

RESVERATROL

AGE DISGRACEFULLY



You've heard it before: Act your age. Settle into a comfortable arm-chair with the TV remote—at home if you're lucky, or in an elder care facility. Maybe take up knitting. *Age gracefully.*

Now imagine a different future. Wouldn't you rather spend your days, active and vibrant? Enjoying nature—wind surfing, perhaps—or staying out late dancing, or playing in a band? Whatever you love.

There is an alternative to aging gracefully. Intervention in the

aging process, once regarded as fantasy, is within reach due to advances in nutritional science. And one of the most exciting discoveries is resveratrol. This protective compound is produced by grapes and other plants in response to environmental stress. Its most potent source is the traditional Chinese herb Hu Zhang (also known as Japanese knotweed or *Polygonum cuspidatum*).

Today, the mass media is trumpeting the promise of resveratrol for healthy aging. But in 1997—long before resveratrol's benefits were widely known—Source Naturals was the first national vitamin company to introduce this amazing compound to America. Source Naturals remains true to its commitment to speedily make available the latest nutritional breakthroughs for your use and benefit.



Strategies for Wellness SM

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Resveratrol: A Nutritional Powerhouse

Resveratrol, a compound found in grapes, berries, and pine, is being studied worldwide for its phenomenal health benefits. In fact, of the dozen Systemi-Care™ metabolic systems identified by Source Naturals as necessary for optimal health, resveratrol positively affects five: Cells/DNA; Inflammation Response; Antioxidant Defense; Circulation; and Immunity.

Potent Support for Healthy Aging

Researchers at Harvard Medical School recently made headlines when they identified the resveratrol molecule as a compound they believe may hold the key to slowing the human aging process. It has long been known that calorie restriction increases longevity in most mammals, including humans. The Harvard researchers discovered that resveratrol mimics the benefits of caloric restriction by activating the SIRT family of genes. Discovered in the 1990s, these genes tell the body it is running low on nutrients, which triggers processes that protect tissues and burn off fat reserves. Resveratrol stimulates SIRT genes, making the body think it is undergoing calorie reduction. The resulting metabolic actions are beneficial to healthy aging and overall health.

Antioxidant Defense

At the core of aging are free radicals and the oxidation process. Free radicals are atoms or groups of atoms with unpaired electrons that are formed when oxygen interacts with certain molecules. Free radicals are highly

reactive and can bind with other molecules, potentially initiating a chain reaction as successive molecules lose and gain electrons; the theft of electrons by free radicals can disrupt cellular processes. The signs of normal aging—

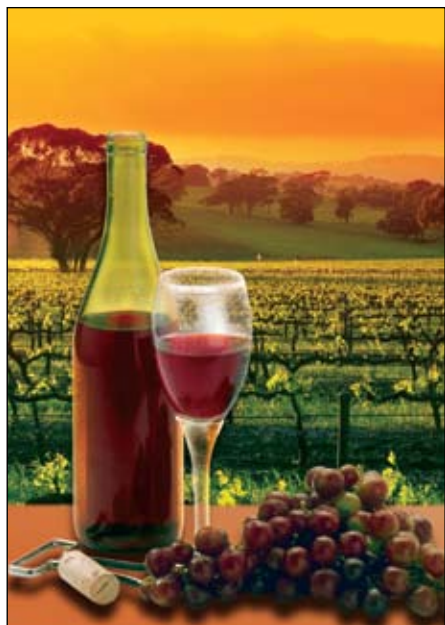


wrinkles, age spots, loss of function—can be partially attributed to this oxidation process.

Antioxidants like resveratrol safely quench free radicals and halt the chain reaction. Resveratrol upgrades the body's antioxidant capacities. Studies show that it enhances the effectiveness of other antioxidants, such as vitamins C and E, or beta-carotene.

Healthy Inflammation Response

As one of the most discussed conditions in health research today, Metabolic Inflammation™ is said to affect over half the U.S. adult population. Metabolic inflammation is our bodies' natural response to unnatural lifestyle and environmental conditions. Toxic chemicals, junk food, nutrient-imbalanced diets and sedentary lifestyles alter our biochemical metabolism and set our immune systems on overdrive. The inappropriate activation of immune response can disrupt many bodily systems. Resveratrol has been shown to



address metabolic inflammation by inhibiting the inflammation messengers, NF kappa-B, prostaglandin E-2, c-Jun N-terminal kinase, and the COX-2 enzyme.

