

# R.O.S-Quench



Synergistic Super-Antioxidant Formula | VA-121

## Key Features:

**R.O.S-Quench** is a **synergistic blend of powerful antioxidants** in potent dosages, specifically formulated to strengthen the vasculature, modulate immune function, and reduce inflammation.

- Protects against thrombosis, strengthens arteries and veins, promotes eye health, alleviates systemic inflammation, and reduces the risk of CVD and stroke.
- Contains natural, **highly concentrated (99%) trans-resveratrol (200 mg per capsule)** from Japanese knotweed - the more stable and bioavailable form.

## Indications:

- **Prevention of atherosclerosis and its complications** (ie. CVD, stroke)
- **Modulate immune system** and help relieve allergies and hypersensitivities
- **Skin Rejuvenation** - protect against UV-induced damage, collagen breakdown, and hyperpigmentation from oxidation.
- **Adjunct cancer therapy** (\*under strict supervision of experienced doctors in cancer management)

## Description:

### Resveratrol

#### Trans-Form vs. Cis-Form

Resveratrol exists in either the cis or trans form in nature, but it is the trans-isomer that is known to be more bioactive and more stable in terms of free radical scavenging, anti-proliferative, and cytotoxic activities.<sup>[1],[2],[3]</sup> This could explain why some research has shown mixed results of resveratrol in human subjects.

A vast body of research has revealed resveratrol's multiple beneficial effects - including **anti-hypertensive, anti-atherosclerotic, and glycemic-modulating effects.**

#### Anti-Hypertensive Action

Resveratrol has been shown to activate several signalling pathways (i.e. AMPK, SIRT1, NRF2) that **promote endothelium nitric oxide synthase (eNOS) activity** and counteract reactive oxygen species (ROS) to achieve overall systemic vasorelaxation.<sup>[4]</sup>

A recent meta-analysis of 6 clinical trials involving 247 subjects investigated the blood pressure (BP) lowering effect of resveratrol. It was reported that high doses of resveratrol (> 150 mg/day) significantly reduced systolic BP (p=0.01).<sup>[5]</sup>

#### Anti-Atherosclerosis Effect

The formation of atherosclerotic plaques is usually caused by high levels of LDL accumulating at the arterial wall followed by oxidation, inflammation, and activation of immune cells and clotting factors.

Research has shown that resveratrol can not only reduce oxidation

### Quantity: 42 Vegetarian Capsules

#### Ingredients (per capsule):

Trans-Resveratrol.....	200 mg
(>99%; isolate from <i>Reynoutria japonica</i> ) (root)	
Grapeseed Extract (95% OPCs) (100:1).....	100 mg
( <i>Vitis vinifera</i> ) (seed) (equivalent to 10,000 mg dried herb)	
Quercetin (isolate).....	100 mg
Olive Leaf Extract ( <i>Olea europaea</i> ) (7:1) (20% oleuropein).....	60 mg
(equivalent to 420 mg dried herb)	
Vitamin C.....	60 mg
Mixed tocopherol concentrate.....	30 mg

**Non-medicinal Ingredients:** Silicon dioxide, L-leucine, pullulan/hypromellose (capsule)

**Suggested Use:** Adults - Take 1 capsule, 1-2 times a day, with food, or as directed by a healthcare practitioner. Consult a health care practitioner for use beyond 3 months.

of LDL and inflammation in the vasculature, but also lower levels of total cholesterol, LDL, and triglycerides, and increase the level of HDL cholesterol. The main mechanisms of action include down-regulating HMG-CoA reductase<sup>[6]</sup>, promoting bile synthesis and secretion<sup>[7]</sup>, and increasing expression of LDL receptors in hepatocytes.<sup>[8]</sup>

#### Glycemic Control

Resveratrol has demonstrated the ability to help with glycemic control. Its mechanisms of action include stimulation of insulin secretion and activation of Sirtuin 1 Protein (SIRT1), which is one of the principle factors in glucose homeostasis and insulin sensitivity.<sup>[9]</sup>

In a randomized controlled trial involving patients with type 2 diabetes, the subjects were administered either 250 mg of resveratrol daily along with their oral hypoglycemic agents or just their hypoglycemic agents. After a period of 3 months, the resveratrol group showed significant improvement in their hemoglobin A1c (p<0.05).<sup>[6]</sup>

#### Grape Seed Extract (OPCs)

Grape seed has been shown to exert beneficial actions against atherosclerotic plaque formation and cardiovascular risk by improving serum lipid profile,



reducing oxidation of LDL, increasing insulin sensitivity and serum reduced glutathione. <sup>[15], [16]</sup> It's also a powerful antioxidant to help protect cells from inflammation and reactive oxygen species.

### **Multiple Anti-Tumor Potentials of Resveratrol, Grape Seed Extract, and Quercetin**

A vast body of research has shown that resveratrol, grapeseed extract, and quercetin pack synergistic mechanisms of action against cancers:

- Induces apoptosis of cancer cells <sup>[10], [11]</sup> via mitochondria rescue<sup>[17]</sup> and p53 activation<sup>[18]</sup>
- Anti-angiogenic <sup>[12], [19]</sup>
- Inhibits cancer growth and progression by inhibiting collagenases <sup>[13], [20]</sup>
- Augments chemotherapy drugs <sup>[12], [14]</sup>
- Inhibits COX-2<sup>[22]</sup> and LOX-5 <sup>[23]</sup> to reduce metastasis
- Aromatase inhibitor to reduce endogenous estrogen levels <sup>[21]</sup>
- Blocks epidermal growth factor receptor (EGFR), the mutation of which promotes proliferation of tumor cells.

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### **Caution:**

Consult a health care practitioner if symptoms persist or worsen. Consult a health care practitioner prior to use if you are pregnant or breastfeeding; if you are taking other diuretics; if you have a kidney disorder; if you are taking prescription medication as resveratrol may alter the effectiveness of this medication.

**For Education Purpose Only:** The entire contents are not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read in this presentation. All statements in this article have not been evaluated by the Food and Drug Administration and are not intended to be used to diagnose, treat, or prevent any diseases.

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