Blood Pressure Response™

Supports Healthy Blood Pressure



healthy blood pressure levels. That's why Source Naturals created Blood Pressure Response.

BLOOD PRESSURE RESPONSE is a comprehensive Bio-Aligned FormulaTM that can help maintain blood pressure already within the normal range, when used as part of a healthy diet and exercise plan.

Blood pressure health is critical because it is associated with myriad other body systems. Blood pressure affects, and is affected by, circulation to the heart and brain, glucose metabolism, oxidative stress, and endothelial function (the cells lining our blood vessels). The complex array of nutrients, botanicals and special ingredients in Blood Pressure Response provides balanced support for the deep SystemiCare metabolic systems identified by Source Naturals as critical for your optimal health:

Heart/Circulation (including healthy blood vessels, blood flow, homocysteine levels, and blood lipid regulation) and Antioxidant Defense.



What is Blood Pressure?

Blood pressure can be defined as the pressure or force applied against the artery walls as blood is carried through our circulatory system. Blood pressure rises and falls as the heart and muscles cope with demands, such as exercise, stress, and sleep. There are two types of blood pressure. Systolic blood pressure refers to the force the heart exerts against arterial walls when it contracts to pump blood. Diastolic blood pressure refers to the pressure within the arteries as the heart relaxes and refills with blood. Blood pressure levels are recorded as two numbers: the top number is systolic, the bottom number is diastolic. The systolic number is always the higher of the two.

Changes in blood pressure can be caused by various factors. During pregnancy it tends to rise but gradually returns to its previous level after birth. During the day, a normal person's blood pressure fluctuates according to activity. An elderly person normally has blood pressure readings above normal values because blood pressure increases with age. Blood pressure also goes up as a normal response to stress and physical activity. Young children usually have blood pressure readings well below values considered normal for adults.

Blood pressure is also affected by a combination of genetic and environmental factors. Being overweight, physical inactivity, excessive sodium or sugar intake, and tobacco smoking impact blood pressure in a negative way.

Blood Pressure Response Can Help

BLOOD PRESSURE RESPONSE is uniquely effective because it is a Bio-Aligned Formula[™]. Source Naturals evaluates the underlying causes of system imbalances, and designs formulas that provide targeted nutrition to interrelated body systems. BLOOD PRESSURE RESPONSE helps balance the deep metabolic systems associated with healthy blood pressure levels.

Blood Vessels: The Vascular Endothelium

The vascular endothelium is the inner lining of the blood vessels. The proper functioning of the endothelium plays an important role in a number of functions, including regulation of blood flow, vascular tone, and platelet aggregation. These functions are mediated by the synthesis and release of several substances, particularly nitric oxide (NO), which causes blood vessels to relax. L-Arginine is an essential amino acid required by the endothelium to produce nitric oxide. Additional ingredients that help maintain healthy blood vessels include L-citrulline, vitamin D, magnesium, calcium, pine bark extract, Coleus forskohlii, arjuna, potassium, resveratrol, grape seed, salvia, folic acid/folinic acid, ashwagandha, hawthorn, and hibiscus.

Blood Flow

Several herbs and vitamins, such as vitamin E, ginkgo and myrrh, have been shown to help tonify the circulatory system and support healthy blood flow. Nattokinase, a systemic enzyme isolated from the traditional Japanese soy food natto, has been shown in animal models to assist in the disintegration and clearing of cross-linked fibrin deposits from the circulatory system and thus to support blood flow. Blood flow is also supported by garlic, onion, *Coleus forskohlii*, resveratrol, grape seed, salvia, guggulsterones, and hawthorn.

Homocysteine Defense

Preventing an undesirable buildup of homocysteine levels may help support the integrity of arteries. High amounts of homocysteine can affect vascular function and endothelial-dependent vasorelaxation. In order to help regulate homocysteine levels, it is critical to provide the body with sufficient amounts of vitamin B-6 and B-12, trimethylglycine, and folic acid/folinic acid.

Antioxidant Defense

Healthy blood pressure is associated with a normal level of antioxidants. Oxidative stress from excess production of free radicals can have a negative effect on blood vessels and blood flow, and also oxidize blood lipids. Oxidized LDL can lead to the accumulation of vascular

inflammatory cells and free radicals and to the inactivation of nitric oxide. Carotenoids such as lycopene, as well as tocotrienols and gamma vitamin E, can inactivate free radicals and help maintain healthy blood vessels.

Blood Pressure Response also contains these additional antioxidant ingredients: garlic, pine bark extract, arjuna, coenzyme Q10, ginkgo biloba, resveratrol, grape seed, salvia, guggulsterones, selenium, ashwagandha, and onion.

