

Alcohol intake associated with increased risk of melanoma

December 1 2016

Bottom Line: Alcohol intake was associated with higher rates of invasive melanoma among white men and women. White wine carried the most significant association, and the increased risk was greater for parts of the body that receive less sun exposure.

Journal in Which the Study was Published: *Cancer Epidemiology, Biomarkers & Prevention*, a journal of the American Association for Cancer Research.

Author: Eunyoung Cho, ScD, an associate professor of dermatology and epidemiology at the Warren Alpert Medical School of Brown University in Providence, Rhode Island.

Background: Approximately 3.6 percent of cancer cases worldwide have been attributed to alcohol, most typically cancers of the aerodigestive tract, liver, pancreas, colon, rectum, and breast. Previous research has suggested that alcohol can cause carcinogenesis as the ethanol in alcohol metabolizes into acetaldehyde, which damages DNA and prevents DNA repair.

How the Study Was Conducted: Cho and colleagues sought to determine whether alcohol consumption increased melanoma risk. They used data from three large prospective cohort studies in which 210,252 participants were followed for a mean of 18.3 years, using food-frequency questionnaires to determine their alcohol consumption. A standard drink was defined as 12.8 grams of alcohol.

Results: Overall alcohol intake was associated with a 14 percent higher risk of melanoma per drink per day. Each drink per day of white wine was associated with a 13 percent increased risk of melanoma. Other forms of alcohol—beer, red wine, and liquor—did not significantly affect melanoma risk.

The association between alcohol and melanoma was strongest for parts of the body that typically receive less [sun exposure](#). Cho said that compared with nondrinkers, those who consumed 20 grams or more of alcohol per day were 2 percent more likely to be diagnosed with melanomas of the head, neck, or extremities, but 73 percent more likely to be diagnosed with melanomas of the trunk. She said this finding was novel and further research would be required to explain the results.

Author Comment: Cho said it was surprising that white wine was the only drink independently associated with increased risk of melanoma. The reason for the association is unknown. However, research has shown that some wine has somewhat higher levels of pre-existing acetaldehyde than beer or spirits. While red and [white wine](#) may have similar amounts of pre-existing acetaldehyde, the antioxidants in red wine may offset the risks, Cho said.

Cho said the study adds melanoma to the list of cancers associated with alcohol, and the findings support existing recommendations by organizations including the American Cancer Society to limit alcohol intake.

"The clinical and biological significance of these findings remains to be determined, but for motivated individuals with other strong risk factors for melanoma, counseling regarding [alcohol](#) use may be an appropriate risk-reduction strategy to reduce risks of melanoma as well as other cancers," Cho said.

However, Cho pointed out that modest [alcohol intake](#) has been connected with reduced risk of cardiovascular disease.

"For drinkers, risks and benefits of [alcohol consumption](#) have to be considered individually, including the risk related to skin cancer," she said.

Limitations: Cho said the study's chief limitation was the homogeneity of the study population. Non-whites were excluded, as there were too few non-white participants to draw statistically valid conclusions. Therefore, the study's findings cannot be generalized for other racial or ethnic groups.

Also, few study participants reported heavy drinking, and the study did not account for some potential risk factors of [melanoma](#), such as sun-protection behaviors. Participants were excluded if they reported a personal history of cancer at baseline of the follow-up in order to avoid bias due to closer physician follow-up of cancer patients.

Provided by American Association for Cancer Research

Citation: Alcohol intake associated with increased risk of melanoma (2016, December 1) retrieved 26 April 2024 from <https://medicalxpress.com/news/2016-12-alcohol-intake-melanoma.html>

<p>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.</p>
