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BeanMeUpCoffee

The Secret to Healthy Skin: Coffee

It kills the skin cancer cells caused by UVB radiation

In the vivid debate on whether coffee is good or bad for our health, here comes a new study coffee supporters can always use as a pro argument: in the case of mice, caffeine works like a "sun screen", protecting their skin against the harmful ultraviolet B (UVB) radiation and ultimately against skin cancer. In the study published in *Cancer Research*, the team of researchers also presents the mechanism behind this protection: caffeine activates a process that removes skin cells with DNA affected by irradiation. When cells with defective DNA start multiplying, cancer sets in. "The results of the present study provide a possible mechanism for earlier observations indicating that oral administration of caffeine inhibits ultraviolet light-induced skin cancer in mice," senior author Dr Allan H. Conney told Reuters Health. The team delivered caffeine to the mice in their drinking water for 1 to 2 weeks before the animals were exposed to UVB, in doses comparable to humans drinking 3 to 5 cups of coffee daily. Caffeine was also ointed, mixed with cream or gel, directly to the skin soon after UVB radiation exposure. In both cases, the alkaloid killed the skin cells with impaired DNA. "We believe that these results will extrapolate to humans but clinical studies need to be done. [Previous] studies indicate that coffee or tea drinkers have a lower risk of non-melanoma skin cancer," said Conney. About 75,000 new cases of non-melanoma skin cancer (NMSC), the less aggressive type of skin cancer, are detected annually in the US, and the overall number of skin cancers could go up to 1,000,000 each year in the US alone. A 2007 research conducted at the Wayne State University, Detroit, showed that coffee consumption could reduce the risk of skin cancer by 35 %. Subjects drinking over six cups of caffeinated coffee daily decreased their likelihood of developing skin cancer by 35 %, while 2-3 cups lowered it by 12 %. Another 2007 research made at Rutgers revealed that coffee and exercising fight against sun-induced skin cancer. The mice on caffeine presented a 95 % increase in UVB-induced apoptosis (cell death, instead of tumor forming in the cells whose DNA had been broken by UV light), the exercising mice a 120 % increase, while the mice that both ingested caffeine and exercised more, an increase of 400 % compared to the control group.