

Is your brain aging *too fast*?

Now with
Resveratrol for
unparalleled DNA
support and
protection

DHLA Nano-Plex™

The World's First Stable DHLA
Unprecedented in History

"Case after case, results with DHLA Nano-Plex™ have shown just two 30-drop doses (50 mg each) dramatically shifts the lipid peroxide profile from excessively high levels to the lower quartile when 400 to 600 mg of ALA (alpha-lipoic acid) did not. At a recent seminar, literally every practitioner who tried this product could feel heat and tingling opening into their head, producing an on-the-spot rise in energy and mental focus."

Bob Marshall, PhD, CCN
Austin, Tx



Still looking for the **ONE** proven supplement
to help literally every patient with immune-specific problems or low energy?



- ◆ Never-before-available health benefits: premier nerve and brain cell nourishment, protection and rejuvenation*
- ◆ Significant help for immune-related concerns, especially fatigue and muscle aches*
- ◆ DHLA has far superior free radical quenching power than alpha or R-lipoic acid
- ◆ DHLA is the ultimate antioxidant capable of quenching every known free radical in living cells, one of the major causes of chronic health dysfunction¹; DHLA recycles all major antioxidants, including CoQ-10, glutathione and vitamins E and C*
- ◆ Practitioners report that patients taking DHLA Nano-Plex™ require far fewer supplements and experience dramatic improvement in significantly less time because it promotes such rapid balancing of brain and nerve chemistry*

Lipoic acid's fabulous health benefits are famous for the liver, immune system, brain, anti-aging and more.* Now you can get all these benefits and much more.

IF ONLY . . .

. . . you could get the best lipoic acid, the reduced form (DHLA), highly bio-available, ensuring enhanced metabolism,* ATP synthesis and the ultimate in free radical quenching. Then you'd get the very best benefits – especially for those running out of time. **Now you can!**

WE DID IT –

For the first time in history (patent pending), we have developed a stable, fully reduced form of lipoic acid (DHLA) – derived from “once-living” sources (*not typical synthetic sources*). Now you can get huge amounts of exquisitely bio-available DHLA, fully active and intracellularly potent. The lab director who performed the independent laboratory assay on our DHLA expressed his surprise at the creation of DHLA in a stable form – which has *never* been done before.¹

And It Really Works –

DHLA Nano-Plex™, the world's *first and only* stable, live-source, reduced form of DHLA, is vastly superior to alpha-lipoic acid (ALA), R-lipoic acid or R-DHLA in long term DNA protection and free radical quenching capacity – and thus can deliver more comprehensive reduction of oxidative stress for literally **EVERY** organ and gland, especially the brain and the nervous system.* For example, **DHLA Nano-Plex™** can quench the superoxide anion free radical and the peroxy radical whereas ALA and R-lipoic acid cannot.

How DID we do it?

In our proprietary process, **DHLA Nano-Plex™** is produced by 12 strains of beneficial probiotic organisms that pre-culture and “nanize” our nutrient sources where they become part of the living probiotic structure, micro-digested into particle sizes so tiny they become exceptionally bio-available. Just ¼ tsp. provides 80 mg. of DHLA² and 5 mg of Resveratrol. Take note: there are **NO OTHER** live-source DHLA supplements available in the world! The closest you might come is a product with alpha-lipoic, R-lipoic acid or R-DHLA (*but from non-live sources*).

Fast-Acting. Excellent for even your worst cases. Many people experience a sense of increased energy and well being with the very first dose. Start the DHLA immune system cleanup today. Available in 2 oz glass bottles; 48 servings/bottle.

DHLA is the only known antioxidant (*not* ALA or R-lipoic acid) capable of quenching every known free radical found in living cells: all ROS (reactive oxygen species) and RNS (reactive nitrogen species). While ALA and R-lipoic acid forms may be helpful, they cannot compare with the free radical quenching power of DHLA, nor can they compare to the boost in metabolism and ATP synthesis of DHLA.

Most all sources of ALA, R-lipoic or R-DHLA are synthetic – devoid of a “body of light” and therefore, ultimately act to degrade cellular DNA and, with long-term use, they can accelerate aging (as shown in biophotonic research by Dr. Fritz-Albert Popp, a noted German biophysicist).

