



## RESVERATROL SUPREME™

SOURCE OF ANTIOXIDANTS TO HELP FIGHT OXIDATIVE STRESS IN THE BODY

60 VEGETARIAN CAPSULES | NPN80050356 | RVS060-CN

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 pest deterrent. In the case of grapes, it concentrates in the skin and protects the plant from mold and bacterial infection. The harsher the climate in which grapes grow, for example, the more resveratrol is found in wine produced from those grapes.

Research shows that resveratrol provides very potent antioxidant protection, which may support estrogen metabolism, healthy cardiovascular function, and the immune system. But probably the most exciting news on resveratrol is that researchers at Harvard Medical School discovered that resveratrol acts as a sirtuin activator, meaning it activates the SirT1 gene, which, when turned on, may help support healthy aging. It is believed that the trans-resveratrol form is responsible for this effect. The polygonum source used in Resveratrol Supreme is standardized to 50% resveratrol, all in the trans form.

### WHAT IS EFFECTIVE DOSING?

One negative aspect to the otherwise positive resveratrol research is that it would be impossible to consume the amount of resveratrol proven effective from normal food sources. 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 200 mg/day. With this in mind, Resveratrol Supreme was designed as the ultimate high potency, high quality 200 mg trans-resveratrol formulation.

### RESVERATROL AND QUERCETIN MAY SUPPORT CARDIOVASCULAR HEALTH

According to a group of Hungarian researchers, up to 20% of serious vascular events in high-risk vascular patients are 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 may help lower lipids by reducing hepatic lipogenesis while also lowering cholesterol absorption. In high-cholesterol fed rats, quercetin dihy-

drate 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 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 liquid-cap 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 Supreme 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.

## HOW CAN WE PROVE RESVERATROL IS STABLE?

Researchers have proven resveratrol's stability quite conclusively. A study called Resveratrol and its glycon piceid are stable polyphenols states, "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 NEUROSUPPORTIVE

When dopaminergic neurons of the brain were exposed to multiple neurotoxins, resveratrol and quercetin (both sirtuin-activating polyphenols) prevented the decrease of dopaminergic neurons. Resveratrol prevented depletion of glutathione and protected against free radicals. Both resveratrol and quercetin support a healthy inflammatory response, adding to their ability to help protect the heart and nervous system.

## RESVERATROL AND QUERCETIN WORK SYNERGISTICALLY

Resveratrol and quercetin are being researched for how they act on the cancer process. 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 may help support an apoptosis effect on the cancer cells.

### Medicinal Ingredients (per capsule):

Quercetin ..... 200 mg  
Resveratrol (Trans-Resveratrol)(*Reynoutria japonica*-Root) ..... 200 mg  
Lecithin (*Helianthus annuus*-Seed) ..... 100 mg

**Non-Medicinal Ingredients:** Hypromellose, microcrystalline cellulose, magnesium stearate (vegetable source), silicon dioxide. **Recommended Dose:** Adults: Take two capsules per day, in divided doses with food/meals, or as directed by your health care practitioner. For use beyond 12 weeks, consult a health care practitioner.

## REFERENCES

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