

Chocolate rich in flavanols may protect the skin from UV

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Chocolate. Credit: Wikimedia Commons

(PhysOrg.com) -- A new study has discovered for the first time that dark chocolate rich in flavanols may provide significant protection from the harmful effects of ultraviolet light.

Fresh cocoa beans are extremely rich in flavanols, which are believed to have antioxidant properties. During the manufacture of conventional chocolate the concentration of flavanols is drastically reduced.

[Antioxidants](#) are essential to protect [cells](#) from damaging free-radicals.

The London-based researchers, S. Williams, S Tamburic, and C Lally compared the results of chocolate containing high and low levels of flavanols. The high flavanols (HF) [dark chocolate](#) was specially produced in Belgium using a method of manufacture that preserves the natural HF

content. The low flavanols (LF) chocolate was made by the more conventional, high temperature method.

The experiment was a double-blind study of 30 healthy, pale-skinned volunteers who were randomly assigned to one of two groups. One group consumed 20 g of HF chocolate in the form of droplets each day, while the other consumed 20 g droplets of the conventional dark (low flavanols - LF) chocolate.

During the study, the scientists regularly exposed the subjects to controlled, and increasingly high, amounts of UV light to test the amount of UV required for the skin on their front and forearms to react and become inflamed. This is known as the minimal erythema dose (MED). The results showed that subjects consuming HF chocolate doubled their mean MED during the three-month study, while those consuming LF chocolate saw no change in the MED.

The researchers suggest the findings indicate that the HF dark chocolate could protect the skin from ageing effects of exposure to sun, such as [wrinkles](#), and the most likely mechanisms are the antioxidant and anti-inflammatory effects of the flavanols. The study did not look at the long term effects, and the high flavanols chocolate used in the experiment is not generally available in stores.

Previous research has suggested dark chocolate can also reduce the risk of blood clots, prevent premature births, lower blood pressure, [reduce the pain response to heat](#), and protect against bowel cancer. Swedish researchers also reported earlier this year that consuming dark chocolate a couple of times a week slashed the mortality rate for [heart attack patients](#). It has also been shown to cut the risk of dementia and [boost brain power](#).

The latest research findings are published in the *Journal of Cosmetic*

Dermatology.

More information: Eating [chocolate](#) can significantly protect the skin from [UV light](#), *Journal of Cosmetic Dermatology*, [DOI:10.1111/j.1473-2165.2009.00448.x](https://doi.org/10.1111/j.1473-2165.2009.00448.x)

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