DHLA Nano-Plex™, on the other hand, is not only the superior, reduced form of lipoic acid (DHLA), but it is also derived from “once-living” nutrient sources (*not devitalized, synthetic sources*) so a single serving has long-lasting benefits that *no amount* of synthetic alpha lipoic acid, R-lipoic and R-DHLA can deliver.

Experience for yourself the increased energy, mental clarity, concentration and sense of well-being - *only possible* with “once-living” **DHLA Nano-Plex™**.*



Premier Research Labs

“Nutrition That Really Works”™

- The Excipient-Free Company (*no toxic magnesium stearate, methyl parabens, natural flavors [MSG], etc.*)
- Full-practitioner line available, clinically tested, quantum quality
- Full-time practitioner support team, practitioner test kits available

*This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.

¹Ames, BN et al, Oxidants, antioxidants, and the degenerative diseases of aging (*Proc Natl Acad Sci USA* 1993 Sep; 90:7915-22)

²Confirmed by independent laboratory assay; copy available upon request.

Stabilized DHLA

Dihydrolipoic Acid: The Premier Anti-Aging, Free Radical Quencher

- *The King of Antioxidants: Unparalleled Free Radical Protection*
- *The Best DHLA Form Derived from a "Once Living" Source*

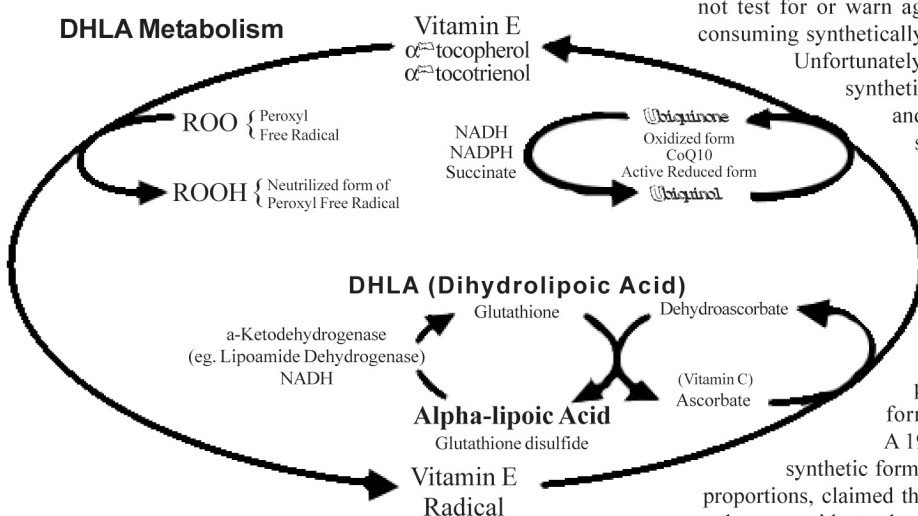
DHLA: The Spectacular Antioxidant

DHLA (dihydrolipoic acid) is unique as an antioxidant due to its spectacular effectiveness in quenching *every* known free radical that occurs in living tissue, including both fat and water-soluble tissues. No other antioxidant has this incredible capability. DHLA is readily absorbed orally and has very low toxicity. It has unequalled potential as a highly effective therapeutic agent in clinical conditions associated with free radical damage such as Parkinson's disease, Alzheimer's disease and other neurodegenerative illnesses.¹

Until recently (2003), DHLA in a stabilized form was not available. DHLA could only be obtained indirectly through consuming ALA (alpha lipoic acid) which in turn, was converted by the body into small amounts of DHLA. However, this process did not deliver a significant or reliable supply of DHLA. Research studies have attempted to measure the effect of DHLA on cellular tissue using indirect methods based on ALA consumption. As a result, DHLA is known to be a powerful electron donor to other compounds. Ascorbic acid and indirectly vitamin E are regenerated by DHLA.² Busse et. al. found that the oxidized form of DHLA, ALA, increased intracellular glutathione.³ DHLA was shown to regenerate coenzyme Q10, glutathione and NADPH or NADH and by this mechanism, increase cellular ATP production.⁴ The oxidized form of DHLA, ALA, also assists in the conversion of pyruvate to acetyl-coenzyme A, the beginning point of the Krebs cycle which produces the high energy molecule ATP.

