

# VasculoSirt®

Because Healthy Aging Requires Healthy Arteries And A Healthy Heart



Following three years of research, Dr. Mark Houston, Associate Clinical Professor of Medicine at Vanderbilt Medical School and Director of Hypertension Institute and Vascular Biology in Nashville, in conjunction with Biotics Research, has developed a revolutionary nutritional supplement: VasculoSirt®.

VasculoSirt® is designed to slow vascular aging, promote vascular and heart health, provide healthy support for blood pressure, cholesterol, glucose and insulin levels within normal ranges, and has been found to slow aging in experimental animals.

Vascular aging is characterized by progressive arterial stiffness, loss of arterial elasticity and arterial compliance from a myriad of structural and functional changes in the endothelium, vascular media and adventitia, resulting in:

- Endothelial dysfunction
- Increased extracellular matrix
- Altered vascular smooth muscle (VSMC)
- Altered adventitia

*(Mark Houston, MD, MSc, ABAAM, FACP, FAHA)*



VasculoSirt® is a state of the art product, providing comprehensive support for healthy cardiovascular function.

To place your order for VasculoSirt® or for additional information please contact us:



**(800) 840-1676**

Biotics Research Canada Box 283 • Keswick  
ON L4P 3E2 [orders@bioticscan.com](mailto:orders@bioticscan.com)  
[www.bioticscanada.com](http://www.bioticscanada.com)

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## Key components of VasculoSirt® include:

**Resveratrol (Trans-Resveratrol)** – a phytoalexin found in certain plants. Resveratrol is readily absorbed, but is rapidly metabolized and excreted.

Resveratrol is the focus of a significant level of ongoing research. Among its many attributes, Resveratrol has been shown to:

Resveratrol has been shown to increase the activity of SIRT1, which slows aging in animal studies and deacetylates enzymes that simulate caloric restriction and longevity in animal studies.

- Slow aging in experimental animals by up to 66%
- Simulate caloric restriction and assist in weight control
- Increase Nitric Oxide production
- Protect DNA from damage
- Increase the activity of SIRT1, which slows aging in

animal studies and deacetylates enzymes that simulate caloric restriction and longevity in animal studies

**R-Alpha Lipoic Acid (R-ALA)** – an active, natural isomer of lipoic acid. R-ALA, a mixture of R and S forms, is believed to be twice as active as traditional Alpha Lipoic Acid. R-ALA is a disulfide compound found in the mitochondria of cells, and is the coenzyme for both pyruvate dehydrogenase and alpha-ketoglutarate dehydrogenase. In-vitro studies have demonstrated R-ALA supplementation improves mitochondrial function, increases metabolic rate, and decreases oxidative damage. Ambulatory activity, a measure of metabolic activity, was almost three times

higher with R-ALA supplementation. Additionally, R-ALA enhances glutathione levels and is linked to detoxification of xenobiotics. R-ALA supports healthy blood pressure, glucose and insulin levels within normal ranges, and supports healthy arteries and heart health. An increase in nitric oxide levels have been noted as well.

**EGCG (Epigallocatechin Gallate)** – a major catechin found in green tea. EGCG is the most potent of all the green tea catechins and is readily absorbed. EGCG inhibits tyrosine phosphorylation of platelet-derived growth factor receptor-beta (PDGF-Rbeta) and its downstream signaling pathway, thereby inhibiting the proliferation of smooth muscle, one of the requisites of atherogenesis. Other beneficial functions of EGCG include:

- Inhibits the activity of the transcription factors AP-1 and NFkappaB, key inflammatory mediators
- Thermogenic properties (promotes fat oxidation)
- Chemo-protective
- Supports healthy glucose and insulin levels within normal ranges, and supports healthy arteries and heart health

**Vitamin K (K<sub>2</sub> and K<sub>1</sub>)** – Inadequate calcium metabolism results in the calcium paradox-concurrent arterial calcification and osteoporosis. Osteoporosis is correlated with low levels of circulating vitamin K (K). Low levels of K influence secondary modification of osteocalcin,



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a K dependent gamma-carboxyglutamic acid (Gla) protein, which is needed to effectively bind calcium to the bone matrix. K is a cofactor for gammaglutamylcarboxylase, which modifies the Gla proteins. With optimal levels of K, osteocalcin is carboxylated (cOC) and effective. With insufficient levels it is under-carboxylated (ucOC) and ineffective. Supplementation with K reduces serum levels of the ineffective form of osteocalcin. Insufficient K fails to modify (carboxylate) the Matrix Gla Protein (MGP), an important inhibitor of arterial calcification. MGP is a very strong and abundant inhibitor of soft tissue calcification. No ucOC MGP is found in healthy arteries, while increased amounts of non-functional, ucOC MGP was found around arterial salt precipitates.

Vitamin K<sub>2</sub> is structurally different from the more common K<sub>1</sub> (found in green leafy vegetables) and is found in fermented products, primarily Natto. The Natto K<sub>2</sub> supplies primarily menaquinone-7 (MK-7). It is more bioavailable than the other forms of K on a basis of intake. Experimental animal models have shown vitamin K<sub>2</sub> (MK-7) promotes removal of vascular calcifications and arterial plaque.

