

Enzyme of the Month



Catalase (*Aspergillus niger*)

Catalase is an antioxidant enzyme found in the liver of most mammals. Its function is to catalyze the reaction that breaks the bonds of hydrogen peroxide so that it decomposes into water and oxygen without affecting the taste, texture or smell. It is the most active enzyme ever documented. It is off-the-charts fast, breaking bonds at a prolific rate of 5 to 40 million per second. This free radical fighter has no counter indications or downsides, but the health benefits may prove astounding.

In an article in The Scientist Magazine, Dr. David Sinclair, of Harvard Medical School, states there is proof the catalase enzyme prevents free radical damage and can extend our life span. Because of its free radical fighting ability, it may also help in the war against other degenerative diseases.

Oxygen powers our cells, but because it is a reactive molecule it can also cause serious issues if not fully monitored. One of the dangers of oxygen is that it can be transformed into other compounds that are responsive to it.

Inside our cells, electrons are continuously ushered from place to place by carrier molecules. Riboflavin and niacin are examples of compatible carriers. So, let's just say that Oxygen is off to play at the county fair for the day when suddenly he runs into the bullies Riboflavin and Niacin. Niacin grabs him by the collar and says, "Hey! You better join my gang or you gonna get beat up!" Oxygen, not wanting to get beat up, easily converts and joins "the gang." With strength in numbers and teamwork, "the gang" becomes "radically" more dangerous. By mixing with the riffraff, oxygen has changed into a superoxide radical and hydrogen peroxide. Muscle-bound and gaining strength in numbers the gang goes off to attack other hapless and helpless compounds such as sulfur atoms and metal ions in proteins. To make things worse, free iron ions in the cell occasionally convert hydrogen peroxide into hydroxyl radicals. These now deadly molecules attack and mutate DNA. One theory, still controversial, is that this type of oxidative damage accumulates over the years of our life, causing us to age and allow the onset of serious degenerative diseases.

Fortunately, bullies can often be discouraged by calling in the police. Our cells make an array of antioxidant enzymes which combat the dangerous side effects of life with oxygen. Two of our important heroes are superoxide dismutase, which converts superoxide radicals into hydrogen peroxide, and *catalase*, which converts hydrogen peroxide into water and oxygen gas. These many catalase molecules patrol the cell, counteracting the steady production of hydrogen peroxide and keeping it at a safe level.

The University of Washington in Seattle performed a study on rats and the enhancement of natural catalase in their bodies. Their research showed that by supplementing increased catalase to the rats, the life span of the subjects increased by near 20%. This is comparable to about 25 human years.

References: 1. [Britannica](https://www.britannica.com/science/catalase) - <https://www.britannica.com/science/catalase> 2. [Global Healing Center](https://www.globalhealingcenter.com/natural-health/catalase/) - <https://www.globalhealingcenter.com/natural-health/catalase/>
3. [PDB](http://pdb101.rcsb.org/motm/57) - <http://pdb101.rcsb.org/motm/57> 4. [Pub Med](https://www.ncbi.nlm.nih.gov/pubmed/16563232) - <https://www.ncbi.nlm.nih.gov/pubmed/16563232>

Characteristics

Description – highly active enzyme preparation derived from the fermentation of *Aspergillus niger*.

Color – light tan to tan

Odor – free of offensive odor and taste

Texture – fine, free flowing powder, soluble in water

Moisture - NMT 10.0%

PH - The optimum pH is 6.0 to 7.0 with a stability range from 5.0 to 8.5

Temp – Has an optimum temperature of 40° C with stability range up from 20-60° C.

Activity – NLT 7,500 Baker Units





Doctor Retail Affiliate Program



Join our Doctor Retail Affiliate Program!

On behalf of all of us at U.S. Enzymes, we are excited to announce that our **Doctor Retail Affiliate Program** is online and ready for you to activate.

Your patients will be able to place their own orders using the U.S. Enzymes website and your assigned code. Every order placed with your code will earn you 30%.

Example: 1 - Seaxym™ retails for \$70.00, you receive 30% or \$21.00

Your clientèle will see our complete list of products, descriptions and retail pricing. The entire order will be processed by our facility.

