

Cell Energy

"All Roads to living longer, anti-aging lead to Resveratrol". This compound is a polyphenol which has an effect on inflammatory disease by stopping sphingosine kinase and phospholipase D. While inflammation is a natural response in your body (it's a process in which your body's white blood cells protect you from outside invaders such as bacteria and viruses), it's possible for your body to exist in a chronically inflamed state. Chronic inflammation is not a beneficial bodily response, and in fact has been linked to numerous chronic diseases including heart disease.

What Makes Resveratrol a Unique Antioxidant?

Resveratrol is unique among antioxidants because it can cross the blood-brain barrier to help protect your brain and nervous system, and studies show that its benefits are wide reaching, including:

- Protecting your cells from free radical damage
- Inhibiting the spread of cancer, especially prostate cancer
- Lowering your blood pressure and cholesterol
- Keeping your heart healthy and improving elasticity in your blood vessels
- Normalizing your anti-inflammatory response
- Helping to prevent Alzheimer's disease

Because Resveratrol appears to be so effective at warding off many diseases associated with aging, it is often referred to a "fountain of youth" that can extend lifespan. Furthermore it stimulates the production of Melanin!

Already, animal studies have shown that Resveratrol helped overweight mice run farther and live about 20 percent longer. It has even been found to increase the lifespan of human cells.

More Tips for Lowering Inflammation

Increasing your intake of Resveratrol may be a potent way to lower inflammation in your body, but it is far from the only way. If you're suffering from excess

inflammation, you really need to focus on your diet, as inflammation is aggravated by:

- Oxidized cholesterol (cholesterol that has gone rancid, such as that from overcooked, scrambled eggs)
- Lots of sugar and grains
- Foods cooked at high temperatures
- Trans fats

In addition to avoiding the dietary hazards just mentioned, here are a few more recommendations that can have a profound impact on reducing inflammation in your body:

1. Take Astaxanthin (see SuperTEN).
2. Make sure you're eating the right foods for your body's unique nutritional type.
3. Optimize your insulin levels. If your fasting insulin level is not lower than 3, consider limiting or eliminating your intake of grains and sugars until you optimize your insulin level.
4. Make sure your Vitamin D levels are optimized. Most people are not aware that vitamin D can have a profoundly dramatic impact on normalizing blood pressure and lowering your risk for inflammation and related heart disease. (See D POWER)

Resveratrol as a Phytonutrient

Renowned for its healthy aging properties, Resveratrol dynamically supports the health of the circulatory and cardiovascular systems, as well as supporting healthy energy levels, endurance and stamina. First discovered in 1940, Resveratrol is a standout among phytonutrients-beneficial bio-molecules in plants-with more than 4,000 research studies describing its effects on physiology. Classified along with bioflavonoids as a "polyphenol", Resveratrol is a powerful antioxidant that outperforms most other plant-based flavonoids. Resveratrol boosts the function of enzymes in the body that help tamp down the impact of oxidative stress on tissues, which can elevate when free radicals build up to excess. Lastly, Resveratrol stimulates Glutathione production in the lungs to combat oxidative stress.



Take Resveratrol for the Heart & Brain

Scientific investigation about Resveratrol's importance for cardiovascular health has led to a deeper understanding of its extraordinary cellular effects. Resveratrol has been shown to interact with cell membrane receptors that maintain dynamic function of the cardiovascular system. Among its more significant actions, Resveratrol appears to support a key enzyme that stimulates production of nitric oxide in blood vessel linings. This in turn promotes relaxation of blood vessels and healthy circulation increases oxygen to the cells through maintaining magnesium-calcium balance which prevents the calcification of the body. Lastly, Resveratrol stimulates the pineal gland to produce Melanin.

Resveratrol stimulates special set of genes called **Sirtuins**. This activity increases when caloric restriction occurs promoting anti-aging and prove beneficial to individuals in repairing their DNA and with degenerative diseases such as cancer, Alzheimer's, diabetes, atherosclerosis, and gout.

Alzheimer's

Sirtuins (SIRT1) deacetylates and coactivates the retinoic acid receptor beta that upregulates the expression of alpha-secretase (ADAM10). Alpha-secretase in turn suppresses beta-amyloid production. Furthermore, ADAM10 activation by SIRT1 also induces the Notch signaling pathway, which is known to repair neuronal damage in the brain.