## **Additional components and benefits of VasculoSirt®'s comprehensive formulation include:**

**Coenzyme-Q<sub>10</sub> (CoQ<sub>10</sub>)**, a fat soluble antioxidant, is supplied as a soy free micro emulsion for enhanced uptake and utilization. CoQ<sub>10</sub> functions

as an electron carrier in mitochondrial oxidative phosphorylation. Adequate CoQ<sub>10</sub> is critically important for energy production (ATP) of the myocardium, and supports healthy blood pressure, arteries and a healthy heart.

**Acetyl-L-Carnitine** supports healthy heart function by assisting in the transport of long-chain fatty acids across mitochondrial membranes for energy production. Acetyl-L-Carnitine also provides support for healthy arteries and blood pressure levels within normal ranges.

**B-Complex vitamins** support healthy blood pressure, homocysteine, glucose and insulin levels within normal ranges, and supports healthy arteries and heart function. Additionally, B-Complex vitamins work with enzyme systems that convert fuels to energy (tricarboxylic acid cycle).

**Vitamin D<sub>3</sub>** suppresses renin transcription and regulates the renin-angiotensin system. D<sub>3</sub> also supports healthy arteries, and healthy blood pressure, glucose and insulin levels within normal ranges.

**Vitamin C** - A potent antioxidant, vitamin C supports healthy arteries, and healthy blood pressure within normal ranges.

**Magnesium, zinc, copper** and **selenium** support healthy arteries and healthy blood pressure, glucose and insulin levels within normal ranges.



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**Olive leaf extract** supplies flavonoids and glycosides possessing well-defined antioxidant properties, having effectively been shown to prevent the oxidation of LDL *in-vitro*. Olive leaf's phytonutrients support healthy arteries, and healthy blood pressure, glucose and insulin levels within normal ranges.

**Quercetin** protects against lipid peroxidation and inhibits arachidonic acid cascade enzymes. Quercetin increases that activity of resveratrol by slowing hepatic metabolism.

**Phytolens®** – a patented and very potent antioxidant. **Phytolens®** effectively protects lipids from oxidation, and downregulates pro-inflammatory mediators *in-vitro*.

**Ginkgo biloba extract** possesses antioxidant activity. Research suggests Ginkgo protects endothelial cells from free-radical induced damage.

**Lutein** and **Lycopene**, natural carotenoids possessing significant antioxidant activity, provide support for healthy arteries and blood pressure levels within normal ranges.

VasculoSirt® is available in 150-count (#2924) and 300-count bottles (#2925).

Supplement Facts					
Serving Size: 5 Capsules					
Servings Per Container: 60					
	Amount Per Serving	% Daily Value			
Vitamin A (as mixed carotenoids)	1,095 mcg RAE	122%	Selenium (as selenomethionine)	50 mcg	91%
Vitamin C (as ascorbic acid)	250 mg	278%	Copper (as copper citrate)	0.5 mg	56%
Vitamin D <sub>3</sub> (as cholecalciferol)	50 mcg	250%	Coenzyme Q10 (emulsified)	50 mg	†
Vitamin K (as menaquinone-7 from fermentation and as phytonadione)	50 mcg	42%	Trans-Resveratrol	50 mg	†
Thiamin (B1) (as thiamin mononitrate)	5 mg	417%	R-Alpha Lipoic Acid (from stabilized sodium salt)	50 mg	†
Riboflavin (B2)	5 mg	385%	Green Tea Extract (50% EGCG) (leaf)	500 mg	†
Niacin	25 mg	156%	Acetyl-L-Carnitine hydrochloride	500 mg	†
Vitamin B <sub>6</sub> (as pyridoxine HCl)	50 mg	2,941%	Olive Extract ( <i>Olea europaea</i> ) (leaf)	50 mg	†
Folate (as calcium folinate)	400 mcg	100%	Quercetin	50 mg	†
Vitamin B12 (as methylcobalamin)	50 mcg	2,083%	Ginkgo Extract (Ginkgo biloba) (leaf)	5 mg	†
Biotin	2,500 mcg	8,333%	Phytolens® ** (Lens esculenta extract)	5 mg	†
Pantothenic Acid (as calcium pantothenate)	12.5 mg	250%	Lutein (from Aztec Marigold flower)	5 mg	†
Magnesium (as magnesium glycinate*)	125 mg	30%	Lycopene (from Tomato)	1.5 mg	†
Zinc (as zinc picolinate)	15 mg	136%			

† Daily Value not established

**Other ingredients:** Capsule shell (gelatin and water), magnesium stearate (vegetable source) and gum arabic.

\* **Albion®** brand Magnesium Glycinate. Albion Laboratories, Inc. of Clearfield, Utah.

\*\* **Phytolens®** is a registered trademark of Biotics Research Corporation. US. Patent No. 5,762,936, Biotics Research Corporation.

**This product is gluten and dairy free.**

**RECOMMENDATION:** Five (5) capsules two (2) times each day as a dietary supplement or as otherwise directed by a healthcare professional.

**CAUTION:** Those taking blood thinners should avoid supplements with vitamin K unless specifically recommended and monitored by their physician. Not recommended for pregnant or lactating women.

**KEEP OUT OF REACH OF CHILDREN**

Store in a cool, dry area.

Sealed with an imprinted safety seal for your protection.

Product # 2925 Rev. 12/18



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