Cardiovascular Benefits

The so-called “French Paradox” has long intrigued researchers. Why is there a lower incidence of heart problems in France, when the French diet has similar quantities of fat to our own? One explanation is the regular, moderate drinking of red wine—and specifically its components, resveratrol and the other bioflavonoids and polyphenols present in large amounts in the leaves, twigs and bark of grapevines. Red wine, which is fermented with the skins and seeds of the grape tends to contain much larger quantities of these beneficial phytochemicals than white wine, which is fermented only from the juice. Resveratrol may support healthy

circulation, according to human and preclinical studies. It enhances nitric oxide production, relaxing blood vessels for enhanced blood flow. It has been shown to reduce the oxidation of LDL (bad cholesterol) and to promote healthy HDL (good cholesterol) levels.

Wide-Ranging Benefits

Research has documented additional benefits:

- Resveratrol supports circulation by inhibiting platelet aggregation.
- Resveratrol was found to support healthy mammary and skin tissue in mice by suppressing damaging free radicals.
- Resveratrol was found in preclinical studies to inhibit COX-1 and COX-2 enzymes, which are involved, not only with inflammation, but also with cellular growth and regeneration. Recent research focuses on resveratrol’s role in suppressing COX-2 via the action of NF-kappa B, an important DNA regulating factor.

A Non-Alcoholic Source

Most publicity about resveratrol focuses on its presence in grape skins and red wine. However, this beneficial compound is found in other plants. Source Naturals RESVERATROL products feature standardized extracts of Hu Zhang root, a celebrated traditional Chinese herb, along with red wine extract. They provide the health benefits of red wine without the alcohol, sulfites, headaches or excess calories.

A Wealth of Resveratrol

Source Naturals is pleased to offer you an expanding line of resveratrol products. RESVERATROL 200™ and RESVERATROL 100™ are Source Naturals’ most powerful resveratrol

supplements. They combine Hu Zhang extract standardized to 50% natural trans-resveratrol with red wine extract. Source Naturals also offers an 8% standardized Hu Zhang extract in 40 mg and 80 mg potencies. RED WINE EXTRACT WITH RESVERATROL enhances the antioxidant benefits of resveratrol with extracts of grape seed, grape skin, green tea leaf, and quercetin.

Source Naturals, the science company, is pleased to partner with your natural foods retailer in bringing you this botanical treasure. For a long and vital life, resveratrol belongs at the center of your healthy aging regimen.

Reverences

Bowers, J.L. et al. 2000. Resveratrol acts as a mixed agonist/antagonist for estrogen receptors alpha and beta. *Endocrinol.* 141(10):3657-67.

Fustier, P. et al. 2003. Resveratrol increases BRCA1 and BRCA2 mRNA expression in breast tumour cell lines. *Brit J*

Cancer. 89(1):168-72.

Howitz, Konrad T. et al. 2003. Small molecule activators of sirtuins extend *Saccharomyces cerevisiae* lifespan. *Nature.* 425:191-196.

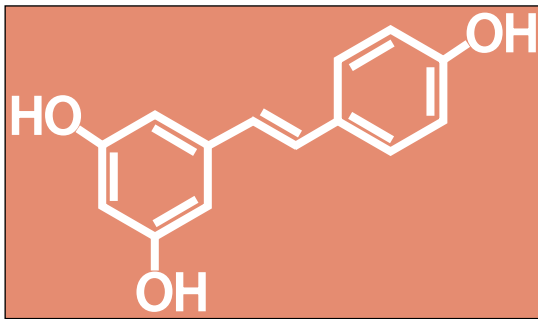
Jang, M. et al. 1997. Cancer chemopreventive activity of resveratrol, a natural product derived from grapes. *Science.* 275(5297):218-20.

Pace-Asciak CR, et al. 1996. Wines and grape juices as modulators of platelet aggregation in healthy human subjects. *Clin Chim Acta.*246(1-2):163-82.

Pervaiz, S. 2003. Resveratrol: from grapevines to mammalian biology. *The FASEB Journal.* 17:1975-1985.

Stivala L, et al. 2001. Specific Structural Determinants are Responsible for the Antioxidant Activity and the Cell Cycle Effects of Resveratrol. *J of Biological Chemistry.* 276(25):22586-22594.

Xiao, K, et al. 2002. Constituents from *Polygonum cuspidatum*. *Chem Pharm Bull.* 50(5):605-8.



The chemical structure of resveratrol



Strategies for Wellnesssm

www.sourcenaturals.com



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.