The Discovery of Stabilized DHLA

Recently, the world's first stabilized form of DHLA has been created by Robert J. Marshall, PhD, CCN, of Round Rock, Texas and has been verified by independent laboratory testing. Stabilized DHLA offers a significant and reliable source of DHLA, never before available.



not test for or warn against the long-term problems encountered in consuming synthetically-derived agents.

Unfortunately, most research studies using ALA have used the synthetic form which contains equal amounts of the R and the S racemic forms. The S form occurs only in synthetic-source ALA, never in naturally-derived ALA, and has negative, pro-inflammatory effects. In an attempt to enhance the effectiveness of synthetic ALA, some manufacturers have chemically removed the S-form, thus producing a new form, stand-alone R-lipoic acid. Because synthetically derived ALA contains both R and S forms, studies show that synthetic R-lipoic acid alone is superior to ALA (which contains both R and S forms).

A 1995 research study using DL-alpha-lipoic acid, a synthetic form containing both the R and the S forms in equal proportions, claimed that the resultant DHLA was both an antioxidant and a pro-oxidant where hydroxyl radicals were generated.⁸ However, new research since the year 2000 has shown the S-form of lipoic acid (which has pro-inflammatory effects) may well be the cause of this pro-oxidant study finding (rather than as an effect of DHLA).

The highlights of ALA research, including R-lipoic acid and S-lipoic acid, are as follows:

- **Scavenger of Free Radicals.** Lester Packer, PhD, of the University of California at Berkeley, has shown that ALA is a powerful free radical quencher and metal-chelating agent. It helps regenerate other antioxidants and favorably affects gene expression.¹ Experts are in general agreement that ALA can scavenge the hydroxyl radical, hypochlorous acid radical, and singlet oxygen radical, but not the peroxy or superoxide anion free radical.^{1, 5-7}
- **Kidney Protection:** Research by Sandhya et. al. found that ALA protected kidney cells in a dose-dependent manner.⁸
- **Arsenic Protection:** Research has shown that ALA can protect mice from poisoning by sodium arsenite, an arsenical herbicide, insecticide and rodenticide by a ratio of ALA to arsenite of at least 8:1. The mice were protected even if the administration of ALA was given after onset of severe symptoms of poisoning.⁹
- **Mercury Protection:** Further research has demonstrated that ALA removed mercury from renal slices (kidney).¹⁴ ALA was also shown to dramatically increase biliary excretion of injected mercury while decreasing cadmium, zinc, copper and methylmercury excretion.¹⁵

Synthetic vs. "Once Living" Sources

ALA, R-lipoic acid or DHLA that are derived from synthetic sources can never match natural-source counterparts in the ability to sustain and repair the DNA of the cell. A natural ("once living") source is comprised of dynamic, complex processes where each molecule contains atoms that generate photons, or in other words, pure light. The photonic field around each molecule creates a "body of light" which surrounds all living substances. Only nutrients derived from a "once living" source are capable of upgrading cellular DNA, according to quantum physics researcher and expert, Dr. Fritz-Albert Popp.³³

On the other hand, synthetic-source nutrients may provide initial cellular benefits, but over time, they act to accelerate the degeneration of DNA, ending in earlier cell death. Synthetic nutrients initially stimulate the cell to accomplish work which may appear to be beneficial, but long-term, the DNA and cellular degradation cannot justify the initial benefits. Consequently, using ALA derived from a synthetic source can defeat the purpose of using an ALA supplement to live longer more healthfully. Not only has a stable form of DHLA been badly needed, but also a DHLA source that has been derived from a "once living" source so it is capable of imparting significant, long-term DNA protection and cellular benefits.

Benefits of ALA (Alpha Lipoic Acid)

Research Summary

Many research studies show the spectacular benefits from the use of ALA, even ALA derived from synthetic sources. Although these studies demonstrate many, short-term benefits of synthetic ALA, they do

