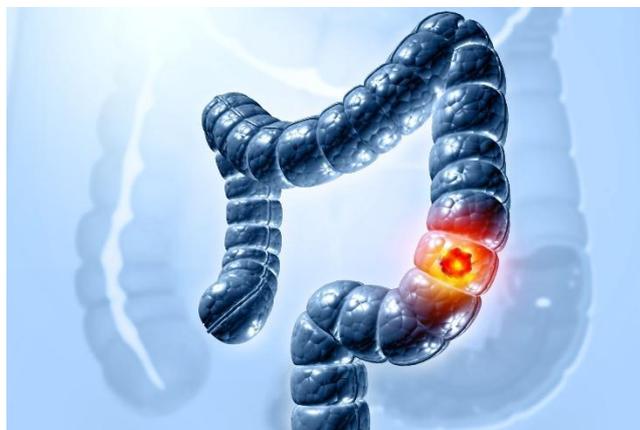


Colorectal Cancer Risk Sharply Raises due to Lifetime Heavy Drinking

Researchers used data from the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial to examine the association between lifetime alcohol intake and the risk of developing [colorectal adenomas](#) (precancerous polyps) and invasive cancer.

Study findings revealed that higher lifetime alcohol intake was associated with an increased risk of colorectal cancer (CRC), particularly rectal cancer, among current drinkers. Conversely, the data suggested that [alcohol cessation](#) was associated with lower odds of developing nonadvanced adenomas detected at screening, a very early precursor lesion.

These findings highlight the importance of viewing [alcohol consumption](#) as a cumulative exposure and suggest that reducing intake may influence early carcinogenic processes, although causal effects cannot be inferred.



Study

The present study aimed to address this knowledge gap by reconstructing participants' drinking histories from age 18 onward. Understanding this relationship is vital, as preventing an [adenoma](#) may effectively prevent cancer incidence.

The study leveraged data from the PLCO [Cancer](#) Screening Trial, a large-scale randomized controlled trial of US adults aged 55 to 74.

Study data examined two distinct groups: An incident adenoma cohort of 12,327 participants who underwent flexible sigmoidoscopy screening and a larger CRC cohort of 88,092 participants followed prospectively for clinically [diagnosed cancer](#).

The study data comprised participants' long-term sociodemographic and medical histories. Participants also completed a [Dietary History Questionnaire](#) (DHQ) that asked about beer, wine, and liquor consumption across four age groups: 18–24, 25–39, 40–54, and 55 years and older.

These data were collated and analysed to calculate a [weighted average](#) of lifetime alcohol intake.

Participants were categorized based on lifetime average alcohol consumption among current drinkers, with those consuming less than one drink per week serving as the reference group, as follows: Less than one drink per week, 1 to <7 drinks per week, 7 to <14 drinks per week, and 14 or more [drinks](#) per week.

Former drinkers were analysed separately to reduce [potential bias](#) related to lifetime abstention.

The study further investigated drinking patterns, identifying participants who were consistent heavy drinkers versus those who changed their habits over time, using sex-specific thresholds aligned with [US dietary guidelines](#).

Statistical models included logistic regression for adenomas and Cox proportional hazards regression for cancer, adjusting for confounders such as smoking, [body mass index](#) (BMI), and family history.

Findings

The study revealed a robust association between heavy, long-term alcohol consumption and increased cancer risk. Among current drinkers, those with a lifetime average of 14 or more drinks per week demonstrated a 25% [higher risk](#) of developing CRC compared with those consuming less than one drink per week (hazard ratio, 1.25; 95% CI, 1.01–1.53; $p = 0.003$).

Associations were strongest for [rectal cancer](#), where heavy lifetime drinkers faced nearly double the risk of those in the lowest intake group (hazard ratio, 1.95; 95% CI, 1.17–3.28).

Participants identified as consistent heavy drinkers throughout adulthood demonstrated a 91% higher [risk](#) of CRC compared with consistent light drinkers (hazard ratio, 1.91; 95% CI, 1.17–3.12).

Study analyses identified a nonlinear association for moderate drinking. Participants averaging 7 to <14 drinks per week showed a lower risk of CRC (hazard ratio, 0.79) compared with those consuming less than one drink per week, particularly for distal [colon](#) cancer.

The authors cautioned that this apparent inverse association may reflect residual confounding, differences in [health](#) behaviours, or reference group effects and does not indicate a protective effect of alcohol consumption.

Former drinkers had significantly lower odds of developing nonadvanced adenomas than current very light drinkers (odds ratio, 0.58; 95% CI, 0.39–0.84), suggesting that cessation may be associated with reduced risk at the earliest detectable stages of [colorectal neoplasia](#).

Associations for [advanced adenomas](#) and overall adenoma risk were less consistent.

Conclusion

The present study provides evidence that cumulative lifetime [alcohol exposure](#) is associated with CRC risk. Study data indicate that consistent heavy drinking is a robust risk factor for CRC, especially rectal cancer.

Findings related to adenomas suggest that alcohol cessation is associated with lower odds of nonadvanced precursor lesions detected at screening, reinforcing the potential value of lifestyle modification even later in [adulthood](#). However, the observational nature of the study precludes causal conclusions, and the findings of adenomas should be interpreted cautiously.

Limitations include reliance on self-reported alcohol intake and a predominantly white, educated cohort. The study underscores that [public health](#) messaging may need to emphasize that reducing alcohol intake is not only about immediate health outcomes but also about reducing long-term cumulative cancer risk.

Source:

<https://www.news-medical.net/news/20260128/Lifetime-heavy-drinking-sharply-raises-colorectal-cancer-risk-major-US-study-finds.aspx>