................................................................................................................... 18

OrganiZymes: The “Micro Miracle” Enzyme Solution ............................................................................ 19

Our Vision .................................................................................................................................................. 20

Sources .................................................................................................................................................... 21
Imagine for a moment that you’ve just purchased the car of your dreams and are right now taking it for a spin around town for the very first time. Everything is running as smoothly as can be – the engine is quick and steady, the brakes are responsive, and that sound system! It’s everything you’d ever hoped for and then some, providing an optimal and reliable driver experience without a hitch!

Now imagine driving that same car six months from now, then a year later, then two years later, and so on. Even if you follow all the appropriate maintenance guidelines for routine oil changes, regular tire rotations and replacements, and tune-ups, things are eventually going to start breaking down. It’s the inevitable nature of our physical reality – the essence behind the second law of thermodynamics that says everything ultimately succumbs to decay over time.

This isn’t to say that you can’t keep your car in the best shape possible by replacing key parts and components as needed at appropriate intervals. But simply filling the tank with fuel all the time just to make sure your car runs isn’t going to cut it in the long run. Each mechanical element must remain in appropriate working order alongside all the others. If these parts aren’t working as they should and your car stalls, no amount of fuel is going to get you anywhere.

Consider the fact that your body works much the same way as your car. From the moment you’re born, the systems of your body are fully equipped with brand new components that develop and function in an optimal state to keep you alive. Each component – from your brain, to your organs, to your blood vessels, to your bones and cartilage – is “fueled” and nourished by the foods you eat. This results in your ability to think, move, and live in a fully expressive state.

But just like your car, your body requires regular and proper maintenance in order to function at its best. If you abuse it – or more indirectly, if you fail to feed it the things it needs to remain in a state of balance – it will begin to break down. This is why, if you want optimal health, that it’s vital to move your body regularly and stick to a healthy diet. But what exactly is a healthy diet in practical terms, and are there more pieces to the puzzle than just food?
Enzymes: The Maintenance Crew That Keeps Your Body in Check

In a perfect world, every morsel of food that you put inside your mouth would carry with it a unique and comprehensive bundle of essential nutrients. It would also include the digestive compounds necessary for those nutrients to be systematically processed and converted into the various elemental building blocks that your body needs for repair, rejuvenation, and life itself. But unfortunately, we don’t live in a perfect world.

Whole, living foods grown in healthy soils naturally contain most of the elements necessary for our bodies to utilize and benefit from them. But the fact of the matter is that, in today’s modern world, such foods are becoming increasingly harder to come by. This is a result of heavy processing and other “convenience” factors that render these foods functionally “dead.” As a result our bodies have a difficult time processing and digesting them for nutritive purposes.

You’re probably thinking to yourself – but wait, doesn’t my body produce bile acids, pancreatic juices, and other substances that help to break down the foods I eat? And isn’t that enough to get all the nutrition I need? Well, yes it does. But it’s not quite as simple as that.

Your body is equipped in many ways to handle the foods you put into it. But your body also relies on food itself to meet it halfway in furnishing certain conversion elements. These elements pre-digest that food and extract its nutrients. They also deliver these nutrients to areas throughout the body where they’re needed. These conversion elements are known as enzymes, and they’re the foundation upon which human life exists.

“Enzymes are substances which make life possible. They are needed for every chemical reaction that occurs in our body. Without enzymes, no activity at all would take place. Neither vitamins, minerals or hormones can do any work – without enzymes.”

– Dr. Edward Howell, author of Enzyme Nutrition: The Food Enzyme Concept
Once again using the car analogy, you can think of enzymes as little maintenance workers that make sure nutrient “fuel” from food is effectively extracted, processed, and delivered all throughout the body in order to keep it running smoothly. These enzyme “mechanics” also ensure that the body’s many component parts, which are responsible for performing these important functions in precise tandem with one another, are kept in tip-top shape for optimal efficiency and performance.