- **Cadmium Protection:** In another study, ALA and R-lipoic acid were shown more effective than S-lipoic acid (which occurs only in synthetic ALA) in metal chelation.¹⁰ In isolated hepatocytes (liver cells), ALA reduced cadmium-induced toxicity. However, DHLA was much more effective than ALA.¹¹ ALA (and therefore DHLA at least as much or more) was shown to provide significant liver protection against cadmium toxicity, even under glutathione-depleted experimental conditions.¹² Another study showed ALA completely prevented cadmium-induced lipid peroxidation in the brain, heart and testicles in rats.¹³
- **Restoration of Metabolism and Mobility:** R-lipoic acid supplementation reversed the age-related, declining ability of rats to respond to increased oxidative stress. The age decline was almost completely reversed on a two-week dietary supplementation of R-lipoic acid.¹⁶ When fed to old rats, R-lipoic acid showed complete reversal of declining levels of glutathione and ascorbic acid in hepatocytes. In addition, the metabolic rate and mobility of the old rats were also restored to that of youthful rats.^{17, 18}
- **Decreased Oxidative Stress in the Heart:** Another study found the aging rat heart is under increased mitochondrial-induced oxidative stress (elevated free radical attack). This oxidative stress in the heart was significantly reduced by R-lipoic acid supplementation.¹⁹
- **Improvement in Type II Diabetes.** Since the year 2000, about 80% of all type II diabetes is now believed to be linked to infection. Type II diabetes is now at epidemic proportions with 900,000 new cases per year in the U.S. The infectious process produces large amounts of free radicals. One marker of free radical damage common to Type II diabetes is AGEs (advanced glycation end products). Glycation of protein can be caused by elevated blood and tissue glucose. Packer and Kawabata²⁰ showed that non-covalent binding of ALA to albumin protects protein from glycation. Other studies using ALA in Type II diabetes have shown improvement in insulin metabolism.^{21, 22} Nerve damage (polyneuropathies) is common in diabetes and has been successfully treated with ALA in Germany for more than 20 years. Findings show that ALA administration yielded excellent results: albuminuria decreased 50%,²³ and neuropeptide deficits, nerve blood flow and neurological symptoms all improved.^{24, 25, 26}
- **Glaucoma Improvement:** In one glaucoma study, stage I and II OAG (open-angle glaucoma) patients were assigned to one of 3 groups: no ALA, 75mg or 150mg ALA daily for 2 months. The greatest improvement in visual function, efficacy of liquid discharge and biochemical markers were observed in the group receiving the higher dose of ALA.³⁰
- **Protection Against Cataracts:** Cataracts in diabetics have shown a direct correlation with high levels of aldose reductase, which is inhibited by ALA in the lenses of rats.³¹ Other studies suggest ALA supplementation may be protective against cataract formation by other causes.³²

Benefits of Stabilized DHLA

The above clinical research studies using synthetically-derived ALA had obviously spectacular physiological benefits. However, as has been emphasized earlier, these benefits are not without a price to pay, namely, the eventual degradation of the cellular DNA which occurs during long-term use of synthetic compounds.

Advantages of Natural-Source DHLA: Stabilized DHLA (natural-source) may prove to be one of the most significant antioxidant compounds ever created, since it can accomplish all the feats attributed to ALA and more, but without ALA's negative effects. In fact, some authors believe that the benefits ascribed to ALA are in fact, actually due to the internal generation of DHLA (after ALA consumption). For the very first time, stabilized DHLA is now available that can offer significant and reliable amounts of DHLA, without the need to consume synthetic precursors.

DNA and Nerve Protection: Stabilized DHLA can provide exquisite neuroprotection as well as superior DNA protection and repair, unmatched by any other antioxidant. Studies show that DHLA increases cellular energy and efficiency by increasing ATP. At the same time, DHLA helps regenerate the production of vitamin E, CoQ10, glutathione, NADH and NADPH to provide unparalleled DNA protection. In addition, DHLA has the capacity to induce repair of DNA strand breaks.⁷ For long-term benefits of DHLA, only natural-source DHLA is recommended to avoid the long-term degradation of DNA from synthetically-derived sources.

Arterial and Heart Protection: Research has shown that DHLA can accelerate recovery of the aortic blood flow during reperfusion (resumption of blood flow) and increase ATP synthesis in the rat heart.²⁷ ALA forms were not helpful — only internally generated DHLA was able to reduce the infarct or necrotic tissue size in middle cerebral artery occlusion in mice.²⁸ Wolz et. al. believe ALA must be reduced to the DHLA form in order to provide neuroprotection.²⁹ Natural-source, stabilized DHLA (now available) can provide exquisite neuroprotection as well as superior DNA repair and protection without compromise.