Heart Health

Healthy blood pressure is affected by and affects numerous body systems, particularly the heart. It is therefore critical to address the health and strength of this organ. Arjuna has been shown to improve cardiac muscle function and to support pumping activity, while potassium is essential for cardiac smooth muscle contraction. Several herbs, such as myrrh and arjuna, have been used in traditional Chinese and Indian herbalism as cardiac tonics and to support circulation. A healthy heart organ is also supported by grape seed, ashwagandha, hawthorn berry, *Coleus forskohlii*, hibiscus, and coenzyme Q10.

Blood Lipid Regulation

Cardiovascular and circulatory health depends on healthy blood lipid levels. The type and ratio of lipids in the diet and in the bloodstream may have a positive effect on healthy blood pressure. Lipids also affect the functioning of the entire cardiovascular system, including blood flow and platelet aggregation. Blood lipids also have an effect on the synthesis of certain prostaglandins that regulate vasodilation. Blood lipid regulation is addressed by hibiscus, arjuna, coenzyme Q10, guggulsterones, garlic, onion, and hawthorn berry.

Scientific Nutrition: Cornerstone of the Wellness Revolution

Source Naturals brings you the science of BLOOD PRESSURE RESPONSE as part of our commitment to offer the latest emerging wellness strategies. Adding Source Naturals BLOOD PRESSURE RESPONSE to your supplement regimen is a profound yet accessible way to deal with the challenges to blood pressure and cardiovascular health posed by lifestyle, environmental and genetic factors. Source Naturals is pleased to partner with your retailer in bringing to market cutting-edge supplements to help you take personal charge of your health.



References

Digiesi V et al. Coenzyme Q10 in essential hypertension. *Mol Aspects Med.* 1994; 15 Suppl:s257-58.

Engelhard YN et al. Natural antioxidants from tomato extract reduce blood pressure in patients with grade-1 hypertension: a double-blind, placebo-controlled pilot study. *Am Heart* J. 2006 Jan;151 (1):100.

Geleijnse JM, Grobbee DE, Kok FJ. Impact of dietary and lifestyle factors on the prevalence of hypertension in Western Populations. *J Jum Hypertens* 2005 Dec; 19 Supple 3:S1-4.

Herrera-Arellano A et al. Effectiveness and tolerability of a standardized extract from *Hibiscus sabdariffa* in patients with mild to moderate hypertension: a controlled and randomized clinical trial. *Phytomedicine* 2004Jul;11(5):375-82.

Houston, Mark C. Nutraceuticals, Vitamins, Antioxidants, and Minerals in the Prevention and Treatment of Hypertension. *Progress in Cardiovascular Diseases*, Vol 47, No 6 (May/June) 2005: pp 396-449.

Witteman et al. Reduction of blood pressure with oral magnesium supplementation in women with mild to moderate hypertension. *Am J Clin Nutr.* 1994 Jul;60(1):129-35.

Xin-Yan JI, Benny K-H Tan, Yi-Zhun Zhu. 2000. *Salvia miltiorrhiza* and ischemic diseases. *Acta Pharmacol Sin* 21(12): 1089-94



BLOOD PRESSURE RESPONSE is a Bio-Aligned Formula Supports Blood Pressure Levels Already in the Normal Range

Blood Vessels: The Vascular Endothelium	Arjuna, Ashwagandha, <i>Coleus forskohlii</i> , Grape Seed Extract, Hawthorn Berry, Hibiscus, L-Arginine, L-Citrulline, Pine Bark Extract, Resveratrol, Salvia Extract, Calcium, Magnesium, Potassium, Folic Acid,/Folinic Acid Vitamin D
Blood Flow	Coleus forskohlii, Garlic, Ginkgo biloba, Grape Seed Extract, Guggulsterones Extract, Hawthorn Berry, Nattokinase, Onion, Resveratrol, Salvia Extract, Vitamin E
Homocysteine Defense	Trimethylglycine, Folic Acid/Folinic Acid, Vitamin B-6, Vitamin B-12
Antioxidant Defense	Arjuna, Ashwagandha, Coenzyme Q10, Garlic, Ginkgo biloba, Grape Seed Extract, Guggulsterones Extract, Lycopene, Onion, Pine Bark Extract, Resveratrol, Salvia Extract, Selenium, Tocotrienols, Vitamin E
Heart Health	Arjuna, Ashwagandha, Coenzyme Q10, <i>Coleus forskohlii</i> , Grape Seed Extract, Hawthorn Berry, Hibiscus, Potassium
Blood Lipid Regulation	Arjuna, Coenzyme Q10, Garlic, Guggulsterones Extract, Hawthorn Berry, Hibiscus, Onion



Bio-Aligned Formulas

Body Systems Charts 2003, Volume 1

To learn more about the SystemiCareproactive approach to health care, visit our website, www.sourcenaturals.com, or look for the Bio-Aligned Chart Book at participating health food stores.



Strategies for Wellness www.sourcenaturals.com



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