

Coffee consumption associated with decreased risk for basal cell carcinoma

October 24 2011

Caffeine could be related to an inverse association between basal cell carcinoma risk and consumption of coffee, a study found.

The prospective study, presented at the 10th AACR International Conference on Frontiers in [Cancer Prevention Research](#), held Oct. 22-25, 2011, examined the risks of [basal cell carcinoma](#) (BCC), [squamous cell carcinoma](#) (SCC) and melanoma in connection with coffee consumption and found a decreased risk for BCC only.

"Given the nearly 1 million new cases of BCC diagnosed each year in the United States, daily dietary factors with even small protective effects may have great public health impact," said researcher Fengju Song, Ph.D., a postdoctoral fellow in the department of dermatology at Brigham and Women's Hospital and Harvard Medical School. "Our study indicates that coffee consumption may be an important option to help prevent BCC."

Data were taken from the Nurses' [Health Study](#) (Brigham and Women's Hospital) and the Health Professionals Follow-Up Study (Harvard School of Public Health). In the Nurses' Health Study, 72,921 participants were followed from June 1984 to June 2008. In the Health Professionals Follow-Up Study, 39,976 participants were followed from June 1986 to June 2008.

The researchers reported 25,480 incident [skin cancer](#) cases. Of those, 22,786 were BCC, 1,953 were SCC, and 741 were melanoma.

Song and colleagues reported that women who consumed more than three cups of coffee per day had a 20 percent reduction in risk for BCC, and men who consumed more than three cups per day had a nine percent risk reduction compared with people who consumed less than one cup per month.

The amount of coffee consumption was inversely associated with BCC risk. Those in the highest quintile had the lowest risk, with an 18 percent reduction for women and a 13 percent reduction for men.

Song and colleagues were surprised by the inverse connection in BCC cases only. Animal studies have suggested an association between [coffee intake](#) and skin cancer risk, but epidemiologic studies have not conclusively shown the same results, they said.

"Mouse studies have shown that oral or topical caffeine promotes elimination of UV-damaged keratinocytes via apoptosis (programmed cell death) and markedly reduces subsequent SCC development," Song said. "However, in our cohort analysis, we did not find any inverse association between coffee consumption and the risk for SCC."

Song said that additional studies specifically addressing the association between [coffee consumption](#) and BCC and the mechanism behind this association are warranted.

Provided by American Association for Cancer Research

Citation: Coffee consumption associated with decreased risk for basal cell carcinoma (2011, October 24) retrieved 30 April 2024 from <https://medicalxpress.com/news/2011-10-coffee-consumption-decreased-basal-cell.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.