DHLA: Safety and Effectiveness

Clinical research by Dr. Robert J. Marshall has shown that the newly available natural-source, stabilized DHLA is both safe and effective for general use, including those with chronic illness and neurodegenerative disease. If high dosages (over 300 mg/day) of stabilized DHLA are used, to get maximum benefits the concurrent use of additional nutrients such as nutritional yeast which contains natural-source B vitamins, sulphur-based amino acids and reduced glutathione, is an excellent adjunct.

Brief Clinical Observations. The discoverer and inventor of stabilized DHLA, Dr. Marshall, has observed various immediate, spectacular effects of oral administration of stabilized DHLA in his office.

One 44-year woman presented with a history of bilateral, maxillary sinus infection with extreme pain even to the touch. She had used oral antibiotics for more than a year with no relief and was unable to breathe through her sinuses for at least 10 months. Further, she had begun to experience pain at her liver, chronic fatigue, loose stool and severe brain fog. After only one dose (30 drops) of natural-source, stabilized DHLA, within less than one minute, she remarked, "I can breathe through my nose! My head feels clear for the first time in 10 months."

A 60 year-old male complaining of brain fog, diminished short-term memory and a general sense of malaise remarked that within one day of taking natural-source, stabilized DHLA, literally all his symptoms were gone. He had a renewed sense of mental acuity and a significant improvement in short-term memory.

A medical doctor has remarked that in many clinical cases, natural-source, stabilized DHLA reduced the amount of time and number of nutritional supplements needed to restore healthy nerve function in his patients. It has become one of his most used supplement "aces", especially in neurodegenerative cases.

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Resveratrol

Resveratrol

Nature's Longevity Nutrient and Anti-Cancer Weapon

Increasing Your Life Span. What if you could have a longer, healthier life – to the point of doubling your life span? Science is now uncovering nature's longevity secrets, locked away inside plant molecules.

Over 750 scientific studies have demonstrated the health-promoting properties of a special plant compound called **resveratrol**. A recent landmark study (2003) demonstrated that resveratrol was able to extend the life span of yeast cells by an **incredible 60-80%**. This study showed resveratrol was able to activate a "longevity gene" that is normally expressed (activated) only during caloric restriction (such as fasting). Since caloric restriction is known to extend maximum lifespan in mammals (such as mice), scientists speculated that humans also might be able to derive significant health and longevity benefits by orally supplementing with resveratrol.

Although this study focused on yeast, a very simple life form compared to humans, the life-extending results are believed to be applicable to humans since both yeast and humans have the same type of longevity gene. Other studies have shown that resveratrol is effective against many types of chronic diseases in humans, including cardiovascular disease, inflammatory conditions, age-related illnesses and even the ultimate chronic degenerative disease, cancer.

Resveratrol's Remarkable Benefits

The Anti-Aging Effect. Scientific studies performed with both animals and living cells have proven that resveratrol is able to promote more efficient intracellular repair, create healthier blood vessels and protect brain tissue. Research demonstrates resveratrol is able to deeply affect the center of a living cell's nucleus to provide significant antioxidant protection as well as increasing cellular longevity. It activates an enzyme that prolongs the cell's life, thus allowing more time for the cell to repair its DNA and live longer before the final activation of the cell's P-53 self-destruct gene.¹

The Unique Molecular Structure of Resveratrol.

The unique, natural molecular structure of resveratrol appears to be the key to its remarkable function not its antioxidant capacity. It works by increasing the rate of deacetylation. Acetylation and deacetylation reactions turn genes "on" and "off".^{2,3}

Turning Off the Cancer Genes. In a normal, healthy body reactions called acetylation and deacetylation turn a gene on or off. However, in cancer, cells begin runaway activation of their own "cancer genes," promoting the spread of diseased cells. By controlling deacetylation and by activating the longevity gene, resveratrol has the potential to stop the cancer process and provide serious longevity benefits.^{4,5,6}

Reversing DNA Mistakes. A primary cause of aging (and ultimately death), is the gradual loss of the ability of older cells to precisely replicate their own DNA in every new cell. As DNA "mistakes" as well as little pieces of unusable DNA fragments accumulate, this garbled DNA debris eventually halts the cell's proper functioning. This clogging of the cell with DNA "trash" finally leads to the cell's deterioration and death. However, resveratrol is able to reduce the amount of DNA mistakes and debris by an **unprecedented 60%** through its ability to stimulate the longevity gene. This is why resveratrol represents a **giant step forward** slowing the aging process.