Five Easy Steps to participate in our Doctor Retail Affiliate program:

1. Request your **Doctor Retail Affiliate** account by emailing: info@usenzymes.com
2. Upon account approval, we will email a customized Patient Order Form to you. This form will have your unique referral code/link and how-to instructions for your patients to set up an account for making purchases.
3. We pay monthly on the 15th to your PayPal account. If you do not have a PayPal account, please go to paypal.com and sign up.
4. Email, print or hand out, this form to the client with your recommendations. They can click on the active link within the body of the email. Or, print off the Patient Order Form and ask them to go online, type in the custom assigned link for your practice. Subsequent ordering is easy, but your patients will need to remember to use the custom link for your practice as well as their username and password.
5. Commissions will be paid the 15th of the month, for purchases from the previous month.

Follow the link to login to your Affiliate Reward Dashboard.

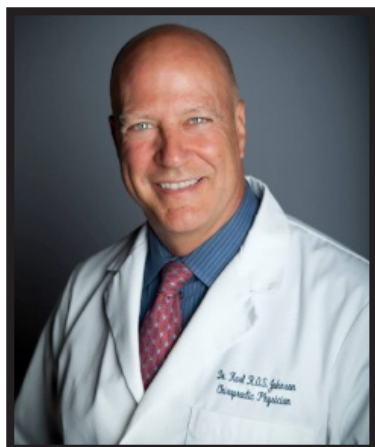
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Thank you for supporting excellence in enzymes!

From the U.S. Enzymes Team



Doctor of the Month



Congratulations to U.S. Enzymes doctor of the month. Dr. Karl R.O.S. Johnson

I have been in clinical practice since 1983 as a doctor of chiropractic and have always been interested in helping people heal by rooting out underlying causes to their health challenges, whether from a neurological, structural or nutritional perspective. Motivated by excellence, I have continued my education over the last 34 years and have studied functional neurology, functional medicine, clinical nutrition, neurofeedback (in process of board certification), various energy medicine techniques and Trigenics® Myoneural Special Procedures. A variety of supplement company's products have received my stamp of approval and found their way into my dispensary shelves after deliberate scrutiny.

When U.S. Enzymes first came on to my "radar" two years ago. Jason's (U.S. Enzymes Advisor) detailed explanation of their quality and function resonated with me and I placed my initial order. At the time, there were only a few products and I started personally using them. Having gluten induced early neuropathy, I started with Nattoxym™, Serraxym™, Theraxym™, Seaxym™. Soon the nasty burning, achy pain in my toes that would occasionally wake me thankfully stopped. I use Digestxym™, Glutaxym™ and Proteinxym™ and I will add more products as I learn how and what to use for maintaining optimal wellness.

I also started using the products with patients and found the Seaxym™ was super helpful in dealing with the stubborn sinus problems some patients presented with. I use Nattoxym™ with neuropathy patients as well as those with cardiovascular issues. As the product line has expanded, I have started replacing other products in my dispensary with U.S. Enzymes products. Having been an enzyme proponent for years since reading Enzyme Nutrition by Dr. Edward Howell, I became an "enzyme snob" and always sought out the best enzyme products. **Now with U.S. Enzymes, I don't have to look far to find super high quality and effectiveness.** Adding enzymes to other nutrients such as vitamin D, etc. is such an awesome idea, and I look forward to swapping out more and more of my dispensary inventory with the offering from U.S. Enzymes.

Speaking of U.S. Enzymes, Jason Rozin is a great resource for information and is happy to help anyone interested from the novice to the experienced nutritionist. I am very thankful to have met Jason Rozin and Troy Aupperle (Technical Enzyme Advisor).

Dr. Karl R.O.S. Johnson, DC, DNMSc, BCIM, FICPA, FIFHI

"Digging Deeper To Find Solutions"

Author of Reclaim Your Life: Your Guide To Revealing Your Body's Life Changing Secrets For Renewed Health

<http://www.DrKarlJohnson.com>

"...I look forward to swapping out more and more of my dispensary inventory with the offerings from U.S. Enzymes"

-Dr. Karl R.O.S. Johnson



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December 2017
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Special of the Month



KREBXYM™

ON-LINE ORDERING AVAILABLE THROUGH U.S. ENZYMES WEBSITE

VISIT: usenzymes.com
CLICK ON: Request an Account

10% off case of 12
enter website code DEC10

15% off 24 or more
enter website code DEC15



KREBXYM™

KREBXYM™ is a proprietary blend of vitamins and minerals designed to enhance the absorption of co-enzymes and co-factors into the mitochondria to support the Krebs' Cycle.* It's blended in a base of AstraZyme™.