Without enzymes, in other words, the body is sure to suffer a catastrophic breakdown at some point. And the longer the body faces a persistent enzyme deficiency, the greater the likelihood that it will suffer total mechanical failure in the form of death. This is obviously not a position you want to find yourself in if you can help it!
Where Do Enzymes Come From, and How Can You Make Sure You’re Getting Enough?

The good news is that the human body is designed to produce its own enzymes to aid in the food digestion process. It also has the ability to compensate for whatever enzymes are lacking in processed or otherwise enzyme-deficient foods – at least for a time. This is where the bad news comes into play...

The fact of the matter is that the body is limited in the types and quantity of enzymes that it can produce for supplemental purposes beyond what it was originally designed to handle. When the foods a person eats are persistently lacking in native enzymes, in other words, the body will eventually exhaust its own enzyme reserves. At this time the “check engine” light comes on and all bets are off.
What Happens When Our Food Lacks Enzymes?

The reason why these enzyme reserves are so important is that every biochemical process that takes place inside the body only occurs because of enzymes. Enzymes ensure that each piece of the vast molecular puzzle that makes up our bodies is functioning as it should, as well as interacting with all the other pieces in sustained congruence. You can think of enzymes as a type of “micro miracle” that necessitates life as we see it animated in the human form.

Enzymes are also important for digestion – this being the primary way that our bodies obtain vital nutrients from the foods we eat. Enzymes are absolutely crucial if you want to live a long and healthy life, in fact, which is why you need to make sure that you’re getting enough of them.

Let’s take a closer look at the three primary types of enzymes that our bodies need: food enzymes, digestive enzymes, and metabolic enzymes:

- **Food enzymes**
  occur naturally in raw food. Their job is to begin pre-digesting food in the upper stomach, a process that takes between 30-45 minutes after eating.

- **Digestive enzymes**
  are manufactured by the body to further break down this pre-digested food and deliver its nutrients through the gut wall and into the bloodstream.

- **Metabolic enzymes**
  also produced by the body, perform various other important functions throughout the body such as cell tissue repair, waste cleanup, and even destruction of harmful cells.
Each class of enzyme is designed to perform its own unique set of functions to keep your body going strong. Together, this enzymatic trio is what sustains overall health and well-being, serving as the basis of life itself. But what happens when one piece of this enzyme mosaic is thrown out of balance, such as when otherwise enzymatically-dense foods are cooked or processed?

Many people don’t know this, but enzymes are extremely delicate and volatile, despite their incredible importance and amazing abilities. When exposed to heat, even at extremely low temperatures of as little as 118 degrees Fahrenheit, enzymes in food quickly begin to die off in very high numbers. Enzymes are also unable to withstand the types of processing that lands food in shelf-stable packages, boxes, and cartons. For many people, this is a very large percentage of what they eat on a daily basis.

Such heated and processed food, stripped of its enzymes, is categorically speaking: dead. This means that the body has to offset the problem by producing extra enzymes to help digest this dead food before attempting to send its nutrient components into the small intestine for absorption. This is a difficult process that puts immense strain on vital organs like the pancreas that already have the responsibility of manufacturing enzymes for other purposes such as cellular tissue repair, toxin elimination, and waste removal.

While our bodies are equipped to adapt to problems like this in order to offset them, they can only do so for a limited time. The fact of the matter is that enzyme production potential and stores gradually diminish the longer the body has to overcompensate for enzyme deficiency in food. This creates a situation where either food is no longer being fully and properly digested, or the rest of the body isn’t getting the enzymes it needs to repair tissue and clean up waste.

In some cases, both scenarios occur at the same, creating the ultimate recipe for a health disaster.
“Micro Miracle” Enzymes: Digestive vs. Systemic (Proteolytic)

Enzymes can technically be categorized into two main categories as opposed to three. Digestive enzymes that handle food – these include both the food and digestive enzyme categories mentioned earlier. As well as systemic, or metabolic, enzymes that handle everything else.

The body produces both types, and many foods also contain both. But again, the body relies heavily upon the enzymes that are supposed to be in food to complement its own, especially since it also has to produce and deliver systemic enzymes throughout the body.