Cardiovascular Protection

Over the past decade interest in resveratrol research has exploded because of its great potential for reversing so many diseases, including the prevention of cardiovascular disease and because it has shown an almost non-existent toxicity at any dose. This is the perfect winning combination to battle chronic illness: remarkable effectiveness with high safety.

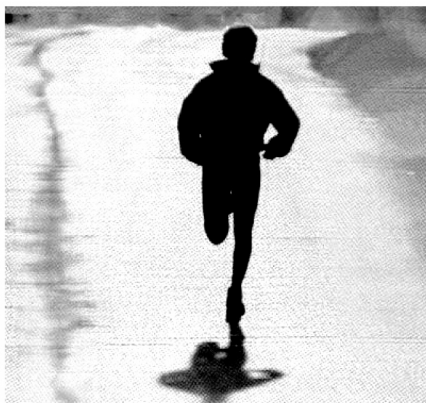
Reversing Arterial Damage. In cardiovascular disease, years of free radical damage can lead to thickening and hardening of the arteries. The cellular havoc from free radicals combined with infective agents such as nano-bacteria are known to cause restriction of arterial blood flow and arterial damage.^{7,8} In a study published in *Free Radical Research (2000)*,⁹ resveratrol was tested against vitamin E and a synthetic antioxidant, but resveratrol provided the best antioxidant defense for the arteries. Resveratrol was able to halt free radical damage and open abnormally narrowed arterial passageways.

Increasing Nitric Oxide. Nitric oxide production is a vital component of healthy heart and arterial function. It naturally dilates blood vessels to improve blood flow. In a 2003 study, a high cholesterol diet was shown to decrease nitric oxide about 33%.¹⁰ Adding resveratrol significantly reversed the decrease of nitric oxide, acting similar to the drug, Viagra, in this regard. However, Viagra's action affects only small blood vessels while resveratrol is able to affect both the small as well as the main arteries. Resveratrol can also inhibit red blood cell-platelet adhesion and blood vessel constriction to produce an even more profound circulatory upregulation.

Neurodegenerative Protection

New research shows that literally all neurodegenerative diseases, including chronic brain-related concerns such as Alzheimer's disease, are driven by an ever escalating attack on the brain cells by two key elements: free radicals and excitotoxins (i.e. neuro-transmitters that act too long at cell neuroreceptors). These two unrelenting forces are commonly kept active in the body by chronic, low-grade infections (often overlooked or missed in medical diagnoses).¹¹ Free radicals and excitotoxins steadily escalate their attack, feeding on one another until they kill the cell. Unchecked, this process can lead to rapid neurodegeneration.

Protecting the Brain. Studies show that resveratrol may be a key compound that can halt this relentless, neurodegenerative process, especially for those with Alzheimer's disease or those at risk.¹² Resveratrol has been shown to protect the brain against oxidative stress, and in conjunction with other antioxidants like vitamins C and E, has been proven to provide an even greater measure of brain cell protection than with any single antioxidant alone.¹³ For the most comprehensive free radical protection and acceleration of repair of DNA strand breaks, the best partner for resveratrol is living-source, stabilized DHLA (newly available). DHLA, the antioxidant superstar, is capable of quenching every known free radical in living tissue, and also regenerates vitamins E and C, CoQ-10, glutathione, NADH and NADPH. Together, resveratrol and DHLA may be able to deliver the best cellular protection for the body yet discovered.



Resveratrol's Powerful Benefits

- Activates the "longevity gene," known to prolong life and health
- Inhibits cancer cell activity also reverses the cancer process
- Protects against cardiovascular disease
- Reverses arterial damage and age-related illnesses
- Outperforms Viagra's circulatory effect, boosts Nitric Oxide
- Buys the cell more time for DNA repair
- Clears the cell of DNA debris up to 60%
- A natural anti-inflammatory agent and a powerful antioxidant

Resveratrol is Proven To Inhibit:

(According to published research in cell cultures and animals)

- Colon cancer
- Neuroblastoma
- Esophageal cancer
- Breast cancer (all types)
- Prostate cancer (all types)
- Leukemia (various types)
- Skin cancer (including melanoma)
- Pancreas cancer
- Liver cancer
- Lung cancer
- Stomach cancer
- Oral cancer
- Cervical cancer
- Ovarian cancer
- Lymphoma (various types)
- Thyroid cancer

Anti-Inflammatory Effects

A recent Chinese research study¹⁴ showed that resveratrol was able to reverse the inflammatory response seen in spinal cord injury at a level comparable to the steroid drug, Prednisone – but resveratrol also provided superior free radical protection and better energy compensation when given immediately after injury. Resveratrol is able to inhibit specific enzymes that change the way cells respond to injury.

