



Taking on Heart Disease with Avini's Cardio Care



Rik J. Deitsch, MS Biochemistry
Chief Scientific Officer, Avini Health



Heart disease is the leading cause of mortality in the United States and throughout the world; responsible for almost a third of all deaths. It is also known as a 'silent killer' as most people don't have any clue that there is a problem until they suffer their first heart attack. While it is true that some people may be genetically predisposed to cardiac disease, most heart disease and cardiovascular risk can be reduced or even eliminated by good lifestyle choices. These include physical activity, a healthful diet, and supplementation proven to benefit cardiovascular health.

It can sometimes be frustrating when people are reviewing supplementation for a specific organ, system or health concern and cannot pinpoint the benefits to them. This is especially true when looking for a product to aid in "cardiovascular

health." The problem comes from the broad nature of the word "cardiovascular." Some products may benefit the heart muscle itself; while other compounds aid in the electrical nature of the heart in improving or stabilizing heart rate and rhythm. Additionally, some products may benefit the large blood vessels in reducing risk of blood vessel blockages or stiffening of the blood vessels (atherosclerosis and arteriosclerosis). Lastly, some products may help with surface circulation and improve blood flow to the capillaries and extremities; which includes the hands, feet, and even the sex organs. In creating a new product for Avini Health, we wanted to address ALL of the parts of the cardiovascular system.



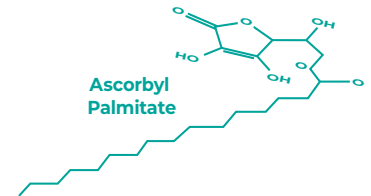
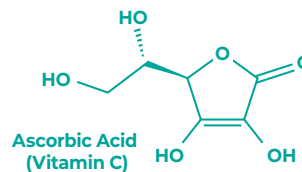
Avini's Plus CardioCare provides nutrients to support the entire cardiovascular system: including nutrients to aid the heart muscle as an efficient pump; improving heart rate and rhythm, while supplying nutrition to improve circulation, stabilize blood pressure, and improve the structure and function of the blood vessels.

These include:

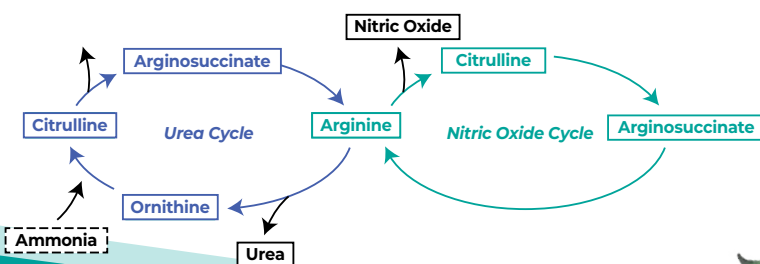
Co-enzyme Q10 (CoQ10, Ubiquinone): As part of the electron transport chain in the mitochondria of every cell, CoQ10 is critical in the production of energy (ATP). Since heart muscle never rests – your heart beats 24 hours a day – cardiac muscles have ten times the mitochondria than any other cells in the body. Studies demonstrate that it can help maintain healthy immune and cardiovascular systems, tissues and organs, and oral health (especially the gums). It also assists the body to maintain proper weight balance. Lastly, many prescription drugs for the treatment of heart disease may actually deplete CoQ10 from the body. So, anyone on cardiac medication should make sure that they are supplementing with CoQ10.

L-Arginine & L-Citrulline are amino acids and are the building blocks for nitric oxide production, a crucial substance that increases blood flow by relaxing smooth muscle and expanding blood vessels. Since these amino acids actually replenish each other in the Urea Cycle and the Nitric Oxide Cycle; research has shown that supplementing with a low-dose combination of both of these amino acids provides much higher benefits than extreme amounts of just L-Arginine.

Grape Seed Extract is rich in proanthocyanidins, another group of important flavonoids. Proanthocyanidins are highly regarded for their strong antioxidant properties and their role in supporting the body's capillary blood vessel system.



Ascorbyl Palmitate is a fat-soluble version of Vitamin C (ascorbic acid). While ascorbic acid is usually thought of as a water soluble vitamin that is excreted when over-supplemented, ascorbyl palmitate is ascorbic acid attached to palmitic acid (a long-chain fat) that can be stored over time and has been shown to protect blood vessels; supporting healthy circulation. While most people are familiar with Vitamin C's properties as an antioxidant, that is not its main function in the body. Ascorbic acid is a coenzyme and co-factor in the production of collagen. Collagen is a protein that is responsible for the structure of our skin, hair, nails, and even the walls of our blood vessels. When our diets lack Vitamin C, we can suffer from the deficiency disease known as scurvy; symptoms of which include swollen and bleeding gums along with cardiovascular failure. Ascorbyl palmitate can be stored over time and may even sequester into fatty deposits in the body. This includes the plaques in the arteries. Over time, this may reduce risk of blockages and may even improve the strength and flexibility of blood vessels.



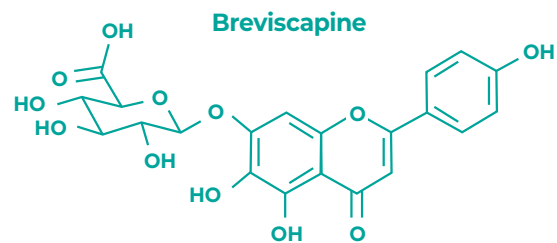
Selenium: Selenium is the essential cofactor in over twenty enzymes, including the antioxidant enzyme glutathione peroxidase. Glutathione peroxidase levels decline with advancing age, and experts believe that adequate selenium nutrition can help maintain normal production of this important enzyme. Selenium is also necessary for healthy thyroid and cardiovascular function.

Hawthorne Berry Powder: Hawthorn (*Crataegus oxyacantha*) has a long history as a medicinal substance. The cardiovascular effects are believed to be the result of positive inotropic activity, ability to increase the integrity of the blood vessel wall and improve coronary blood flow. Clinical trials going back to the 1990s have shown that Hawthorn extracts are safe, well-tolerated and actually may improve function in patients with clinical heart disease. Hawthorn Berry is believed to improve heart rate and rhythm, as well as strengthen the heart muscle as an efficient pump.

L-Taurine: Taurine is a sulfur-containing amino acid concentrated in the muscles and central nervous system. Not only is taurine a potent antioxidant, but it has been shown to affect some of the risk factors for heart disease. Specifically, taurine seems to lower blood pressure and cholesterol levels. Taurine has been shown to aid in lowering both serum cholesterol and triglyceride levels, as well as helping to mitigate damage from high-fat diets. Taurine may also contribute toward cardiovascular health by reducing the tendency of platelets to stick together or aggregate.

Breviscapine Extract: A natural floral extract historically used to promote healthy circulation and mental focus. With over fifty published

studies, breviscapine is becoming the breakout ingredient from traditional Chinese medicine for cardiovascular and cognitive function products.



Beet Powder: A natural extract that promotes healthy blood pressure and circulation.

Detoxolite: Avini's micronized and Activated clinoptilolite Detoxolite™ that detoxifies while improving nutritional absorption and utilization.

In all, Avini Health's Cardio Care delivers on its promise to provide benefits for the entire cardiovascular system: providing nutrition to improve the heart muscle as an efficient pump, regulating heart rate and rhythm, improving the structure of the blood vessels, supporting healthy blood pressure, and improving circulation throughout the body.





thank you