Diabetes

Sirtuins have been proposed as a chemotherapeutic target for type II diabetes mellitus.

Aging

Preliminary studies with resveratrol, a possible SIRT1 activator, have led some scientists to speculate that resveratrol may extend lifespan. Further experiments conducted by Rafael de Cabo et al. showed that resveratrol-mimicking drugs such as SRT1720 could extend the lifespan of obese mice by 44%. Comparable molecules are now undergoing clinical trials in humans.

Cell culture research into the behavior of the human Sirtuins SIRT1 shows that it behaves like the yeast Sirtuins Sir2: SIRT2 assists in the repair of DNA and regulates genes that undergo altered expression with age. Adding resveratrol to the diet of mice inhibit gene expression profiles associated with muscle aging and age-related cardiac dysfunction.

A study performed on transgenic mice overexpressing SIRT6, showed an increased lifespan of about 15% in males. The transgenic males displayed lower serum levels of insulin-like growth factor 1 (IGF1) and changes in its metabolism, which may have contributed to the increased lifespan.

Glutathione

Glutathione represents a tripeptide that resides in the lungs, gastrointestinal tract lining, blood and cells of the body. Glutathione is the "**Super Hero**," "**Mother of all antioxidants**" and "**Underground Antioxidant**" considered the most powerful chemical made by the body, an essential molecule to certain Phase II enzymatic pathways. Normally, this compound ONLY available as an option in Myers I.V. Cocktail formulation for nutritional support. Cell Energy has this antioxidant available and absorbed within seconds! Furthermore, a key benefit of Glutathione it'll "**RECYCLE THE VITAMINS in your BODY which is Essential for Athletic Performance and daily activities under in normal and extreme weather conditions!**"

Why Glutathione is essential to health and longevity: [click here](#) view **CELL ENERGY**

http://www.huffingtonpost.com/dr-mark-hyman/glutathione-the-mother-of_b_530494.html

Studies have shown Glutathione attaches to and removes toxic compounds, heavy metals in the liver, enabling them to be excreted. Furthermore, it binds with iron to increase absorption into the cells, also combines with pollutants such as cigarette smoke, auto exhaust in the lungs, X-rays and radiation which become safely eliminated. Glutathione intercept and neutralize toxins before they can be absorbed. This tri-peptide protects new cells and prevents damage thus providing an anti-aging

effect. Under optimal circumstances, the body produces the necessary levels however, a poor diet high in sugar and medications deplete reserve levels of this compound. Glutathione level starts to decrease around age 45 years and decline after age 60. However, evidence-based research in nutrition indicates an alarming trend that Glutathione levels are at dangerously low levels in children raised on a high sugar diet. Sucrose and its derivatives deplete Glutathione levels resulting in the various conditions listed. Glutathione exists in food however the levels are not at a sufficient level to nourish the body. Consuming **B Boost** will recycle your Glutathione level in the body. The day will come where athletes and people with different health issues could perform extraordinary athleticism plus mental and physical feats with lots of energy based on the formula, absorption rate due to the spray technology and delivery method. Team Effort Network is the **ONLY** company that has Glutathione in a spray! **Studies have shown that individuals who maintain the highest levels of Glutathione remain the healthiest and live the longest!**

Dietary antioxidants are great, but they neutralize disease-promoting free radicals at a rate of 1:1. One antioxidant molecule kills one free radical and then it's done. The problem lies in the fact that cells produce on average about 300 sextillion free radicals every day. That's the number 3 with 23 zeros behind it! Glutathione is the only antioxidant to neutralize that many free radicals and recycle with help of various co-factors.

One must consume 375 oranges per day to neutralize that many free radicals!

By activating NRF2 via phytonutrients and Michael Acceptor Pharmacophores (MAPs) polyphenol **EGCG** (epigallocatechin gallate) instructs the genes to produce antioxidant enzymes that can destroy free radicals at a rate of up to one million per second! Furthermore the enzymes are recycled and keep fighting the good fight by protecting your cells and extinguishing inflammation.

One of these antioxidant enzymes is **Glutathione**, the chief cellular antioxidant and protector. You can't eat it because stomach acid will destroy this compound. Instead, you have to coax your cells and genes to produce more of it via foods however, using an intra-oral spray Glutathione, goes directly into the bloodstream in seconds neutralizing free radicals! source: <http://undergroundwellness.com/glutathione-the-underground-antioxidant/>.