It is therefore theorized that taking resveratrol supplementally could mean a protective effect against stroke or other injuries, especially to the brain. Another study demonstrated that rodents which were pretreated for 21 days with resveratrol had significantly less brain and motor damage after a stroke was initiated.

Anti-Cancer Effects

Research shows resveratrol not only prevents cancer, but it has been proposed as an additional treatment for cancer.^{15,16,17} This is because resveratrol has been shown to **slow or halt certain stages of cancer**. Resveratrol can inhibit cancer in a number of ways: it can block estrogen and androgen uptake (whether the cancer cells are estrogen receptor positive or negative); it can modulate gene expression; and it can cause cancer cell death by deacetylation. In Austria, elaborate studies have shown that resveratrol also **blocked the ability of cancer cells to metastasize** to the bone at a rate of 30 to 71%.¹⁸

Halting Cancer Without Harm. Resveratrol has been shown effective against a wide range of cancers, both during the preventative and treatment stages.^{15,16,17} Its ability to stop cancer is connected to its ability to distinguish a cancer cell from a normal cell. Chemotherapeutic drugs are not specific in their action: they harm healthy cells in the body as well as cancer cells. In contrast, resveratrol does not damage healthy cells, but protects them while deactivating the cancer cells. Resveratrol's illustrious abilities also include being able to quench free radicals, activate or deactivate critical enzymes, genes, hormones and chemicals.

Studies have demonstrated that resveratrol produces a striking effect on cancer-related genes. Among other effects, resveratrol **activates tumor suppressor genes** and genes that detoxify chemicals. It also suppresses genes that enable cancer cells to communicate with each other.^{19,20,21}

Prostate Cancer. Resveratrol has been shown to decrease an elevated PSA (prostate-specific antigen) in cancer cells. In one study, only four days of treatment with resveratrol **reduced PSA levels in prostate cancer cells by 80%**.^{21,22} In addition, resveratrol has multiple, anti-prostate cancer effects: it can halt the growth of hormone-positive and negative cancers; it works via multiple mechanisms to stop cancer cells from multiplying; it is effective from the earliest to the latest stages of cancer; it can protect DNA from damage; and it may inhibit cancer metastasis.

Taking resveratrol in addition to key dietary recommendations can mean a decisive difference in the prognosis for prostate cancer. For example, consuming three or more glasses of milk a day more than doubles the risk of prostate cancer.²³ Thus, reducing or eliminating pasteurized milk consumption during treatment can expedite your progress.

I3C: Highly Effective Anti-Cancer Synergist. Another powerful phytonutrient complex called I3C (indole-3-carbinol extracted from broccoli) is an excellent synergistic partner for resveratrol. Both resveratrol and I3C have been proven to exert a striking effect on cancer-related genes and are able to block growth-promoting hormones.²⁴ Their ability to exert these effects *without toxicity* makes them an extremely desirable combination in prostate cancer and for cancer prevention in general.

All cell growth, including cancer cell growth, involves an enzyme known as ornithine decarboxylase. In a study by the National Cancer Institute, 90 potentially anti-cancer compounds were tested. I3C was one of eight that scored positively on all six tests, including the suppression of ornithine decarboxylase.²⁵

Resveratrol's Polyphenols.

Resveratrol and its related polyphenols also protect the cell's DNA, block cancer-causing chemicals and radiation, and fight free radicals and inflammation. Resveratrol activates the same anti-cancer gene that is activated by non-steroidal anti-inflammatory drugs (NSAIDs) – but without toxic side effects.²⁶ In one study, resveratrol along with quercetin and curcumin (from turmeric), emerged as the most powerful anti-cancer agents from 22 compounds that were subjected to a battery of tests, including their ability to suppress ornithine decarboxylase, scavenge free radicals and counteract carcinogens.

