

## ***Study Sweet for Chocolate Lovers***

Previous research has hinted that chocolate may be healthy, and now a new UCSF-led study will tickle the hearts of chocolate lovers.

School of Nursing researchers on Wednesday (November 20) reported a potential link between cocoa flavanols contained in certain chocolates and improved blood vessel function, which is believed to be an important indicator of cardiovascular health.

The study was presented by Marguerite M. Engler, PhD, RN, professor and vice chair of the physiological nursing, during a special session sponsored by the Scientific Councils of the American Heart Association. The research compared the effects on blood vessel function of consuming a flavanol-rich dark chocolate bar (DOVE® Dark Chocolate, Mars, Incorporated) to a flavanol-poor dark chocolate product.

Twenty-one healthy subjects ate either a bar (1.6 ounces) of the flavanol-rich (259 mg of chocolate flavanols) or a flavanol-poor chocolate product each day for two weeks. Researchers measured the level of flavanols in participants' blood, and found that the chocolate flavanols in the flavanol-rich chocolate were absorbed into the blood stream. They also measured blood vessel dilation or elasticity in response to an increase in blood flow.

Principal investigator Mary B. Engler, PhD, RN, professor of physiological nursing, and her research team found that those who consumed the flavanol-rich DOVE® Dark chocolate exhibited increased blood vessel dilation two hours after eating the chocolate. Blood vessel dilation is believed to be an important indicator of healthy blood vessel function and a healthy cardiovascular system.

"This is consistent with previous research suggesting that certain chocolates do contain enough flavanols to support cardiovascular health," said Marguerite Engler.

Flavanols are a sub-class of flavonoids found naturally in a variety of plant-based foods, including certain cocoas, chocolates and red wine. Decades of studies suggest that flavanols may have a host of potentially beneficial health effects.

"As health professionals, we are very excited to find that a food consumers can enjoy eating in moderation may have measurable benefits on health," said Carl L. Keen, PhD, professor and chair, Department of Nutrition, professor, Department of Internal Medicine, University of California at Davis, who also presented research at the American Heart Association session. "We've hypothesized that chocolate, if processed properly, could contain enough flavanols to have a beneficial effect on heart health. The study from UCSF further reinforces this hypothesis."