

# Association of Alcohol Intake With Risk of Early-Onset Colorectal Cancer

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In a Korean study reported in the [Journal of Clinical Oncology](#), Jin et al found that increased alcohol intake may be associated with an increased risk of early-onset colorectal cancer.

## Study Details

The study involved data from 5,666,576 individuals aged 20 to 49 years from the Korean National Health Insurance Service for 2009 to 2019. Alcohol consumption levels of nondrinker and light (reference), moderate, and heavy drinker were defined as 0, < 10, 10 to < 30, and  $\geq 30$  g/d for men, and 0, < 10, 10 to < 20, and  $\geq 20$  g/d for women, respectively.

## Key Findings

During a median of 9.1 (interquartile range = 5.5–9.3 years), a total of 8,314 individuals were identified with incident early-onset colorectal cancer. On multivariate analysis, moderate (adjusted hazard ratio [aHR] = 1.09, 95% confidence interval [CI] = 1.02–1.16) and heavy drinkers (aHR = 1.20, 95% CI = 1.11–1.29) had a significantly increased risk of early-onset colorectal cancer vs light drinkers.

The dose-response relationship between intake level and risk was significant for men ( $P < .0001$  for trend) and women ( $P = .003$  for trend). However, increased risk was not statistically significant for moderate (aHR = 1.11, 95% CI = 0.94–1.32) or heavy drinking (aHR = 1.20, 95% CI = 0.97–1.47) vs light drinking among women.

Analysis by tumor location showed a significant trend for increased risk with increased intake for the distal colon ( $P = .006$  for trend), rectum ( $P < .0001$  for trend), and unspecified colon ( $P = .009$  for trend) but not for the proximal colon ( $P = .439$  for trend). Compared with light drinkers, moderate and heavy drinkers had a 14% and 27% increased risk of distal colon cancer, respectively, and heavy drinkers had a 15% and 27% increased risk of rectal cancer and unspecified colon cancer, respectively. Nondrinkers had a 10% reduced risk of rectal cancer compared with light drinkers.

Among men, heavy drinking was associated with 26%, 17%, and 29% increased risk of distal colon, rectal, and unspecified colon cancers, respectively, compared with light drinkers. Among women, moderate drinking was associated with a 47% increased risk of distal colon cancer compared with light drinking, and nondrinking was associated with a 14% reduction in risk of rectal cancer vs light drinking.

A significant dose-response relationship between drinking frequency and risk for early-onset colorectal cancer was observed ( $P < .0001$  for trend), with increased risks of 6%, 14%, and 27% for 1 or 2, 3 or 4, and  $\geq 5$  drinking days per week vs nondrinkers.

The investigators concluded, “Excessive alcohol consumption increases the risk of colorectal cancer onset before age 50 years. Thus, effective interventions are required to discourage alcohol consumption among young people and to tailor colorectal cancer screening approaches for high-risk individuals.”

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