Other Key Synergists. When resveratrol is coupled with a whole range of essential synergists, co-factors and transporters, including quercetin, curcumin (from turmeric), I3C (a powerful, anti-hormonal agent),²⁴ the raw and fermented mycelial extracts of cordyceps, modified citrus pectin and others, the synergy of this **Super Nutrient combination may just be the best cancer-preventative approach available today.** Together these premier nutrients can initiate the body's most rapid shift back to ideal cellular resonance (which means best health). In addition, the use of internal and external detoxification can be a tremendous help to clear stagnant pathways in the body that have blocked the uptake of nutrients.

The Resveratrol Controversy

Recent research found that resveratrol, when taken orally, was rapidly broken down in the liver (through sulphation and glucuronidation) leading some researchers to believe that taking resveratrol yielded only negligible amounts of it to the body.²⁷ However, prior research (3 Italian studies)²⁸ showed that when resveratrol was combined with quercetin, a companion antioxidant to resveratrol, it significantly inhibited the breakdown of resveratrol and vastly improved its cellular bioavailability. Thus, taking resveratrol orally can really deliver significant health benefits.

Resveratrol is very sensitive to light and moisture however, so it can be easily spoiled if not properly processed and packaged. When resveratrol is preserved in organic alcohol or encapsulated with quercetin and packaged in high-barrier air and light bottles, resveratrol can be efficiently delivered through the blood to the cell, evading degradation at the liver.

Sources of Resveratrol

Resveratrol is a highly active, phytonutrient compound found in over 70 species of plants. As a defense against infection by fungus, various plants (often found in humid, moist climates) are known to produce resveratrol. The richest natural sources of resveratrol are dark grape extracts and giant knotweed (*Polygonum cuspidatum*, a perennial shrub). For centuries, knotweed has been used in traditional medicines throughout Asia for liver and heart disorders.

How to Take Resveratrol

Recommended Amounts of Resveratrol. For adults or children (under 150 lbs): take 10 mg/day; if over 150 lbs, take 20 mg./day for general preventive and anti-aging support. For therapeutic support as needed in chronic disease and especially, cancer: take 30 to 40 mg/day. Don't forget that adequate packaging is needed for protection of resveratrol's potency.

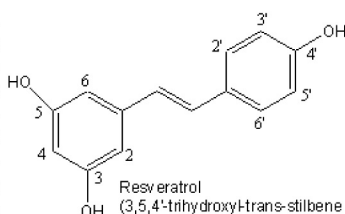
Resveratrol in Liquid Form. To take resveratrol in liquid form preserved in certified organic alcohol, add ½ tsp (or more) of the resveratrol tincture to ¼ to ½ cup purified water, gently mix and then sip it over a few minutes rather than drinking it down quickly. Slow sipping is important because it maximizes the uptake of resveratrol directly into the blood circulation which predominantly bypasses the liver. (If the resveratrol liquid is drunk too quickly, then some will be routed to the liver, where it may undergo degradation by the processes of sulphation and glucuronidation, reducing its effectiveness.)

***Please Note:** Avoid resveratrol preserved in *commercial* alcohol — otherwise, you may be consuming toxic pesticide/heavy metal residues as commonly found in commercial alcohol.

Resveratrol in Capsule Form. When resveratrol is taken in capsule form, it will be absorbed primarily from the small intestine through the hepatoportal artery where most of it will be carried to the liver. Once resveratrol arrives at the liver, if it is unprotected by special compounds such as quercetin, it may largely be degraded by the liver. Therefore, for the best absorption of resveratrol, quercetin should be present (in 4 to 6 times the amount of resveratrol) for maximum protection of the resveratrol from liver degradation.

Protecting Resveratrol's Potency. Resveratrol is highly sensitive to degradation by air and light. When resveratrol is preserved with organic alcohol and placed in a dark bottle, there is exquisite protection from air and light. When resveratrol is encapsulated as a dry powder, it must be densely packed to ensure adequate protection from air. It should also be bottled in a dark container such as Violite™ (patent-pending, deep violet color), known to block 100% of the light from 450 to 720 nanometers, which damages nutrients.

Special Considerations: Cancer. When cancer is present, the recommended daily dose of resveratrol is 30 to 40 mg (or more). In cancer, research shows that resveratrol works best (in either liquid or capsule form) when combined with the powerful, key synergists: quercetin, I3C, citrus pectin and others. For specific help in prostate cancer, resveratrol works best when combined with the key synergists, I3C, beta sitosterol, Pygeum Africanum as well as others.



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