Enzymes are the building blocks of life and nothing in our bodies (or life) can function without them. Enzyme reactions provide a steady power supply to keep all systems active, functioning and producing anti aging & anti-oxidant effects.* Vitamins and minerals are considered co-enzymes so they work with enzymes to produce more effective results.

Enzyme / Vitamin / Mineral therapy:
Promotes energy production*
Supports a healthy nervous system*
With AstraZyme™ increases absorption*

Visit our YouTube channel to view our product related video's!

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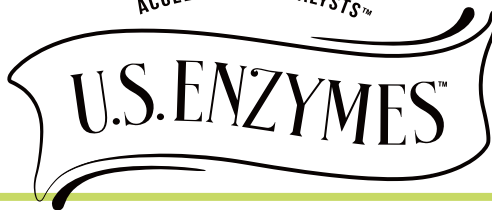


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ACCELERATED CATALYSTS™



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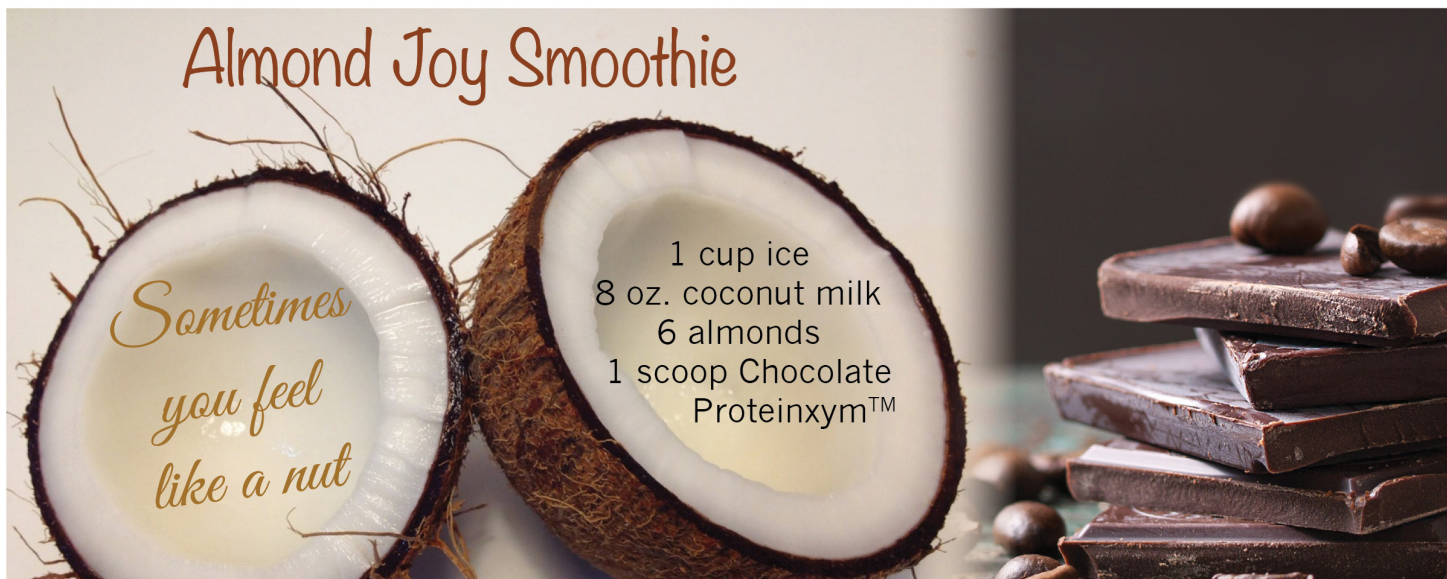
Recipes of the Month



Add a scoop of Proteinxym™ powder to any one of your favorite recipes and you've got yourself a tasty, couldn't-be-easier, snack or meal replacement drink that should be hands down the best health improvement drink you've ever tasted.

These are our favorite submitted recipes. Submit one of your own!

Almond Joy Smoothie



*Sometimes
you feel
like a nut*

- 1 cup ice
- 8 oz. coconut milk
- 6 almonds
- 1 scoop Chocolate Proteinxym™

Kickstart Sunrise Smoothie



- 1/2 cup ice
- 6 oz. of water
- 6 oz. of orange juice
- 1 scp of Vanilla Proteinxym™
- 1/2 banana
- 1/4 cup of strawberries

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