

## Cocoa: A New Supplement for Skin Health

By Greg Arnold, DC, CSCS, May 16, 2006, abstracted from "Long-Term Ingestion of High Flavanol Cocoa Provides Photoprotection against UV-Induced Erythema and Improves Skin Condition in Women" in the June 2006 issue of the Journal of Nutrition

Link - http://www.nowfoods.com/HealthLibrary/HealthArticles/HealthNotes/M083905.htm

Chocolate is a food loaded with health benefits. It has been used as a medicinal remedy since ancient times<sup>1</sup> and been proposed in medicine today for preventing various chronic diseases.<sup>2</sup> A 100 g bar of milk chocolate, which contains 170 mg of flavonoid antioxidants, procyanidins and flavonols,<sup>3</sup> can help lower blood pressure and help protect against type 2 diabetes.<sup>4</sup>

Because chocolate contains a saturated fat in cocoa butter called stearic acid, chocolate has been viewed as unhealthy despite having a higher amount of polyphenols (611 mg per serving) and flavonoids (564 mg per serving of epicatechin) than either tea or wine. Not only does dark chocolate contain "substantially more" flavonols than tea, apple, onions, and red wine, it has all the flavonoids of tea, four times the catechins of tea, and even many flavonoids not found in tea. This all adds up to chocolate being a food that can help protect against heart disease.

Now a new study<sup>9</sup> has found that the health benefits of cocoa extend to preserving the health of your skin.

In the study, researchers gave two groups of women either a high (326 mg per day) or low (27 mg per day) flavonol cocoa powder dissolved in 100 mL water for 12 weeks. The high flavonol drink contained Epicatechin (61 mg per day) and catechin (20 mg per day) while the low flavanol drink contained 6.6 mg epicatechin and 1.6 mg catechin as the daily dose.

After exposing skin areas to radiation from a solar simulator, researchers found that redness from the solar stimulator was "significantly decreased" by 15% after week 6 and 25% after week 12 in the high flavonol group compared to no change in the low flavanol group. They also found an increase in blood flow, skin density, skin hydration with a concomitant decrease in water loss after week 12 while no changes were seen in the low flavanol cocoa group. Finally, there was "a significant decrease" of skin roughness and scaling in the high flavanol cocoa group compared with those at week 12.

For the researchers, "dietary flavanols from cocoa contribute to endogenous photoprotection, improve dermal blood circulation, and affect cosmetically relevant skin surface and hydration variables."

Greg Arnold is a Chiropractic Physician practicing in Danville, CA. You can contact Dr. Arnold directly by emailing him at <a href="mailto:PitchingDoc@msn.com">PitchingDoc@msn.com</a> or visiting his website <a href="mailto:www.PitchingDoc.com">www.PitchingDoc.com</a>

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