

Resveratrol Synergy™



— A POWERFUL COMBINATION OF TRANS-RESVERATROL, QUERCETIN AND LECITHIN —

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Exciting research continues to emerge concerning the powerful polyphenol resveratrol, which is found in peanuts, berries, the skin of red grapes, red wine, and in the Japanese Knotweed plant also known as Polygonum. Resveratrol is produced by certain plants to act as a natural pesticide. In the case of grapes, it concentrates in the skin and protects the plant from mold and bacterial infection. The harsher the climate grapes grow in for example, the more resveratrol is found in wine produced from those grapes.

Resveratrol research has proven it to provide very potent antioxidant protection, estrogen protection, cardio-protection, cancer protection, viral protection and neuron protection. But probably the most exciting news on resveratrol is that researchers at Harvard Medical School are hopeful that resveratrol may actually be capable of increasing human lifespan dramatically! They discovered that resveratrol acts as a sirtuin activator, meaning it activates the SirT1 gene, which when turned on slows the aging process. It is believed that the trans-resveratrol form is responsible for this anti-aging effect. The polygonum source used in Resveratrol Synergy is standardized to 50% resveratrol, all in the trans form.

Resveratrol has the same anti-aging effect as cutting calories

A recent study by the Harvard Medical School and the National Institute of Aging shows that a high dose of resveratrol lowers the rate of diabetes, liver problems and other fat-related ill effects in obese mice by mimicking the well know life extending effect produced by calorie restriction. On mice fed a high-fat diet fat-related deaths dropped 31 percent for obese mice on the supplement, compared to untreated obese mice.

Treated mice also lived much longer than expected. The treated obese mice were just as agile on exercise equipment as lean mice. Also, “the organs of the fat mice that got the resveratrol looked normal when they shouldn't have”, said study lead author Dr. David Sinclair of Harvard Medical School. Resveratrol is also being researched by this group for the treatment of diabetes.

What is effective dosing?

One negative aspect of otherwise positive resveratrol research is that it would be impossible to consume from normal food sources the amount of resveratrol proven effective. The amounts used in one successful mouse study were approximately 22.4 mg/kg body weight per day. Scaling this amount to human body weights could imply an “equivalent human dose” of 1.5 to 2.0 grams/day, however if one compensates for the fact that humans have slower metabolic rates than mice, an equivalent human dose may be closer to a range of 200 mg/day. With this in mind Resveratrol Synergy was designed as the ultimate high potency, high quality 200mg trans-resveratrol formulation.

Resveratrol and Quercetin are cardioprotective

According to a group of Hungarian researchers, up to 20% of serious vascular events in high-risk vascular patients is attributable to a failure of aspirin to suppress platelet aggregation. These researchers discovered that resveratrol effectively inhibited collagen- and epinephrine-induced aggregation of platelets in these aspirin resistant patients, which may contribute to its cardioprotective effects in high-risk cardiac patients.

When hamsters were fed an atherogenic diet for 12 weeks and then given resveratrol, quercetin and catechin (all found in red wine), the aortic fatty streak area was significantly reduced in the groups receiving catechin (84%) or quercetin (80%) or resveratrol (76%) in comparison with the controls. The researchers concluded: “These findings demonstrate that catechin, quercetin, and resveratrol at nutritional doses prevent the development of atherosclerosis through several indirect mechanisms.” Research on quercetin dihydrate reveals that it lowers lipids by reducing hepatic lipogenesis and lowers cholesterol absorption as well. In high-cholesterol fed rats quercetin dihydrate supplements lowered plasma and hepatic thiobarbituric acid reactive substances (TBARS) and increased the hepatic superoxide dismutase (SOD) and glutathione peroxidase activities.

Maintaining Product Stability

Designs for Health goes to great lengths to protect all raw materials from potentially damaging heat, light and oxygen by storing them in a climate controlled environment, and in sealed, opaque containers. Encapsulating and bottling takes place immediately after blending. It has been suggested by some marketers that resveratrol is inherently unstable and prone to convert from the trans to cis form, even though the literature consistently shows that polyphenols, including resveratrol, are extremely stable. These same marketers go on to suggest that only production as a liquidcap or gelcap can maintain stability. Since Designs for Health is always Science First focused, the many production possibilities of this product were considered while Resveratrol Synergy was under development. The resulting encapsulated combination of resveratrol from polygonum, quercetin dihydrate, and lecithin proved to be the most effective, economical, and stable formulation. In addition, before and after production, each lot is tested for trans-resveratrol content, with results posted on the DFH website. As with all Designs for Health products you can be confident your patients will enjoy the most rigorously quality controlled resveratrol nutritional supplement.

How can we prove resveratrol is stable?

Researchers have proven it quite conclusively. The following is quoted from a study titled *Resveratrol and its glycon piceid are stable polyphenols*: "Plant extracts containing phytopolyphenols, including resveratrol, are extensively used as nutraceutical supplements. Recent reports allege their lack of stability at ambient conditions. We have studied the stability of resveratrol and its glycon piceid in a mixture with a whole grape extract for 2 years (long-term stability) under Good Manufacturing Practice pharmaceutical protocols (at 60% humidity and 25 degrees C). The compounds were followed for 4 years under conditions of "accelerated stability," at 75% humidity and 40 degrees C, all in the presence of ambient air. Chromatographic analysis did not detect any instability, thus disproving the claims to the opposite." The authors concluded: "No storage precautions are necessary for these nutritional supplements."

Resveratrol and Quercetin are Neuroprotective

When dopaminergic neurons of the brain were exposed to multiple neurotoxins, resveratrol and quercetin (both sirtuin-activating polyphenols) prevented the decrease of dopaminergic neurons, acting as neuroprotectors. Resveratrol prevented depletion of glutathione and protected against free radicals. Both resveratrol and quercetin have anti-inflammatory action, adding to their ability to protect the heart and nervous system. Researchers have also shown that resveratrol protects brain cells against amyloid beta-induced toxicity.

Supplement Facts

Serving Size 1 capsule

Servings Per Container 60

Amount Per Serving	% Daily Value
Trans-Resveratrol (from 400 mg <i>Polygonum cuspidatum</i> , root)	200 mg *
Quercetin Dihydrate	200 mg *
Lecithin	100 mg *

*Daily Value not established.

Other Ingredients: Microcrystalline cellulose, dicalcium phosphate, rice flour, magnesium stearate.

Resveratrol and Quercetin work synergistically

Resveratrol and quercetin are being researched for how they act on the cancer process including metastasis. Research by Susanne Mertens-Talcott on human leukemia cells reveals that when resveratrol and quercetin are given together they more strongly induce caspase 3 activity which means they are able to induce an apoptosis effect on the cancer cells. Listen to her Clinical Rounds interview archived in our Library: www.designsforhealth.com.

Resveratrol acts on the process of carcinogenesis by affecting all three phases: tumor initiation, promotion and progression and suppresses the final steps of carcinogenesis, i.e. angiogenesis and metastasis. Quercetin inhibits a wide range of protein kinases including epidermal growth factor receptor (EGFR) tyrosine kinase and suppresses the secretion of matrix metalloproteinases.

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