This once again illustrates the problem with enzyme-deficient dead food. It’s actually more of a burden on the body, in many cases, than it is helpful. And you’ll quickly see why.

The function of digestive enzymes is pretty self-explanatory – they’re responsible for digesting our food. But what about systemic enzymes? Also known as proteolytic or metabolic enzymes, systemic enzymes are what keep our bodies clean and free of disease-causing debris.

Systemic enzymes go after things like harmful pathogens and cancer cells in order to destroy them, all the while helping to clear up scar tissue and excess fibrin in the blood stream so that our blood continues flowing as it should.

It’s well established that systemic enzymes are critically important for fighting off chronic disease. When it comes to cancer, for instance, enzymes have the ability to soften the thick membranes surrounding cancer cells in order for white blood cells, known as macrophages, to enter and essentially “eat” them. This process effectively stops cancer cells in their tracks – all without chemotherapy or radiation!

One prominent author and health enthusiast succinctly explains the role that systemic enzymes play in our bodies like this:

“Rather than working strictly in the digestive tract, systemic enzymes work throughout the body to support immune health, break down fibrin in the blood stream, remove toxins, reduce blood clots, and neutralize allergens. This allows cells to regenerate faster and gears other bodily processes toward quicker recovery time.”

Once again, our bodies are fully equipped to produce the enzymes we need to perform each of these critical tasks. But when we’re constantly eating enzyme-deficient foods, often accompanied by an onslaught of toxins and other poisons, our bodies have to work overtime to maintain balance. The long-term consequences of this include “enzyme burnout,” which can snowball into a cascade of chronic health conditions.
The Many Types and Uses of Enzymes

One of the most obvious symptoms of enzyme deficiency in your diet is poor digestion. If you often feel bloated or gassy after eating a meal, for instance, or experience abdominal discomfort on a regular basis, chances are you aren’t getting enough enzymes. In fact, unless you’re eating plenty of raw, organic food as part of your normal diet, you’re almost sure to be suffering from an enzyme deficiency – as millions of people today are!

If this isn’t bad enough, consider the fact that if you’re not getting enough enzymes, your body is also more than likely starving for nutrition – no matter how healthy you think you’re eating. Your muscles, brain, circulatory system, bones, vital organs, and intestinal tract all rely on vitamins, trace minerals, protein, carbohydrates, and hormones in order to function. But the only way they’re able to get any of these things is if enzymes are present to effectively extract them from food and deliver them to where they need to be.

Dr. Howell says enzymes are like a skilled labor force that’s responsible for building and maintaining a house. Our bodies can have all the necessary “materials” and “lumber,” a.k.a. vitamins, minerals, hormones, etc., needed to remain structurally sound, but unless there are workers (enzymes) on hand to actually put it all together, none of these materials will do us any good.

It would be one thing if enzymes were mere catalysts that inertly facilitated the delivery of nutrients throughout the body, as these could be easily replicated or substituted. But enzymes possess a unique type of life energy that Dr. Howell and others say exists nowhere else in nature. Much like the metal plates in a battery that hold an electrical charge, enzymes are unique substances that have been energetically equipped to perform essential life functions that no other substance found in nature is able to perform.

“Enzymes give off a kind of radiation when they work,” Dr. Howell says, adding that “there is no combination of proteins or any combination of amino acids or any other substance which will give enzyme activity.”

These one-of-a-kind “micro miracles” go by many different names, and perform many unique functions.
Proteases

Also known as proteolytic enzymes, proteases are responsible for breaking down the proteins and peptides in food into essential amino acids. When taken on an empty stomach, proteases actually bypass the stomach and enter the blood stream directly, where they help to break down excess fibrin, a protein compound that the body naturally uses to heal injuries.