Here's a Glutathione Generally Recognized As Safe (GRAS) National Institute of Health study:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3162377/>

Glutathione deficiency results in the following conditions:

- Oxidation due to free radicals

- Lung Problems: Chronic Obstructive Pulmonary Disorder (COPD); Emphysema, Asthma, Allergies, etc.
- Muscular & Skeletal Problems (Helps with removing Lactic Acid buildup)
- Heart Problems
- Eye Problems: Macular Degeneration, Cataracts, etc.
- Inflammation
- Rheumatoid Arthritis
- Immune System Problems
- Skin Problems
- Neurological Problems: Alzheimer's, Lou Gehrig's disease, Dementia, etc.
- Chronic Fatigue Syndrome
- Gastrointestinal Problems
- Various Forms of Cancer
- Protection from Radiation
- Protects your red and white blood cells

Alpha Lipoic Acid (ALA)

Alpha-Lipoic acid (ALA) is an antioxidant made by the body and found in every cell, where it helps turn glucose into energy while recycling Glutathione. Antioxidants attack "free radicals," waste products created when the body turns food into energy. Free radicals cause harmful chemical reactions that can damage cells in the body, making it harder for the body to fight off infections also cause damage organs and tissues.

Other antioxidants work only in water (such as vitamin C) or fatty tissues (such as vitamin E), but alpha-Lipoic acid is both fat- and water-soluble. That means it can work throughout the body. Antioxidants in the body are used up as they attack free

radicals, but evidence suggests alpha-Lipoic acid may help regenerate these other antioxidants including Co-Q10 and make them active again.

In the cells of the body, alpha-Lipoic acid is changed into dihydrolipoic acid. Alpha-Lipoic acid is not the same as alpha linolenic acid, which is an omega-3 fatty acid that may help heart health. It helps with diabetes, stroke, brain dysfunction and smoothes fine lines and wrinkles.

Alpha-Lipoic acid is used for diabetes and nerve-related symptoms of diabetes including burning, pain, and numbness in the legs and arms. High doses of alpha-lipoic acid are approved in Germany for the treatment of these symptoms.

Some people use alpha-lipoic acid for memory loss, chronic fatigue syndrome (CFS), HIV/AIDS, cancer, liver disease, diseases of the heart and blood vessels (including a disorder called cardiac autonomic neuropathy) and Lyme disease.

Alpha-lipoic acid is also used to treat eye-related disorders, such as damage to the retina, cataracts, glaucoma, and an eye disease called Wilson's disease.

How does (ALA) work?

Alpha-Lipoic acid (ALA) seems to help prevent certain kinds of cell damage in the body, and also restores vitamin levels such as vitamin E and vitamin C. There is also evidence that alpha-lipoic acid can improve the function and conduction of neurons in diabetes.

(ALA) is used in the body to break down carbohydrates and to make energy for the other organs in the body.

Furthermore, it works as an antioxidant, which meaning could provide protection to the brain under conditions of damage or injury. The antioxidant effects might also be helpful in certain liver diseases.

Dr. Berskson's career and caused him to make choices that eventually led to where he is at now. Since then, he has lectured all over the world on this topic, and published a study on the use of antioxidants for the treatment of hepatitis C. His first book, *The Alpha-Lipoic Acid Breakthrough* was published in 1998.

Why You Need Antioxidants

Your entire body, including your DNA, is under endless, daily assault from a variety of sources, from poor diets to pollution. Think of your cells, including your brain cells, each getting hit by free-radicals thousands of times a day. This violent process is called "oxidation," which damages your cells.

Enter antioxidants. They include vitamins and other nutrients that target free radicals.

Food, particularly fruits and vegetables, is a powerful source of these valiant protectors, and your body produces some itself. Their role is to limit the damage to your cells, which can slow down disease and signs of aging.

In the case of (ALA), your body does produce it in minute quantities, but most of it comes from your diet: fruits, vegetables, grasses, nuts, grains and now **CELL ENERGY**.

The Benefits of Alpha Lipoic Acid (ALA)

This nutrient has many functions, however is effective as a free radical scavenger, and the only one known to easily get into your brain.

It also has the ability to regenerate other antioxidants such as vitamins C, E, and glutathione. So, when your body has used up these antioxidants, if there's ALA around, it helps regenerate them.

