Dark chocolate seen healthy for arteries

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NEW YORK (Reuters Health) - Eating dark chocolate may have a protective effect on the cardiovascular system in healthy people, the results of a new study suggest.

"Epidemiological studies suggest that high flavonoid intake confers a benefit on cardiovascular outcome," Dr. Charalambos Vlachopoulos, of Athens Medical School in Greece, and colleagues write in the American Journal of Hypertension.

They point out that the elasticity or stiffness of arteries "are important determinants of cardiovascular performance and are predictors of cardiovascular risk."

The researchers examined the effects of flavonoid-rich dark chocolate on blood-vessel function in 17 young, healthy volunteers over a 3-hour period after they consumed 100 grams of a commercially available dark chocolate.

The investigators saw that an artery in the arm dilated significantly more in response to an increase in bloodflow. Chocolate consumption also led to a significant 7-percent decrease in aortic stiffness.

"The predominant mechanism appears to be dilation of small and medium-sized peripheral arteries and arterioles," Vlachopoulos and colleagues suggest.

The team didn't detect any change in antioxidant levels, so they suggest other possible explanations. "The dilatory effect of chocolate under resting conditions can be attributed to improved nitric oxide bioavailability, prostacyclin increase, direct effect of chocolate in smooth muscle cells, or activation of central mechanisms," they write.

SOURCE: American Journal of Hypertension, June 2005.