While essential for breaking down foreign proteins like those that contribute to infection and disease, effectively helping to keep the blood clean, too much fibrin can increase blood pressure and actually inhibit the healing process by creating inflammation, leading to increased pain, chronic fatigue, and a higher risk of heart attack and stroke.⁵

Protease enzymes are rated based on their activity in various pH environments, typically ranging from 3.0-6.0. The higher the protease number, the broader its spectrum of activity within the digestive tract. Studies have shown that proteases may help to support your immune system and help support both digestive and circulatory health.⁶

Cellulase and Hemicellulase

These two enzymes are responsible for breaking down plant fiber into simple sugars like glucose, beta-glucose, and disaccharide – the body’s key sources of energy. Cellulase and hemicellulase help our bodies to properly digest greens, sprouts, herbs, and even fruits in order to take full advantage of their diverse nutritional profiles.

Cellulase enzymes are known to help maintain blood sugar levels that are already in a normal range, as well as maintain circulatory and GI health.⁷
Beta-Glucanase

Another enzyme that digests plant cellulose, beta-glucanase has the added benefit of also digesting cereal bran fiber and even certain types of fungi, yeast, and bacteria. Many fungal organisms like the infamous Candida albicans, as well as various intestinal biofilms, are surrounded by beta-glucans that aren’t easily digested by the body, but that are easily consumed by beta-glucanase.⁸

Amylase and Glucoamylase

Most vegetables, as well as potatoes, corn, rice, and wheat, contain carbohydrates and starches that require amylase and glucoamylase in order to properly digest. These two enzymes are responsible for breaking down carbohydrates and starches into simple sugars that the body can use to generate energy. Proper intake of amylase and glucoamylase can help to support digestive health.⁹

Xylanase

Like hemicellulase, xylanase helps to break down difficult-to-digest hemicellulose, a robust plant fiber found in beans, cereal grains, and fibrous vegetables. Because the human body can’t produce any xylanase on its own, and gut bacteria only produce a very small amount of it for their own purposes, supplementing with this important enzyme will help support the body to better digest fibrous foods and absorb their nutrients while preventing indigestion.¹⁰

Phytase

Nuts, edible seeds, beans, legumes, and grains all hold stores of the trace mineral phosphorus, an essential nutrient. But they do so in the form of phytic acid, an “anti-nutrient” that actually makes phosphorus and other trace minerals in the digestive tract less bioavailable to the body, leading to mineral deficiency. Phytate disengages phytic acid and unlocks phosphorus, while also releasing other phytic acid-bound minerals like calcium, magnesium, and zinc from food so the body can use them for growth and repair.¹¹

Possessing a unique ability to produce and metabolize B-vitamins, phytase also helps to support digestive and bone health.¹²
Pectinase

Many fruits and vegetables, including apples, bananas, and carrots, contain a type of fiber known as pectin that requires pectinase in order to digest. Fruits and vegetables produce their own pectinase—the riper a fruit or vegetable, the more pectinase it contains. But sometimes our bodies need more of it for improved digestion and nutrient absorption. Pectinase can help support the digestive system.  

Lipase

If you experience heartburn or indigestion after eating a meal, chances are you’re not adequately digesting fat, which could mean that you aren’t intaking enough lipase. The purpose of lipase is to hydrolyze (break down) fat molecules into smaller lipid components that our cells can use to maintain their overall structure and function.

Every cell in the body requires these lipid metabolites in order to perform their respective duties. The pancreas is supposed to produce the lipase needed to extract them from larger fat molecules. But when the body is having to work overtime to produce other enzymes due to an enzyme deficiency, lipase can become scarce.

Unless you’re aggressively intaking plenty of fat-soluble nutrients like vitamins A, D, E, and K, chances are you need more lipase to process the fat you consume as part of your normal diet. Intaking more lipase has been shown to help support overall digestive health.

Alpha-Galactosidase

Cruciferous vegetables like cauliflower, cabbage, and broccoli are considered among the healthiest foods that you can eat. They’re also some of the most difficult foods to digest, especially when they’re heavily cooked or processed, often creating gas, bloat, and other symptoms of indigestion.

