At the Heart of the Power of the Grape

In addition to genetics, being physically active and eating a healthy diet are two important factors that contribute to a recipe for heart health. Enjoying an assortment of heart-healthy foods—such as colorful fruits and vegetables, legumes, whole grains, lean meat, fish and low-fat dairy—can go a long way toward promoting a healthy heart, according to the Mediterranean Diet\(^1\) and DASH (Dietary Approaches to Stop Hypertension)\(^2\) eating plans.

In addition to a produce-rich diet and active lifestyle, delicious Concord grapes may be one important ingredient for maintaining a healthy cardiovascular system. Research suggests that polyphenols, like those found in Concord grapes, can contribute to heart health in certain populations by promoting healthy arteries.\(^3\)\(^-\)\(^7\)

While more research is underway to uncover the natural goodness and health benefits of Concord grapes, current research is pointing to the following heart-health benefits:

- **Concord grapes may help support flexible arteries to promote healthy blood flow.**\(^3\)\(^-\)\(^7\) Human studies indicate that drinking Concord grape juice may help dilate and relax arteries in people with coronary artery disease.\(^4\)\(^,\)\(^7\) This may be due to Concord grapes’ ability to stimulate the production of nitric oxide in cells that line the arteries,\(^3\) causing them to relax and support healthy blood flow.

- **Concord grapes may help promote healthy, clear arteries.**\(^7\)\(^-\)\(^11\) Studies have shown that Concord grape juice can help manage the effects of LDL or “bad” cholesterol to help keep arteries clear of excess plaque build-up in certain populations.\(^7\)\(^,\)\(^8\)\(^,\)\(^11\) It’s worth noting, however, that research by Chou and colleagues did not support these findings.\(^4\)

- **Concord grapes may have an anti-clotting effect**\(^6\)\(^,\)\(^9\)\(^,\)\(^12\) similar to red wine.\(^13\) Platelet aggregation makes blood “sticky” and can lead to clots within the artery. Small but promising human studies suggest that drinking Concord grape juice may inhibit platelet aggregation.\(^6\)\(^,\)\(^12\) With that said, these outcomes were not replicated by Albers and colleagues in a study on Concord grape juice and platelet aggregation in individuals on aspirin therapy.\(^14\)

- **In certain populations, Concord grapes may play a role in healthy blood pressure.**\(^15\)\(^-\)\(^17\) Research in this area is still emerging, but promising: two human studies on men with hypertension found that consuming Concord grape juice regularly resulted in lower systolic and diastolic blood pressure.\(^15\)\(^,\)\(^16\) Another recently published study on men and women with either pre-hypertension or stage 1 hypertension found that while ambulatory blood pressure remained unchanged, drinking Concord grape juice helped lower nocturnal blood pressure compared to the placebo.\(^17\)

**The Grape Science Center** at grapescience.com is a valuable resource to learn about grape science and health, including more information on the cardiovascular research studies mentioned above. Please visit grapescience.com for the latest news on the role of Concord grapes in a healthy lifestyle.
References:


3 Anselm E, Chataigneau M, Ndiaye M, Chataigneau T and Schini-Kerth VB. Grape juice causes endothelium-dependent relaxation via a redox-sensitive Src- and Akt-dependent activation of eNOS. Cardiovasc Res. 2007. 73(2):404-413.


9 Shanmuganayagam D, Warner TF, Krueger CG, Reed JD and Folts JD. Concord grape juice attenuates platelet aggregation, serum cholesterol and development of atheroma in hypercholesterolemic rabbits. Atherosclerosis. 2007.190(1):135-142.