Note, (ALA) regenerates glutathione, also recycles Coenzyme Q10 and Nicotinamide Adenine Dinucleotide (NAD). Furthermore, this powerful antioxidant is also:

- A great modifier of gene expression to reduce inflammation
- A very potent heavy metal chelator
- An enhancer of insulin sensitivity

The benefits of ALA can appear near miraculous. For example, according to Dr. Berkson, Russia has successfully used ALA intravenously to reverse ischemia reperfusion injuries by injecting it right after a heart attack or a stroke.

And people with diabetes or metabolic syndrome tend to do much better when taking lipoic acid, as it enhances insulin sensitivity.

There's even been quite a bit of research showing it can restore T cell function. T cells are a type of white blood cells that are of key importance to your immune system, and are at the core of adaptive immunity, the system that tailors your body's immune response to specific pathogens.

Additional Benefits using Alpha Lipoic Acid?

Clinically, alpha lipoic acid seems to be a useful supplement in treating hepatitis C. It can also be used for painful nerve conditions in diabetes, and may help slow down the aging process itself through its reduction in free radicals. Some studies indicate using (ALA) for the reversal of a number of more serious health conditions:

- Lupus
- Rheumatoid arthritis
- Dermatomyositis (an inflammatory muscle disease)
- Autoimmune diseases

Can Alpha Lipoic Acid Help Your Workout?

Alpha Lipoic acid can be a potent aid when you exercise vigorously.

Dr. Berkson provided an anecdotal story about a friend – an international weight lifting champion – who regularly uses ALA prior to meets.

Natural Caffeine

Caffeine is a chemical found in cocoa, coffee, tea, cola, Guarana, Yerba Mate, and other products. The amount of this product in Cell Energy is less than a quarter cup of coffee.

Caffeine is most commonly used to improve mental alertness, but it has many other uses. Caffeine is used by mouth or rectally in combination with painkillers (such as aspirin and acetaminophen) and a chemical called ergotamine for treating migraine headaches. It is also used with painkillers for simple headaches and preventing and treating headaches after epidural anesthesia.

Some people use caffeine for asthma, gallbladder disease, attention deficit-hyperactivity disorder (ADHD), shortness of breath in newborns, and low blood

pressure. Caffeine is also used for weight loss and Type 2 diabetes. Caffeine is used to detoxify the liver, helps with improving skin tone, moisture, wrinkles, reduce cellulite and is a food which encourage Melanin production in the Skin [click here](#) and there are other sites which and YouTube videos that go into greater detail.

Caffeine is one of the most commonly used stimulants among athletes. Taking caffeine, within limits, is allowed by the National Collegiate Athletic Association (NCAA). Urine concentrations over 15 mcg/mL is prohibited. It takes most people about 8 cups of coffee providing 100 mg/cup to reach this urine concentration.

Caffeine creams are applied to the skin to reduce redness and itching in dermatitis.

Healthcare providers sometimes give caffeine intravenously for headache after epidural anesthesia, breathing problems in newborns, and to increase urine flow.

In foods, caffeine is used as an ingredient in soft drinks, energy drinks, and other beverages.

How does it work?

Caffeine works by stimulating the central nervous system (CNS), heart, muscles, and the centers that control blood pressure. Caffeine can raise blood pressure, but might not have this effect in people who use it all the time. Caffeine can also act like a “water pill” that increases urine flow. But again, it may not have this effect in people who use caffeine regularly. Also, drinking caffeine during moderate exercise is not likely to cause dehydration. The Natural Caffeine level in Cell energy is less than a quarter of a cup of coffee.

The benefits of Cell Energy in conjunction with D Power, B Boost, Super TEN and SLIM By TEN synergistically supply nutrition to the body. Cell Energy revitalizes and rejuvenates the body giving energy plus anti-aging benefits. Furthermore, athletes wanting that edge and maximize their performance and workouts could achieve dramatic results. Individuals affected with the above disease conditions should give Cell Energy an opportunity. The energy experienced from this product is generating phenomenal results. No other company has Glutathione in an intraoral spray with a 98% absorption rate entering the blood in seconds! The Physician Desk Reference (PDR) researched this delivery mechanism is the best and fast method for absorption

of nutrients. (Source Anti-aging Manual by Dr. Joseph Marion, N.D., Mercola.com, Univ. of Maryland Medical Center & WebMD.com)