Complex carbohydrate-dense foods such as these (which also include beans), require alpha-galactosidase, a glycoprotein enzyme, in order to digest. Along with saliva and pancreatic enzymes, alpha-galactosidase hydrolyzes glycolipids and glycoproteins into the various biomolecules that our bodies need for proper function and repair.
**Invertase**

Table sugar (sucrose) and other complex forms of sugar require invertase in order to break down into simple sugars like fructose and glucose that our bodies can use to produce energy. Commonly found in bee pollen and various types of yeast, invertase not only helps generate more simple sugar, it also helps the body to better utilize it.

The metabolic activity of invertase has been shown to support the immune system, brain health, as well as digestive health.\(^{16}\)

**Lactase**

Lactose intolerance is very common, but did you know that many people who suffer from it aren’t actually allergic to milk as they might believe? Milk contains a type of sugar known as lactose that requires lactase in order to digest it. Milk naturally contains both lactose and lactase, but when it’s heated at high temperatures to kill off bacteria (also known as pasteurization), lactase is completely destroyed. This leaves behind a “dead” food product that millions of unsuspecting people have trouble digesting.

If dairy products give you digestive troubles, you may need more lactase in your diet. This important enzyme can help support the digestive system.\(^{17}\)
Kiwifruit and Purple Grapes: Two Enzymatic “Powerhouse” Foods for Maximum Health

With a few exceptions, consuming whole foods in raw form is the simplest and most natural way to obtain the dietary enzymes you need for vibrant health. At the same time, there are some whole foods that stand above the rest as enzyme “powerhouses” due to the sheer volume and/or unique makeup of enzymes they contain.

One of these foods is the kiwifruit, which contains the world’s only known source of an enzyme called actinidin. The whole kiwifruit – flesh, seeds, and skin – is naturally rich in disease-fighting polyphenols, vitamin C, and omega-3 fatty acids. But it’s the actinidin content that really sets the kiwifruit apart as a functional food of exceptional digestive importance.

All by itself, actinidin is capable of digesting many different types of protein, including those found in yogurt, tuna, cheese, and raw eggs. Actinidin is so effective, in fact, as demonstrated in numerous cell and animal models, that some experts consider it to be one of the most powerful digestive support compounds in existence.

Another food that complements the enzymatic richness of kiwifruit is the purple grape, which contains an abundance of phytochemicals, antioxidants, and the nutrient resveratrol. One of the most potent anti-aging benefits of resveratrol is its ability to stop the body from producing sphingosine kinase and phospholipase D, two molecules that are known to contribute to rapid aging.

One of the amazing things about the way resveratrol functions as an antioxidant is its unique ability to cross the blood-brain barrier, allowing it to directly stimulate the brain and central nervous system. The far-reaching benefits of resveratrol also include its ability to help support brain health and overall health.

Where you’ll find the highest concentration of nutrients in purple grapes isn’t necessarily in the part of the fruit that most people eat, however. Essential compounds like resveratrol are primarily concentrated in the skin, seeds, and stems of purple grapes, not necessarily in the sweet flesh of seedless store varieties. And certainly not in highly-processed grape juice products that are mostly just sugar by the time they’re bottled and sold at the grocery store.
Enzymatically-Active Mushrooms that Help Fight Disease

You can also find enzymes and other healing nutrients in medicinal mushrooms like reishi (*Ganoderma lucidum*) and turkey tail (*Trametes versicolor*), both of which contain a treasure trove of healing compounds that are known to help support the immune system and support overall health.

The reishi mushroom, which bears the nickname “king of mushrooms” due to its pronounced and well-documented health effects, contains an enzyme known as laccase that studies have shown can help maximize the antioxidant potential of polyphenolic substances such as resveratrol. Reishi mushrooms also contain their own antioxidants that can help support the immune system, maintain the circulatory system, and maintain overall health.

The adaptogenic, immune-modulating nature of the reishi mushroom is a primary reason why it’s long been used as a key therapeutic in Traditional Chinese Medicine (TCM) to help create homeostatic balance throughout the body. Herbal practitioners recognize that the reishi mushroom is a nutritional powerhouse, helping to support the immune system.

