

Alcohol and health: all, none, or somewhere in-between?



No level of alcohol consumption is safe when it comes to human health, according to a WHO statement released in January, 2023. The data behind this dire warning come from a 2021 study that estimated the number of incident cancers attributable to alcohol consumption in the EU in 2017—light to moderate drinking (1–2 drinks per day) was responsible for 23 300 new cases of cancer. New Canadian guidelines take a strong stance too, suggesting that any more than two drinks per week puts your health at risk. Does this mean the days of safely enjoying a tipple are officially behind us?

The risks and harms associated with alcohol are well documented, and the substantial harms of heavy or binge drinking are not debated. But health benefits of lower levels of alcohol intake have been widely reported. Many studies have shown that low or moderate amounts of alcohol (particularly red wine) can reduce risk for cardiovascular disease, diabetes, and even death—possibly due in part to a tendency to reduce systemic inflammatory mediators. These benefits might be limited to adults older than 40 years, according to a 2022 analysis from the Global Burden of Disease study, which found no such benefit at younger ages.

Potential benefits of light to moderate alcohol consumption have also been reported among patients with rheumatoid arthritis. A meta-analysis of eight prospective studies reported a reduced risk of developing rheumatoid arthritis among those who consumed alcohol (up to 12 g per day, or roughly eight drinks per week) compared with non-drinkers. Another meta-analysis concluded that individuals with rheumatoid arthritis who consume alcohol have lower disease scores and better self-reported health assessments than non-drinkers. But these effects are complicated. For example, patients with high disease activity and low quality of life were more likely to stop drinking in a study from the USA. But a study from Sweden suggested that people with rheumatoid arthritis who stopped drinking ended up worse off with regard to both disease activity and quality of life compared with those who continued drinking, despite both variables being comparable at baseline.

Dire warnings like these seem to have become commonplace (a similar statement about alcohol and cancer was issued by the American Society of Clinical

Oncology in 2017) and have the potential to be ignored by many people as undesirable and unattainable. WHO correctly argues that no studies have addressed whether the potential benefits of alcohol on cardiovascular disease and diabetes outweigh the risks with regard to cancer, and that the harms of alcohol fall disproportionately on disadvantaged and vulnerable populations. In view of these truths, a why-risk-it approach might seem sensible. But interpretation of the seemingly conflicting reports requires consideration of many factors, including the varying levels of alcohol intake considered light to moderate, competing risk factors for disease, choice of comparator groups, and the known pitfalls of self-reported alcohol consumption. It is also important to put the results of these studies in the context of absolute levels of risk (versus relative risk) associated with alcohol intake, which are generally quite small.

Individuals with rheumatic disease taking medications are often counselled to reduce or eliminate alcohol intake, but it might be more realistic to simply advise patients about risk at an individual level. That said, determining risk for people with rheumatic diseases is challenging; we do not know how alcohol-related risk estimates translate to those with rheumatic disease, who are already at higher risk of cardiovascular disease and cancer compared with the general population. More data are needed to help patients make informed decisions—decisions that must also take medications into account. For example, the hepatotoxicity of the foundation drug methotrexate could be increased by alcohol, resulting in a lack of clarity about whether there is a so-called safe level of alcohol for those taking it. Whereas the ACR recommends that alcohol be avoided, the UK National Health Service suggests that patients on methotrexate can drink the same amount as everyone else (up to 14 units of alcohol per week based on UK national recommendations).

WHO calls for increased education on the cancer risks associated with alcohol consumption—perhaps including health warnings on alcohol labels—and few would argue against better-informing the public with regard to health. But the absolute risks of light to moderate drinking are small, and while there is no known safe level of drinking, it seems reasonable that the quality of life gained from an occasional drink might be deemed greater than the potential harm. ■ *The Lancet Rheumatology*



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For the **WHO statement** see <https://www.who.int/europe/news/item/04-01-2023-no-level-of-alcohol-consumption-is-safe-for-our-health> and **Comment** *Lancet Public Health* 2023; 8: e6–7

For the **Canadian drinking guidelines** see <https://ccsa.ca/sites/default/files/2022-08/CCSA-LRDG-Update-of-Canada%27s-LRDG-Final-report-for-public-consultation-en.pdf>

For more on the **global burden of alcohol consumption** see **Articles** *Lancet* 2022; 400: 185–235

For the **meta-analysis on alcohol consumption and the risk of developing rheumatoid arthritis** see *Ann Rheum Dis* 2014; 73: 1962–67

For the **meta-analysis on the effect of alcohol on disease activity and quality of life** see *Sci Rep* 2021; 11: 10474

For the **US study on alcohol and disease activity in patients with rheumatoid arthritis** see *Arthritis Care Res (Hoboken)* 2020; 72: 301–08

For the **Swedish study on alcohol and disease activity in patients with rheumatoid arthritis** see *Arthritis Rheumatol* 2023; published online Jan 11. <https://doi.org/10.1002/art.42442>

For the **UK National Health Service guidance on methotrexate and alcohol** see <https://www.sps.nhs.uk/articles/can-patients-drink-alcohol-while-taking-long-term-low-dose-methotrexate/>