Similarly, the turkey tail mushroom boasts incredible properties that have earned it the classification as a “super” mushroom. Like with reishi and other medicinal mushrooms, turkey tail is rich in beta-glucan polysaccharides that help support the immune system.

The turkey tail mushroom also contains enzymes that break down beta-glucons and other nutritive substances, and perform other remedial functions – much like they do in nature by decomposing organic material in order to deliver nutrients to soils.

Reishi and turkey tail just so happen to be two of the most highly regarded medicinal mushrooms on the planet, and for good reason – they’re two of the most powerful healing foods in the world, especially when it comes to supporting the immune system and overall health.
Sprouting and Fermentation Can Make Food Even More Enzymatic

The only thing better than all the high-enzyme, nutrient-dense “superfoods” previously mentioned are these same superfoods either sprouted or fermented. Depending on which superfoods we’re talking about, sprouting and/or fermenting can offer added benefits in the form of more bioavailable nutrients and enzymes for our bodies – which is always a good thing.

Sprouting is essentially the germination process applied to seeds, whether they be those of grains, nuts, or beans. Sprouting is what makes a seed grow into a full-size plant, and studies show that it makes seeds more nutritious to eat, producing higher levels of protein, essential amino acids, vitamins, and minerals.²³

Sprouting also neutralizes anti-nutrients like phytic acid that actually inhibit the body’s natural production and use of enzymes. Phytic acid, which is found in nuts, seeds, beans and legumes, directly interferes with the body’s manufacture of enzymes like amylase, trypsin, and pepsin, all of which are needed to break down protein and starches.²⁴

Fermentation is similar to sprouting in that it makes other difficult-to-digest foods like cruciferous vegetables and dairy products more nutritious and less demanding on the gut. By essentially allowing beneficial bacteria to feast on food and break down many of its core constituents before consumption, fermentation unlocks the densest nutrient stores in food and makes them more accessible to the body.²⁵
There’s a lot to digest here, and you’re probably thinking to yourself: it’s challenging enough to incorporate enough healthy food into my daily regimen, let alone worry about sprouting and fermenting it, or trying to calculate its enzyme content. We live in a busy, fast-paced world, after all – who has time for all of that?

These are valid concerns, but what if there was a way to get the enzymes you need to support the digestive system and overall health – as well as a healthy dose of some of the world’s most powerful enzyme co-factors – in a simple capsule?

The good news is, there is! It’s called OrganiZymes, and it provides you all the enzymes and enzyme co-factors discussed in this report, and more. It includes 17 digestive enzymes in all, in a base of sprouted and fermented superfoods, and the bottom line is this:

Considering how pure and effective it is, there is literally nothing else like OrganiZymes on the market today! So if you’re interested in finding out more…

Head Here Now to Find Out More About OrganiZymes

https://organixx.com/organizymes/
There is some very important and exciting news you need to know: a deep and fast-growing body of research is now showing that regardless of your genetic makeup, you have the ability — a tremendous ability — to positively shift your health through proper nutrition and other lifestyle choices you make.

In other words, you CAN take control of your own health.

This is what the science of “Organixx” is all about.

And here at Organixx, empowering you to take that control and make a profoundly positive impact on your health is the driving force behind everything we do.

Toward that end, it is our mission to provide you with a complete line-up of the world’s purest and most effective nutritional supplements that can truly make a powerful difference in your health and well-being.

Furthermore, we’re dedicated to providing these supplements to you at the fairest possible price. Yes, to ensure maximum effectiveness and safety we use only the world’s purest and best natural ingredients, and we employ very careful and exacting production processes, so our base costs are higher than “industry averages.” However, our price to you reflects markups that are far lower than industry averages, because we genuinely want as many people as possible to benefit from these best-in-class supplements!

The choices you make really do play THE key role in helping you live a long, healthy, and high-quality life. At Organixx, we’re committed to providing you with the world’s best supplements, and the most beneficial health insights, so you can continue to make the best health decisions for yourself.
Sources: